Agenda
City Commission Regular Meeting
Monday, May 18, 2026 - 7:00 PM
151 Martin Street, Birmingham, MI
City Commission Room 205

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1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Clinton Baller, Mayor

2. ROLL CALL

Alexandria Bingham, City Clerk

3. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

A. Proclamation in honor of Robert L. Ziegelman, FAIA

ANNOUNCEMENTS

A. The City of Birmingham's Annual Memorial Day Ceremony is on May 25, 2026 – 10:00 a.m. in Shain Park, 270 W Merrill St, Birmingham — Hosted by: Piety Hill Chapter, National Society of Daughters of the American Revolution and the City of Birmingham. All are welcome to join in a celebration of remembrance.

APPOINTMENTS

A. Design Review Board
   1. Rob Hoffman

   To appoint _____ as an alternate member to the Design Review Board to serve the remainder of a three-year term to expire September 25, 2028.

B. Housing Board of Appeals
   1. Mark Menuck
   2. Brian Neeper
   3. Dan Gutfreund

   To appoint _____ as a regular member of the Housing Board of Appeals to serve the remainder of a three-year term to expire May 4, 2029.

   To appoint _____ as a regular member of the Housing Board of Appeals to serve the remainder of a three-year term to expire May 4, 2029.

   To appoint _____ as a regular member of the Housing Board of Appeals to serve the remainder of a three-year term expiring May 4, 2028.

4. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

The City of Birmingham welcomes public comment which may be limited to a certain number of minutes per person speaking, announced at the Mayor's discretion at the beginning of the public comment portion of the agenda, on items or discussions that do not appear anywhere else in the printed agenda. The Commission will not participate in a question and answer session and will take no action on any item not appearing on the posted agenda. The public can also speak to agenda items as they occur when the presiding officer opens the floor to the public. When recognized by the presiding officer, please state your name for the record, and direct all comments or questions to the presiding officer.

5. CONSENT AGENDA

All items listed on the consent agenda are considered to be routine and will be enacted by one motion and approved by a roll call vote. There will be no separate discussion of the items unless a Commissioner or citizen so requests, in which event the item will be removed from the general order of business and considered under the last item of new business.

A. Resolution to approve the City Commission Budget Hearing meeting minutes of April 25, 2026.

B. Resolution to approve the City Commission regular meeting minutes of April 27, 2026.

C. Resolution to approve the City Commission special meeting minutes of May 4, 2026.

D. Resolution to approve the City Commission regular meeting minutes of May 4, 2026.

E. Resolution to approve the warrant list, including Automated Clearing House payments, dated May 6, 2026, in the amount of $994,202.11.

F. Resolution to approve the warrant list, including Automated Clearing House payments, dated May 13, 2026, in the amount of $1,285,437.17.

G. Resolution regarding delinquent special assessments and invoices to the tax roll:

WHEREAS, the City Treasurer, in accordance with the provisions in the City Code has reported certain special assessments and invoices, including interest and penalty, unpaid and delinquent on May 1, 2026, and

WHEREAS, the City Code provides that these delinquent special assessments and invoices shall be carried to the next annual City tax roll,

NOW THEREFORE BE IT RESOLVED, that the listing of unpaid and delinquent special assessments and invoices, including interest and penalty, be transferred and reassessed to the 2026 City tax roll with an additional 15% penalty, and that authorization is provided to remove from the list any bills paid after Commission approval.

H. Resolution regarding delinquent water and sewer charges to the tax roll:

WHEREAS, The City Treasurer, in accordance with Chapter 114, Section 114-303, of the City Code has reported certain water/sewage accounts, including interest and penalty, unpaid and delinquent on May 1, 2026, and

WHEREAS, Chapter 114, Section 114-303, of the City Code provides that these payments shall be carried to the next annual City tax roll.

NOW, THEREFORE, BE IT RESOLVED, that the properties with unpaid and delinquent water/sewage accounts, listed in the Delinquent Water/Sewer Tax Roll, dated May 18, 2026, including interest and penalty, be transferred and reassessed to the 2026 City tax roll and authorization be given to remove from the list any bills paid or a payment plan agreement signed after Commission approval.

6. CITY MANAGER'S REPORT

The City Manager's Report regularly occurs on the second City Commission meeting of the month. Additionally, reports from prior months can be viewed on the City's website.

A. May 2026 City Manager's Report

7. UNFINISHED BUSINESS

8. NEW BUSINESS

A. Resolution adopting the budget appropriations resolution and establishing the total number of mills for ad valorem property taxes to be levied for the fiscal year commencing July 1, 2026 and ending June 30, 2027.

B. Public Hearing for Confirmation of the Roll - Wimbleton Phase 2 Project - Sewer and Water Laterals Special Assessment District Roll 920S and Roll 920W

WHEREAS, Special Assessment Roll, designated Roll No. 920S and Roll No. 920W, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 05-117-26 provided it would meet this 18th day of May, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this May 18, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 920S and Roll No. 920W be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in ten (10) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1925255007	541 WIMBLETON DR	$ 2,388.96	$ 1,421.60

1925280009	647 WIMBLETON DR	$ 995.40	$ -
1925280010	669 WIMBLETON DR	$ 1,542.87	$ 1,421.60
1925280026	715 WIMBLETON DR	$ 1,094.94	$ -
1925281010	887 WIMBLETON DR	$ 995.40	$ 1,954.70
1925281033	923 WIMBLETON DR	$ 995.40	$ 1,954.70
1925281031	1054 ABBEY RD	$ -	$ 22.21
1925281030	1064 ABBEY RD	$ -	$ 22.21
1925281029	1074 ABBEY RD	$ -	$ 22.21
1925281028	1084 ABBEY RD	$ -	$ 22.21
1925281027	971 N ADAMS RD	$ -	$ 22.21
1925281026	961 N ADAMS RD	$ -	$ 22.21
1925281025	951 N ADAMS RD	$ -	$ 22.21
1925281024	941 N ADAMS RD UNIT 9	$ -	$ 22.21
1925281023	931 N ADAMS RD	$ -	$ 22.21
1925281022	921 N ADAMS RD	$ -	$ 22.21
1925281021	911 N ADAMS RD	$ -	$ 22.21
1925281020	901 N ADAMS RD	$ -	$ 22.21
1925281019	1085 WIMBLETON DR	$ -	$ 22.21
1925281018	1075 WIMBLETON DR	$ -	$ 22.21
1925281017	1065 WIMBLETON DR	$ -	$ 22.21
1925281016	1055 WIMBLETON DR	$ -	$ 22.21
1925258002	554 WIMBLETON DR	$ 1,493.10	$ 746.34
1925258003	612 WIMBLETON DR	$ 2,040.57	$ -
1925258004	636 WIMBLETON DR	$ 2,040.57	$ 710.80
1925258005	652 WIMBLETON DR	$ 2,040.57	$ 710.80
1925258006	680 WIMBLETON DR	$ 2,040.57	$ 1,101.74
1925258007	700 WIMBLETON DR	$ 2,040.57	$ 1,243.90
1925258008	871 POPPLETON AVE	$ 2,040.57	$ -
1925282001	812 WIMBLETON DR	$ 3,085.74	$ 1,883.62
1925282002	824 WIMBLETON DR	$ 1,990.80	$ -
1925282003	840 WIMBLETON	$ 1,990.80	$ 1,101.74

	DR		
1925282004	868 WIMBLETON DR	$ 1,990.80	$ 1,101.74
1925282015	886 WIMBLETON DR	$ 1,990.80	$ 1,101.74
1925282008	900 WIMBLETON DR	$ 2,040.57	$ 1,243.90
1925282012	1004 WIMBLETON DR	$ 2,040.57	$ 1,066.20
1925282013	1038 WIMBLETON DR	$ 2,040.57	$ 710.80
1925282017	1078 WIMBLETON DR	$ 291.51	$ -
1925282023	1050 WIMBLETON DR	$ 291.51	$ -
1925282022	1060 WIMBLETON DR	$ 291.51	$ -
1925282021	1064 WIMBLETON DR	$ 291.51	$ -
1925282020	1070 WIMBLETON DR	$ 291.51	$ -
1925282019	1072 WIMBLETON DR	$ 291.51	$ -
1925282018	1076 WIMBLETON DR	$ 291.51	$ -

* Records indicate Lead Water Service, Zero Costs per the State of Michigan

$ 40,960.71 $ 19,831.32

C. Public Hearing for Confirmation of the Roll - Wimbleton Phase 2 Project - Paving Special Assessment District Roll 920

WHEREAS, Special Assessment Roll, designated Roll No. 920, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 05-121-26 provided it would meet this 18th day of May, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this May 18, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 920 be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said

assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in ten (10) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Estimated Total Paving SAD Costs
1925255007	541 WIMBLETON DR	$ 7,509.58
1925255008	921 WARWICK DR	$ 1,412.57
1925280008	625 WIMBLETON DR	$ 7,496.24
1925280009	647 WIMBLETON DR	$ 5,087.74
1925280010	669 WIMBLETON DR	$ 3,672.69
1925280025	701 WIMBLETON DR	$ 5,482.15
1925280026	715 WIMBLETON DR	$ 4,352.16
1925280027	733 WIMBLETON DR	$ 4,830.53
1925280028	777 WIMBLETON DR	$ 5,640.97
1925280029	921 POPPLETON AVE	$ 5,284.60
1925280030	939 POPPLETON AVE	$ 904.05
1925281005	928 POPPLETON AVE	$ 10,420.08
1925281010	887 WIMBLETON DR	$ 8,521.94
1925281033	923 WIMBLETON DR	$ 7,808.58
1925281040	983 WIMBLETON DR	$ 5,912.37
1925281041	1005 WIMBLETON DR	$ 5,310.42
1925281031	1054 ABBEY RD	$ 484.19
1925281030	1064 ABBEY RD	$ 484.19
1925281029	1074 ABBEY RD	$ 484.19
1925281028	1084 ABBEY RD	$ 484.19
1925281027	971 N ADAMS RD	$ 484.19
1925281026	961 N ADAMS RD	$ 484.19
1925281025	951 N ADAMS RD	$ 484.19
1925281024	941 N ADAMS RD UNIT 9	$ 484.19
1925281023	931 N ADAMS RD	$ 484.19
1925281022	921 N ADAMS RD	$ 484.19
1925281021	911 N ADAMS RD	$ 484.19
1925281020	901 N ADAMS RD	$ 484.19
1925281019	1085 WIMBLETON DR	$ 484.19
1925281018	1075 WIMBLETON DR	$ 484.19
1925281017	1065 WIMBLETON DR	$ 484.19
1925281016	1055 WIMBLETON DR	$ 484.19

1925258002	554 WIMBLETON DR	$ 9,159.54
1925258003	612 WIMBLETON DR	$ 3,672.69
1925258004	636 WIMBLETON DR	$ 3,390.17
1925258005	652 WIMBLETON DR	$ 4,514.96
1925258006	680 WIMBLETON DR	$ 4,514.96
1925258007	700 WIMBLETON DR	$ 4,534.93
1925258008	871 POPPLETON AVE	$ 8,799.41
1925282001	812 WIMBLETON DR	$ 6,869.23
1925282002	824 WIMBLETON DR	$ 5,605.84
1925282003	840 WIMBLETON DR	$ 4,520.23
1925282004	868 WIMBLETON DR	$ 8,874.23
1925282015	886 WIMBLETON DR	$ 5,650.29
1925282008	900 WIMBLETON DR	$ 5,664.99
1925282024	930 WIMBLETON DR	$ 6,145.05
1925282025	980 WIMBLETON DR	$ 4,696.37
1925282012	1004 WIMBLETON DR	$ 5,153.02
1925282013	1038 WIMBLETON DR	$ 3,178.29
1925282017	1078 WIMBLETON DR	$ 1,183.39
1925282023	1050 WIMBLETON DR	$ 1,183.39
1925282022	1060 WIMBLETON DR	$ 1,183.39
1925282021	1064 WIMBLETON DR	$ 1,183.39
1925282020	1070 WIMBLETON DR	$ 1,183.39
1925282019	1072 WIMBLETON DR	$ 1,183.39
1925282018	1076 WIMBLETON DR	$ 1,183.39
		$ 200,621.65

D. Resolution to award the Wimbleton Phase 2 Project Contract #6-26 (W) to Anglin Civil in the amount of $2,502,731.16.50 plus a 10% construction contingency for a total of $2,753,004.28. In addition, to authorize the Mayor and Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all insurance and bond requirements by Anglin Civil.

AND

To authorize the installation of a stop sign on southbound Warwick Street at Wimbleton Street.

E. Resolution to authorize the formation of the City of Birmingham Community House Foundation, designating the City as the sole member, and authorizing organizational filings, including adoption of the Articles of Incorporation, Bylaws, charitable trust registration with the Michigan Attorney General, and filing of IRS Form 1023.

F. Commission Items for Future Discussion. A motion is required to bring up the item for future discussion at the next reasonable agenda, no discussion on the topic will happen tonight.

G. Commission discussion on items from a prior meeting.

9. REMOVED FROM CONSENT AGENDA

10. COMMUNICATIONS

A. Communications regarding Short Term Rentals

B. Communications regarding the vacant City Commission seat

C. Communications regarding Wimbleton Phase 1 & Phase 2

D. Communication regarding Northlawn

E. Communication regarding South Well Park

11. REPORTS

A. Commissioner Reports

1. Notice of intention to appoint to the City of Birmingham Community House Foundation - Board of Directors

B. Commissioner Comments

C. Advisory Boards, Committees, Commissions' Report

D. Legislation

E. City Staff

1. 3rd Quarter Financial Report

2. 3rd Quarter Investment Report

3. SOCWA Quarterly Report

4. Water and Sewer Rates and Connection Fees - Example Ordinance Amendment and Example Waters Bills

5. Wimbleton Phase 1 Update

6. Short Term Rental Update

F. Information Only

12. ADJOURN

City boards and committees meet in person, and most have a virtual option available to the public. Members of the public may attend the City Commission meeting in person at Birmingham City Hall or attend virtually.

Link to Access Virtual Meeting: https://zoom.us/j/655079760
Telephone Meeting Access: 877 853 5247 US Toll-free
Meeting ID Code: 655 079 760

City Hall is open to the public during regular business hours, Monday through Friday from 8 a.m. – 5 p.m. The Police Department lobby entrance on the east side of City Hall on Pierce Street operates as the after-hours public entrance.

Individuals requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta Street.

Persons who require mobility, visual, hearing, or other assistance for effective participation in this public meeting should contact the City Clerk's Office at (248) 530-1880, or (248) 644-3405 (TDD) at least one day before the meeting to request help.

Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-3405 (para las personas con incapacidad auditiva) por lo menos un dia antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964)

BIRMINGHAM
A WALKABLE CITY

PROCLAMATION
CITY OF BIRMINGHAM
IN HONOR OF ROBERT L. ZIEGELMAN, FAIA

WHEREAS, Robert L. Ziegelman, FAIA, has dedicated a lifetime to serving Birmingham; and

WHEREAS, he has served for more than 20 years on the Housing Board of Appeals and the Triangle District Corridor Improvement Authority; and

WHEREAS, he has been the design architect on nearly 50 commercial, residential and civic buildings in town including homes, commercial and civic buildings, storefronts and interiors; and

WHEREAS, he helped set the stage for the essential character of our downtown by advocating successfully for the construction of a series of parking decks during the second half of the last century; and

WHEREAS, he has been a leader in sustainable architecture throughout his career, in Birmingham and worldwide; and

WHEREAS, he has won scores of awards for his work and been named a Fellow of the American Institute of Architects; and

WHEREAS, he has been a continuing source of pride for our community for decades; and

WHEREAS, the community wishes to demonstrate its gratitude on the occasion of his 90th birthday; and

NOW, THEREFORE BE IT RESOLVED, that I, Clinton Baller, Mayor, do hereby proclaim Birmingham's recognition of Robert L. Ziegelman's profound contributions to our built environment and the City's pride and deep gratitude for his service.

On Behalf of the City Commission and the residents of Birmingham on this 18th day of May 2026.

_____

Clinton Baller, Mayor



The City of Birmingham's Annual Memorial Day Ceremony

May 25, 2026 – 10:00 a.m.

Shain Park, 270 W Merrill St, Birmingham

Hosted by:
Piety Hill Chapter,
National Society Daughters of the American Revolution
and the City of Birmingham

Guest Speaker: George Getschman,
Friends of the Birmingham Museum

You are cordially invited to visit The Birmingham Museum
after the ceremony to view displays celebrating America 250!
556 W Maple Rd, Birmingham

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE DESIGN REVIEW BOARD

At the regular meeting of Monday, May 18, 2026, the Birmingham City Commission intends to appoint the following position to the Design Review Board:

- One alternate member to serve the remainder of a three-year term to expire September 25, 2028

Interested persons may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, May 13, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The function and duty of the Design Review Board is to advise the City Commission in regard to the proper development of the City. The Design Review Board is specifically charged with carrying out the goals, objectives and intent of the City's adopted master plan and urban design plan and other development-oriented plans which may subsequently be adopted.

The Design Review Board is authorized to advise and cooperate with the City Commission, City Planning Board, Historic District Commission and other City advisory boards and cooperate with the planning, historic district and legislative bodies of other governmental units in any area outside the boundaries of the City.

Applicant(s) Presented for City Commission Consideration:

Applicant Name	**Criteria/Qualifications** Members shall represent, insofar as possible, different occupations and professions such as, but not limited to, the legal profession, the financial or real estate professions, and the planning or design professions. Members shall be residents.
Rob Hoffman	1-year resident and custom home builder who graduated from Lawrence Technological University with a BS in Architecture and has 30 years of experience in the construction industry.

SUGGESTED COMMISSION ACTION:

To appoint _____ as an alternate member to the Design Review Board to serve the

A.

remainder of a three-year term to expire September 25, 2028.

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#135]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Wed, Apr 15, 2026 at 4:32 PM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Board of Review or Design Review Board
Name	Rob Hoffman
Residential Address	1643 Maryland Blvd. Birmingham, MI 48009 United States
Business Address	1643 Maryland Blvd. Birmingham, MI 48009 United States
Phone Number *	(734) 740-6504
Email **By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.**	rghoffman72@outlook.com
Length of Residence	1
Occupation	Custom Home Builder

Reason for Interest: Explain how your background and skills will enhance the board to which you have applied.

I have an architectural degree and have worked in the construction industry for the last 30 years. I've designed and built three custom homes for myself personally and was involved in multiple commercial construction projects for the company I previously owned. From design to execution, I was involved in the entire process. I worked with communities to acquire the appropriate variances necessary for our business operations. In addition, I led a team of +300 associates across eight physical locations throughout Michigan and NW Ohio. I am extremely organized, energetic, and detail oriented.

List your related employment experience	I grew within and ultimately led Wimsatt Building Materials - a +$200MM wholesale distribution business before we sold the family business in 2020. I started my construction/property management companies after exiting the business with the sale. I enjoy collaborating with a team. I love the building/construction industry and architecture.
List your related community activities	I am new to the Birmingham community currently. I previously resided here and am eager to contribute.
List your related educational experience	I have a BS in Architecture from Lawrence Technological University. I've also participated in multiple personal enrichment courses over the

	years. I've experienced multiple business coaches and have had excellent mentorship.
To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain.	No
Do you currently have a relative serving on the board/committee to which you have applied?	No
Are you an elector (registered voter) in the City of Birmingham? *	Yes

DESIGN REVIEW BOARD

Ordinance #1882

Terms: 3 years

Members: One member of the Design Review Board shall be an architect duly registered in this state, if such person is available. The other members shall represent, insofar as possible, different occupations and professions such as, but not limited to, the legal profession, the financial or real estate professions, and the planning or design professions.

Duties: The function and duty of the Design Review Board is to advise the city commission in regard to the proper development of the city. The Design Review Board is specifically charged with carrying out the goals, objectives and intent of the city's adopted master plan and urban design plan and other development-oriented plans which may subsequently be adopted. The Design Review Board is authorized to advise and cooperate with the City Commission, city Planning Board, Historic District Commission and other city advisory boards and cooperate with the planning, historic district and legislative bodies of other governmental units in any area outside the boundaries of the city.

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Aikens	**Claire**		2/23/2026 Non-Voting Student	12/31/2026
Collins 958 Pleasant	**Timothy**	(248) 797-5229 *tpcollins@comcast.net*	9/23/2024 Historical preservation organization member	9/25/2027
Deyer 1283 Buckingham	**Keith**	(248)642-6390 *kwdeyer@comcast.net*	9/25/2006 Engineer	9/25/2026
Dukas 1352 Suffield	**Natalia**	(248) 885-8535 *nataliadukas@yahoo.com*	9/9/2013 Finance	9/25/2028
Kolo 851 Ann St.	**Dustin**	(248)935-3651 *dustinkolo@gmail.com*	11/23/2020	9/25/2026

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Lang 1023 Floyd St.	**Patricia**	(248) 540-0991 *pal.family.friends@gmail.com*	12/10/2018	9/25/2027
Rasawehr 221 Baldwin Road	**Julijana**	(586)201-5470 *jmisich@yahooo.com*	9/20/2021 Planning & zoning director	9/25/2027
Sweeney 160 Larchlea Dr	**Steve**	(248) 875-9973 *stevesweeney22@yahoo.com*	12/1/2025 Alternate	9/25/2028
Vacated	**9/15/2025**		Alternate	9/25/2028
Willoughby 667 Greenwood	**Michael**	(248) 760-8903 *mwilloughby@mwa-architects.com*	3/22/2010 Architect	9/25/2028

ARTICLE V. - DESIGN REVIEW BOARD

Footnotes:
*--- (**4**) ---*
***Cross reference—** Boards and commissions, § 2-171 et seq.*

Sec. 82-98. - Created.

There is hereby created a design review board for the city. The design review board is a locally organized board and is not established under the Municipal Planning Commission Act, Act No. 285 of the Public Acts of Michigan of 1931 (MCL 125.31 et seq.), as amended.

(Ord. No. 1882, 7-24-06)

Sec. 82-99. - Composition.

(a) The design review board shall consist of seven members whose residences are located in the city.

(b) One member of the design review board shall be an architect duly registered in this state, if such person is available. The other members shall represent, insofar as possible, different occupations and professions such as, but not limited to, the legal profession, the financial or real estate professions, and the planning or design professions.

(c) The city planner, or the authorized representatives of any of them, and the student representative, shall be members ex officio of the design review board and shall have all rights of membership thereon, except the right to vote.

(d) The city commission may appoint two alternate members to serve as needed on the design review board during their term of appointment. An alternate member may be called on a rotating basis to sit as a regular member of the design review board in the absence of a regular member. An alternate member may also be called to service in the place of a regular member for the purpose of reaching a decision on a case in which the regular member has abstained for reasons of conflict of interest. An alternate member having been appointed shall serve in the case until a final decision has been made. An alternate member shall have the same voting rights as a regular member of the design review board.

(Ord. No. 1882, 7-24-06; Ord. No. 1975, 10-13-08; Ord. No. 2202, 10-10-16)

Sec. 82-100. - Terms.

Members of the design review board shall be appointed by the city commission for terms of office of three years; except that two members of the first board shall be appointed to serve for a term of one year, two for terms of two years, and three for terms of three years. All members shall hold office until their successors are appointed. A vacancy occurring in the membership of the design review board for any cause shall be filled by a person appointed by the city commission for the duration of the unexpired term.

(Ord. No. 1882, 7-24-06)

Sec. 82-101. - Removal of members.

(a) Members of the design review board may, after a public hearing, be removed for cause.

(1) As used in this section, the term "cause" is defined as a determination by the city commission that a sufficient reason exists, as determined and defined by the city commission in its sole discretion, for the removal of a member of the design review board. The decision by the city commission to remove a member of the design review board shall be final and binding upon such member of the design review board and no appeal shall arise therefrom.

(2) As used in this section, the term "public hearing" is designed as an open meeting at which the determination is made by the city commission, in its sole discretion, that cause exists for the removal of a member of the design review board. For purposes of an orderly presentation, the city attorney shall serve as chairperson of the public hearing, and the city manager, or his/her designee, may present information to the city commission with respect to the potential removal of a member of the design review board. The city manager or his/her designee will be afforded the opportunity to address the city commission with respect to such information for a period not to exceed 30 minutes. The affected member of the design review board or his/her designated representative will be afforded the opportunity to address the city commission with respect to such information for a period not to exceed 30 minutes. The presentation of information by the city manager or his/her designee and the presentation of information by the affected member or his/her designated representative may, in accordance with applicable law, be conducted in a closed session. This section shall not be construed as creating a right to a due process or evidentiary hearing.

(b) This section shall not be construed as creating or bestowing upon a member of the design review board any employment status, property interest or any vested interest or right to continued membership on the design review board.

(Ord. No. 1882, 7-24-06)

Sec. 82-102. - Compensation.

The members of the design review board shall serve as such without compensation.

(Ord. No. 1882, 7-24-06)

Sec. 82-103. - Organization and meetings.

(a) The design review board shall, from its appointed members, elect a chairman and vice-chairman whose terms of office shall be fixed by the design review board. The chairman shall preside over the design review board and shall have the right to vote. The vice-chairman shall, in the case of absence or disability of the chairman, perform the duties of the chairman. The city planner or their authorized representative shall act as secretary of the design review board and shall keep a record of all of its proceedings.

(b) At least four members of the design review board shall constitute a quorum for the transaction of its business.

(c) The design review board shall:

(1) Adopt rules for the transaction of its business, which provide for the time and place of holding regular meetings.

(2) Provide for the calling of special meetings by the chairman or by at least two members of the design review board.

(3) Keep a full and complete record of its resolutions, transactions, findings and determinations, which record shall be available to the city commission and to the public upon request.

(d) All meetings of the design review board shall be open to the public, and any person or his duly constituted representative shall be entitled to appear and be heard on any matter applicable to the business at hand before the design review board makes its decision.

(e) The concurring affirmative vote of four members of the design review board shall be required for approval of plans before it for review or for the adoption of any resolution, motion or other action by the design review board.

(Ord. No. 1882, 7-24-06)

Sec. 82-104. - Assistance.

The design review board may call upon the city manager for such services and data from the various departments as it may require. The design review board may recommend to the city commission the securing of such professional and consulting services as it may require; however, no expenditures of funds shall be made or contracts entered into for providing such professional or consulting services unless the same shall first be approved and authorized by the city commission.

(Ord. No. 1882, 7-24-06)

Sec. 82-105. - Duties.

(a) It shall be the function and duty of the design review board to advise the city commission in regard to the proper development of the city. The design review board is specifically charged with carrying out the goals, objectives and intent of the city's adopted master plan and urban design plan and other development-oriented plans which may subsequently be adopted. The design review board is authorized to advise and cooperate with the city commission, city planning board, historic district commission and other city advisory boards and cooperate with the planning, historic district and legislative bodies of other governmental units in any area outside the boundaries of the city.

(b) The design review board is also authorized to recommend for the guidance of the city commission amendments to this Code relating to the control and development of lands within historic districts. The design review board may, from time to time, amend, extend or add to such recommendations; and the same shall be made with the general purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the city and its environs.

(c) The design review board may hold such public meetings and/or hearings from time to time as it may

deem advisable or necessary in connection with the proper performance of its functions under this article.

(d) Not later than April 1 of each year, the design review board shall prepare and submit to the city manager a tentative outline of its program for the ensuing year. Joint meetings of the city commission and of the design review board shall be held at least annually, at a time designated by the mayor. It shall be the duty of the mayor to call such meeting in accordance with the provisions of this section.

(Ord. No. 1882, 7-24-06)

Sec. 82-106. - Review and recommendations.

(a) The design review board shall have the responsibility for sign and design review for non-historic properties as outlined in chapter 126. It shall be the function of the design review board to pass upon all matters referred to it by the city commission and to give to the city commission the benefit of its judgment with relation to such matters so referred. Matters so referred may include but not necessarily be restricted to:

(1) Requests for change of zoning;

(2) Requests for issuing building permits;

(3) Requests for sign and design review text amendments;

(4) Requests for special land use permits; and

(5) Any other matters which bear relation to the physical development or growth of the municipality.

(b) When any recommendation has been made by the design review board, the same shall be referred to the city commission or other appropriate city boards.

(Ord. No. 1882, 7-24-06)

BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE HOUSING BOARD OF APPEALS

At the regular meeting of Monday, May 18, 2026, the Birmingham City Commission intends to appoint the following positions to the Housing Board of Appeals:

- Two regular members to serve the remainder of three-year terms expiring May 4, 2029
- One regular member to serve the remainder of a three-year term expiring May 4, 2028

Interested persons may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, May 13, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The Housing Board of Appeals was established in order to provide an appeal process from regulations derived from the housing and maintenance requirements found in Chapter 22 of the City Code. The purpose of the housing and maintenance regulations is to protect, preserve and promote the physical and social wellbeing of the people, to regulate privately and publicly owned dwellings for the purpose of maintaining adequate sanitation and public health.

Applicant(s) Presented for City Commission Consideration:

Applicant Name	**Criteria/Qualifications** Members shall be educated or experienced in building, construction administration, social services, real estate or other responsible positions.
Mark Menuck	32-year resident who works as a residential contractor and property manager.
Brian Neeper	An architect who owns a business in, and designs homes in, Birmingham.
Dan Gutfreund	18-year resident who works as a global realestate advisor.

SUGGESTED COMMISSION ACTION:

To appoint _____ as a regular member of the Housing Board of Appeals to serve the remainder of a three-year term to expire May 4, 2029.

To appoint _____ as a regular member of the Housing Board of Appeals to serve the remainder

of a three-year term to expire May 4, 2029.

To appoint _____ as a regular member of the Housing Board of Appeals to serve the remainder of a three-year term expiring May 4, 2028.

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#139]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Wed, Apr 29, 2026 at 5:45 PM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Building Board
Specific Category/Vacancy on Board (see below)	Housing Board of Appeals
Name	Mark Menuck
Residential Address	990 Pierce birmingham, MI 48009 United States
Business Address	990 Pierce birmingham, MI 48009 United States
Phone Number *	(248) 730-0300
Email **By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.**	mark@curtisbuilding.com
Length of Residence	32 years
Occupation	Residential Contractor/Property Manager

Reason for Interest: Explain how your background and skills will enhance the board to which you have applied.

I have been in the building business since joining our family's 3rd generation business ins 1995. I grew up with building and construction knowledge and have worked in it for over 30 years. I also have a law degree, though I only practiced law for one year. I did act on behalf of our family business for legal matters for my entire career. I am also very interested in all the construction and developments, as well as the lifestyle and the future of and for the City of Birmingham and its residents.

List your related employment experience	See above but also: I have site planned more than a dozen communities throughout my career, as well as participated in the construction of dozens of communities, including hundreds, if not thousands, of homes. In the recent past, I am only focusing on urban development, construction and lifestyle that is very much like our Birmingham community.
List your related community activities	None, other than the special needs community (The Friendship Circle), due to having an autistic child

List your related educational experience	I have a BS from University of Michigan (1991); Juris Doctorate from University of Detroit School of Law (1994).
To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain.	None that I am aware of.
Do you currently have a relative serving on the board/committee to which you have applied?	No
Are you an elector (registered voter) in the City of Birmingham? *	Yes

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#143]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Tue, May 5, 2026 at 8:31 AM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Housing Board of Appeals
Name	Brian Neeper
Residential Address	750 Hupp Cross Bloomfield Hills, MI 48301 United States
Business Address	259 E Frank St Birmingham, MI 48009 United States
Phone Number *	(248) 259-1784
Occupation	Architect
Reason for Interest: Explain how your background and skills will enhance the board to which you have applied.	Applying at the request of Jeff Zielke. I'm an Architect who has designed homes in Birmingham for over 20 years.
List your related employment experience	Brian Neeper Architecture PC Residential Architect.
List your related educational experience	Masters degree in Architecture.
To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain.	NO
Do you currently have a relative serving on the board/committee to which you have applied?	No
Are you an elector (registered voter) in the City of Birmingham? *	No

BIRMINGHAM
A WALKABLE CITY

Mya Brown <mbrown@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#144]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Tue, May 5, 2026 at 4:13 PM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Board of Appeals
Name	Dan Gutfreund
Residential Address	761 Southfield Rd Birmingham, MI 48009 United States
Business Address	415 S Old Woodward Ave Birmingham, MI 48009 United States
Phone Number *	(248) 978-5774
Email **By providing your email to the City, you agree to receive news and notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.**	Dan@dgrealty.com
Length of Residence	18
Occupation	Global Real Estate Advisor

Reason for Interest: Explain how your background and skills will enhance the board to which you have applied.

I have spent over 15 years working closely with homeowners, builders, architects, developers, and residents throughout Birmingham and the surrounding communities. Through my experience in residential real estate and new construction, I have developed a strong understanding of neighborhood character, property values, zoning considerations, and the long-term impact development decisions have on a community. I believe I can bring a practical, balanced, and collaborative perspective to the Board of Appeals while helping support thoughtful and responsible decision-making that protects the integrity and character of Birmingham.

List your related employment experience

Founder & Team Lead, DG Realty Group at Signature Sotheby's International Realty

Licensed Realtor with over 15 years of experience in residential real estate

Experience specializing in luxury homes, residential development, land acquisition, and new construction

Worked closely with homeowners, builders, architects, developers, inspectors, and municipalities throughout Birmingham and surrounding communities

Experience evaluating property values, neighborhood trends, architectural design, and development impact

Extensive involvement in residential renovation and construction projects

Strong understanding of zoning considerations, community planning, and property-related decision-making

List your related community activities

• Actively involved with the Birmingham Shopping District and local community initiatives
• Sponsor of multiple community events in Birmingham each year, including the Birmingham Tree Lighting and Pumpkin Patch events
• Main partner in the Re-CYCLE for Kids bikes donation drive in partnership with the Oakland County Sheriff's Office for the past five years, helping provide bicycles to local children and families
• Supporter and sponsor of local Toys for Tots programs throughout Metro Detroit
• Supporter of the Seaholm High School PTA

List your related educational experience	-Licensed Realtorin the State of Michigan -Certified Relocation Specialist -Continuing education in residential real estate -Ongoing professional development focused on residential construction, architecture, land use, and market analysis -Extensive industry experience working alongside builders, architects, developers, inspectors, and municipal professionals throughout Birmingham and surrounding communities
To the best of your knowledge, do you or a member of your immediate family have any direct financial or business relationships with any supplier, service provider or contractor of the City of Birmingham from which you or they derive direct compensation or financial benefit? If yes, please explain.	No
Do you currently have a relative serving on the board/committee to which you have applied?	No
Are you an elector (registered voter) in the City of Birmingham? *	yes

HOUSING BOARD OF APPEALS

Chapter 22 - Sections 22-312 – 22-314
Seven Members
Requirements: Qualified by education or experience in building, construction administration, social services, real estate, or other responsible positions.
Terms: Three year - expire the first Monday in May
Meetings held as needed.
Appointed by the City Commission

Last Name	First Name	Home Business E-Mail	Appointed	Term Expires
Claussen 1627 Maryland Blvd Birmingham	**Karson** 48009	(248) 688-4517 *karson.claussen@gmail.com*	4/26/2021 Regular Member - Building Inspector	5/4/2027
Mando 1313 Autumn Drive Troy	**Dennis** 48098	(248) 767-0515 *denny@dennysonline.com*	5/4/2026 Regular Member	5/4/2029
Taylor 3693 W. Bradford Bloomfield Twp	**Robert** 48301	248-892-3316 *bobtaylr@gmail.com*	5/10/2010 Regular Member - Realtor	5/4/2028
Vacated	**5/4/2023**		Regular Member	5/4/2029
Vacated	**5/4/2023**		Regular Member	5/4/2029

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Vacated	**12/1/2025**		Regular Member	5/4/2028
Vincenti 938 Lakeside Birmingham	**Philip** 48009	(248) 722-4747 *pvincenti@tcwall.com*	4/9/2018 Regular Member - building/contractor	5/4/2027

DIVISION 3. APPEALS

Sec. 22-311. Authorized.

(a) Any owner or person who is aggrieved with the ruling or decision of the building official in any matter relative to the interpretation or enforcement of any of the provisions of this article, may appeal the decision or interpretation.

(b) The appeal shall be made to the housing board of appeals.

(Ord. No. 2070, 10-24-11)

Sec. 22-312. Board created; purpose.

In order that the provisions of this article may be reasonably applied and substantial justice done in instances where practical difficulties are apparent or undue hardship would result from carrying out the strict letter of this article, a housing board of appeals is hereby created. The duty of the board shall be to consider appeals from the decision of the officials charged with the enforcement of this article, and to determine in particular cases whether any deviation from the strict enforcement of this article will violate the intent of this article and jeopardize public health and safety.

(Ord. No. 2070, 10-24-11)

Sec. 22-313. Membership and appointment.

The housing board of appeals shall consist of seven members, who shall be appointed by the city commission. The city commission shall appoint to the board, members qualified by education or experience in building construction, administration, social services, real estate or other responsible positions. The building official, the fire chief and the health officer or their representatives shall be ex officio members.

(Ord. No. 2070, 10-24-11)

Sec. 22-314. Term of office.

The term of office of members of the housing board of appeals shall be for three years, but in the first instance after the passage of this Code, two members shall be appointed for one year, two members for two years and three members for three years. These terms shall then expire the first Monday in May.

(Ord. No. 2070, 10-24-11)

Sec. 22-315. Meetings, rules of procedure, quorum.

The housing board of appeals shall meet once a month, provided there are pending appeals. There shall be a fixed place of meeting and all meetings shall be open to the public. The board shall adopt its own rules of

procedure and keep a record of its proceedings, showing the action of the board, and the vote of each member upon each question considered. The presence of five members shall be necessary to constitute a quorum.

(Ord. No. 2070, 10-24-11)

Sec. 22-316. Officers, records.

The housing board of appeals shall elect from its membership a chairman and vice-chairman. A secretary, who shall be an employee of the city, shall be appointed whose duty it shall be to maintain a permanent official record of all of its transactions; such records shall be public records.

(Ord. No. 2070, 10-24-11)

Sec. 22-317. Appeals procedure.

Appeals from the rulings of the building official may be made to the housing board of appeals within 20 days of the issuance of an order by the official. Such appeal may be taken by any person aggrieved by any ruling or determination of any officer, department, board or commission of the city. The appellant shall file with the building official and with the board a notice of appeal specifying the grounds therefor. With each notice of appeal filed, there shall be paid a fee in the amount set forth in the schedule of fees, charges, bonds and insurance to cover the city's cost of handling such appeal, provided that such fees may be returned or retained after hearing at the discretion of the board. The building official shall forthwith transmit to the board a summary report of all previous action taken. The board may at its discretion call upon the building official to explain his action. The final disposition of such appeal shall be in the form of a resolution, either reversing, modifying or affirming, wholly or partly, the decision of the determination appealed from. In order to find for the appellant, four members of the board must concur. In order to overturn a previous decision of the board, five members of the board must concur.

(Ord. No. 2070, 10-24-11)

Sec. 22-318. Hearings.

The housing board of appeals shall fix a reasonable time for the hearing of the appeal and give due notice thereof to interested parties and decide the same within a reasonable time. Within the limits of its jurisdiction, the board of appeals may reverse or affirm, in whole or in part, or may make such order, requirement, decision or determination as in its opinion ought to be made in the premises, and to that end shall have all the power of the building official from whom such appeal is taken.

(Ord. No. 2070, 10-24-11)

Sec. 22-319. Decisions.

The decision of the housing board of appeals shall be final unless an appeal therefrom to Oakland County Circuit Court is taken within 20 days from the date of the board's decision.

(Ord. No. 2070, 10-24-11)

Sec. 22-320. Notices.

The housing board of appeals may prescribe such notice to any interested person and the neighbors surrounding the structure or premises in connection with which the appeal is taken, as shall be deemed reasonable by the board.

(Ord. No. 2070, 10-24-11)

Secs. 22-321—22-330. Reserved.

City Commission Minutes
Public Hearing on the 2026-2027 Recommended Budget
Saturday, April 25, 2026 - 8:30 a.m.
151 Martin Street, Birmingham
City Commission Room 205
Vimeo Link: https://vimeo.com/1182862423

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Clinton Baller, Mayor, opened the meeting with the Pledge of Allegiance.

II. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor Clinton Baller
Commissioner Andrew Haig
Commissioner Brad Host
Commissioner Kevin Kozlowski
Commissioner William Kolb
Commissioner Therese Longe

Absent: None

Staff: City Manager Ecker; Fire Chief Bartalino, Birmingham Shopping District Director Bassett, City Clerk Bingham, Assistant City Manager Clemence, Information Technology Manager Brunk, Finance Director Chavez, Human Resources Manager Ciluffo, Assistant City Manager Clemence, City Engineer Coatta, Baldwin Library Director Craft, Planning Director Dupuis, Parking Systems Manager Ford, Building Maintenance Superintendent Galik, Police Chief Grewe, City Attorney Kucharek, Museum Director Pielack, Department of Public Services Director Zielinski, Building Official Zielke

III. PUBLIC COMMENT

IV. PUBLIC HEARING – 2026 - 2027 RECOMMENDED BUDGET

CM Ecker and the Mayor introduced the budget, and FD Chavez presented the Budget highlights. Staff answered informational questions.

Commissioners discussed the following regarding the introduction and highlights:

- While the City is drawing on the General Fund for its road investments, the City cannot perpetually draw down the General Fund.

- Accounting processes differ between public governments and private businesses.
- Being able to review the profits and losses for parking was helpful.
- Among the Commission's responsibilities is considering whether City rates and fees have been appropriately set.

For General Government, CC Bingham presented the Clerk's Office budget, CM Ecker presented the Commission and the Manager's Office budgets, BMS Galik presented the City Hall & Grounds, the Property Maintenance – Library, and the Property Maintenance – 400 E. Lincoln budgets, HRM Ciluffo presented the Human Resources budget, and FD Chavez presented the Finance Department, Treasury, Assessing, Pension Administration, Legal, General Administration, and 48th District Court budgets. Staff answered questions.

Commissioners discussed the following regarding General Government:

- The expenditures for 400 E. Lincoln would be partially offset by Next's contributions.
- Paying for employees' parking directly from the General Fund instead of transferring it into the Parking Fund should be explored as a possibility.
- There may be opportunities to streamline some aspects of the workflow for the Finance and Treasury Departments.
- In some instances City Hall is functioning with obsolete furnishings and equipment. The included requests to update some of those items seemed appropriate.
- It might be helpful in future budgets to present where minor decreases in some of the proposals could be made if necessary.
- While optimizing for cost is appropriate, those efforts must be balanced with effectively meeting the needs of the City. Some past City Managers decreased both investment in infrastructure and the staff needed to support that investment in infrastructure. Consequently, the present Commission now faces a number of thorny, outstanding infrastructure challenges due to that deferred work. In order to better equip the City for the future, the Commission must take a long-range view when considering how staffing correlates with meeting the City's obligations to its residents.

Public Comment

Mary Jaye commented regarding possible opportunities for cost reduction.

David Bloom supported collecting data on the benefits of the private public partnership work Plante Moran was performing on behalf of the City.

For Public Safety, PC Grewe presented the Police and Dispatch budgets, FC Bartalino presented the Fire and Emergency Management budgets, and BO Zielke presented the Building budget. Staff answered questions.

Commissioners discussed the following regarding Public Safety:

- The Birmingham Fire Department was congratulated on having the quickest response time average in the State of Michigan, and one of the best response times in the country.
- Every rental receives an inspection by the City every two years. A property will receive more than the biannual inspections if violations are found.

Public Comment

Mr. Bloom commented regarding anticipated increases in the Police and Fire Department budgets.

Debra Horner commented regarding City grant opportunities.

The Commission took a brief recess, and returned from recess.

For Public Works, CE Coatta presented the Engineering, Sidewalk Construction and Maintenance, Alley Construction & Maintenance, Fiber Optic System, and Streetlights budgets. DPSD Zielinski presented the Public Services, Property Maintenance, Cemetery Management & Maintenance, and Weed/Snow Enforcement budgets. Staff answered questions.

Commissioners discussed the following regarding Public Works:

- The operating costs for the street lights were significant. An audit of whether the electric usage by the streetlights aligns with the electric charges for the street lights might be useful, if possible.
- Adding solar panels to the top of City parking decks might allow the City to meaningfully reduce its electric costs.
- It is challenging to determine whether DTE is charging appropriately.
- The City should determine whether there are any other options for electric providers.
- The City would likely be able to further lower its telephone costs with a change of service.
- The approximately $16.6 million referred to on page 131 regarding the Department of Public Services (DPS) represents the scope of DPS's services offered to all City Departments. The approximately $6.1 million regards DPS's direct costs.
- Data comparing the budget and actual expenditures is made available.
- More information regarding a number of aspects of DPS' budget was desired. The three Commissioners with further questions about the data should meet with staff to determine what further information might be most useful.

FD Chavez presented the Health and Welfare budget. Staff answered questions.

PD Dupuis presented the Community and Economic Development budget. Staff answered questions.

For Recreation and Culture, DPSD Zielinski presented the Parks & Recreation, Ice Arena, and Community Activities budgets. MD Pielack presented the Birmingham Historical Museum budget. Staff answered questions.

Commissioners discussed the following regarding Public Works:

- It might be possible to get a donation or a sponsorship for Birmingham's holiday tree. The BSD should explore whether there might be interest.
- Staff indicated that the Ice Arena's prior year budget likely had an error that now gives the appearance of an increase in expenditures between last year's and this year's budget. In actuality, expenditures are anticipated to stay largely even.
- The Commission would be interested in hearing about the long term goals for the Recreation Coordinator position.
- Profits and losses tables were requested for the Ice Arena and the Golf Courses.
- Staff noted that the Ice Arena operates close to breakeven for its revenues and expenditures. It was observed that this was positive as long as that included funds being set aside for future equipment replacements. It was confirmed this does occur.
- It would be helpful if future presentations of the Ice Arena accounts could clarify aspects such as money being set aside for equipment replacement.

Public Comment
Mr. Bloom commented regarding appropriately timing the funding requests for Next and regarding the zoning ordinance updates.

The Commission took a brief recess, and returned from recess.

FD Chavez presented the Transfers Out budget. Staff answered questions.

Commissioners discussed the following regarding Transfers Out:

- The City transfers funds out of the General Fund into other funds as needed. Budget amendments involve transfers out.
- The City's General Fund will remain near its maximum goal even after the transfers out, which is 40% of the City's operating budget.
- The City's water and sewer rates are increasingly paying for water and sewer usage. This correlates to diminishing transfers out from the General Fund to water and sewer. There are a number of benefits to this change, including that using the water and sewer rates to pay for the water and sewers does not count towards the City's Headlee maximum.

For Special Revenue Funds, CE Coatta presented the Major and Local Streets budgets, DPSD Zielinski presented the Solid Waste Disposal budget, PD Dupuis presented the Sustainability and Climate Action Fund, FD Chavez and CM Ecker presented the Senior Services Fund budget, and FD Chavez presented the Michigan Indigent Defense Commission, the Law & Drug Enforcement Fund, the Opioid Settlement Fund, the Community Development Block Grant, Debt Administration, and Capital Projects Funds budgets. Staff answered questions.

Commissioners discussed the following regarding Special Revenue Funds:

- While the City presently manages the funds for the 48th District Court, those funds are not available for the City's use.

Public Comment
Mr. Bloom commented regarding how sustainability is integrated into the City.

For Enterprise Funds, PSM Ford presented the Automobile Parking System budget, CE Coatta presented the Water Supply System and the Sewage Disposal budgets, and DPSD Zielinski presented both of the Golf Course budgets. Staff answered questions.

Commissioners discussed the following regarding Special Revenue Funds:

- At the end of this fiscal year, the Parking Fund is expected to have a balance of approximately $45 million.
- The Advisory Parking Committee should likely explore charging more for the parking decks than the on-street parking meters. There may be other opportunities to optimize parking system charges as well.
- In future budgets, it may be useful to provide estimated annualized maintenance costs for the Parking and Engineering budgets.
- A number of factors have caused water bills to increase, including aging infrastructure and the desire to shift the expenses to rate payers and away from the General Fund. The City should be prepared to assist residents with understanding these changes.
- Further conversations regarding the best way for the City to allocate water and sewer

rates would be appropriate.
- Consolidating the golf course reporting might be helpful for future budget presentations. Information about relative utilization of the golf courses would also be of interest.

Public Comment
Ms. Jaye commented regarding peak and/or special event pricing for the parking system.

Mr. Bloom commented regarding waiting lists, parking demand, a possible addition to the Peabody parking deck, increasing the ease of leaving decks, and the anticipated longevity of the parking decks.

ITM Brunk presented the Information Technology budget. Staff answered questions.

Commissioners discussed the following regarding the Information Technology budget:
- The IT budget's equipment costs seemed unexpectedly high.
- Staff should provide a report providing data on hardware, software, and labor costs for each department's IT usage, a ratio analysis with other municipalities, and best practices.
- A full line item breakdown of the IT budget would also be of interest.

Public Comment
Mr. Bloom commented regarding allocating the City's costs for the use of GIS, and whether those costs could be passed on to the members of the public with projects requiring those services.

The Commission took a brief recess, and returned from recess.

For Component Units, LD Craft presented the Baldwin Public Library budget and BSDD Bassett presented the Principal Shopping District budget. The Brownfield Redevelopment Authority and the Triangle District Corridor Improvement Authority (TDCIA) budgets were not presented. Staff answered questions.

Commissioners discussed the following regarding the Component Units budget:
- The Library has its own millage and the Library Board manages how the Library's budget is spent. The Commission does not have oversight over the Library's budget. The City does own and maintain the Library building.
- The City and the Library are finalizing agreements about how Library operations are managed.
- The Commission appreciated LD Craft for providing information on the Library's operations.
- There was interest in understanding how the Library's technological equipment costs per staff compares to the City's.
- The Library's Idea Lab has been a benefit to the community.
- It may be appropriate for the City to offer the Library some support towards its efforts to create a resiliency center since this would be a community-wide benefit.
- Downtown Birmingham has never been stronger, and the Commission appreciates the Principal Shopping District's work.

CM Ecker and CE Coatta presented information regarding Capital Improvement Expenditures. Staff answered questions.

Commissioners discussed the following regarding Capital Improvement Expenditures:

- The City has been operating under the paradigm that all unimproved streets should be improved. Some potential issues with this plan have emerged in the recent past.
- These potential issues include the pace at which roads will be repaired if the water and sewer systems are the determining factor, the costs for the City to maintain all improved streets, the fact that some residents are not interested in fully improved streets, and that some areas of the City with particularly deteriorated road surfaces are not on the upcoming list of planned repairs because of their adequate below-grade infrastructure.
- Residents might experience greater satisfaction and quality of life improvements if the budget for cape sealing was increased significantly.
- There was discussion regarding whether the City might receive a volume discount if a contractor was willing to add more streets to a cape seal project.
- Baldwin Court may have gone longer than average without road surface repairs.
- There was interest in understanding whether the City's cape sealing projects could be optimized for quality and longevity.
- There is support for further exploring options for high-quality, low-cost road surfaces in circumstances where roads are not likely to be fully improved.
- Once the present cycle of cape sealing and improving roads comes to a close, it seems there will be similar challenges with the next cycle. It would be useful to determine how the City might prepare to make the next cycle less challenging.

Public Comment

Mr. Bloom commented regarding increasing cape seal projects and possibly expediting the Library's plans to purchase a generator.

Ms. Jaye commented regarding out year plans.

Staff was thanked for their contributions.

V. ADJOURN

The Commission motioned to adjourn at 2:16 p.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

City Commission Minutes
Monday, April 27, 2026 - 7:00 p.m.
151 Martin Street, Birmingham
City Commission Room 205
Vimeo Link: https://vimeo.com/1187082214

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1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Clinton Baller, Mayor, opened the meeting with the Pledge of Allegiance.

2. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor Clinton Baller
Temporary Mayor Pro Tem Therese Longe
Commissioner Andrew Haig
Commissioner Brad Host
Commissioner William Kolb
Commissioner Kevin Kozlowski

Absent: None

Staff: Assistant City Manager Clemence; City Clerk Bingham, Planning Director Dupuis, Assistant City Manager Fairbairn, Parking Systems Manager Ford, City Attorney Gaudenzi, Police Chief Grewe, Deputy Treasurer Katz, Building Official Zielke

3. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

ANNOUNCEMENTS

The City Clerk's Office is issuing a final call for participants to register for the Celebrate Birmingham Hometown Parade and Party. Registration closes May 1, 2026. The event will be held on May 17, 2026, from 1 to 4 p.m., rain or shine. For more information, contact the City Clerk's Office at (248) 530-1880.

APPOINTMENTS

04-094-26 Appointment of City Commissioner and Mayor Pro Tem

The Mayor introduced the item.

Individual Commissioners commented the following:

- There was some feeling that the process of interviewing the two Commission candidates at the last meeting was contentious, and an apology was offered to both candidates.

Public Comment

Tracy Hackman, Louis Meldman, Kathleen Remski, Mary Kabitsky, Jim Arpin, Noel Hernandez, Susan Hernandez, Bill Hall, Gordon Nelson, Jim Remski, and Kristy Barrett supported Mary Jaye's candidacy for the Commission.

Gordon Rinschler, George Dilgard, and Ralph Plumley supported Debra Horner's candidacy for the Commission.

MOTION: Motion by Kozlowski:
To appoint Debra Horner to the City Commission to serve the remainder of a four-year term to expire November 2027.

Individual Commissioners commented the following:

- The Mayor should have demonstrated more impartiality during the last interview of the two Commission candidates.
- The Mayor had no conflict of interest vis-a-vis either Commission candidate.

Commissioner Host moved to have the Mayor recuse himself from voting on the appointment to the Commission. The motion died for lack of support.

ROLL CALL VOTE
Ayes: Longe, Baller, Kozlowski
Nays: Haig, Host, Kolb
Recused: None

04-095-26 Appointment of City Commissioner and Mayor Pro Tem (Vote II)

MOTION: Motion by Kolb:
To appoint Mary Jaye to the City Commission to serve the remainder of a four-year term to expire November 2027.

ROLL CALL VOTE
Ayes: Haig, Host, Kolb
Nays: Longe, Baller, Kozlowski
Recused: None

The Mayor noted that the City Attorney would offer an opinion at the next meeting regarding next steps, and that the rest of this item would remain on hold until a new Commissioner was appointed.

04-096-26 Planning Board

David Larson was interviewed for the appointment.

MOTION: Motion by Longe:
To appoint David Larson to the Planning Board to serve the remainder of a four-year term to expire March 2029.

VOICE VOTE
Ayes: Haig, Host, Kolb, Longe, Baller, Kozlowski
Nays: None
Recused: None

In light of Rob Hoffman's absence, it was noted that he could reschedule his interview for the Design Review Board if he remained interested.

CC Bingham swore in Mr. Larson.

4. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

David Bloom commented regarding Commissioner Haig's strength of character, weekend nights in Birmingham, and the present lack of a Mayor Pro Tem.

Mike Clift supported continuing to operate the pool at 400 E. Lincoln.

Larry Lyng supported even greater efforts to reduce noise on Woodward.

ACM Clemence and ACE Akram commented regarding Wimbleton Phase I.

Rick Brodsky commented regarding funding allocations for major and local roads, safety enhancements for cape seal, and wanting to know more about how knowledge gained from Wimbleton Phase I would be integrated into Wimbleton Phase II.

Danny Seidman commented about wanting to know more about how knowledge gained from Wimbleton Phase I would be integrated into Wimbleton Phase II, supported weekly email updates about the Wimbleton projects, supported adding curbs to Wimbleton Phase II, and supported possibly redistributing some costs between Wimbleton residents in order to make the cost burden of increased safety measures on Wimbleton more equitable.

Sally Swift commented regarding how the design for Wimbleton Phase II would affect her home, supported any temporary measures that might reduce the dust and dirt from Wimbleton Phase I, opposed starting construction for Wimbleton Phase II in September, and concurred with Messrs. Brodsky and Seidman.

Kristy Barrett complimented the Commissioners on their thorough review of the City's budget, and supported increased efforts towards improving the clarity of the City's budgeting process.

Danny Hill and Kent Fairless commented regarding difficulties during Wimbleton Phase I.

Cliff Rager supported additional consideration of how heavy truck traffic should be directed during Wimbleton Phases I and II.

04-097-26 To Address Agenda Item 8E – Number Two, Short Term Rentals

MOTION: Motion by Kolb, seconded by Host:
To make a motion to move Item 8E, number two, up above number five, Consent Agenda.

VOICE VOTE
Ayes: Haig, Host, Kolb, Longe, Baller, Kozlowski
Nays: None
Recused: None

04-098-26 Short Term Rentals

CA Gaudenzi, PD Dupuis, BO Zielke, and PC Grewe presented the item and answered questions.

Commissioners discussed the following regarding the item:

- Licenses that have been granted to short term rentals cannot be revoked without cause.
- The City's present rules regarding short term rentals have room for increased enforcement.
- The list of licensed short term rentals in the City is publicly available.
- Since the last time the City reviewed the matter of short term rentals, the Michigan Supreme Court ruled that short term rentals are a commercial use that municipalities can regulate in residential areas via zoning.
- Changes to the City's zoning must be referred to the Planning Board.
- When the Police, Building, or Code Enforcement review short term rentals for potential violations, those reviews should be granular in scope.
- A moratorium does not eliminate all risk related to short term rentals.
- Moving forward, the City will distinguish between short and long term rentals.
- The process being proposed by staff is the best way for the City to create an enforceable regulation of short term rentals.

MOTION: Motion by Kozlowski, seconded by Longe:
At a regular meeting of the City Commission for the City of Birmingham, Oakland County, Michigan, held in the City Commission Chambers at 151 Martin Street, Birmingham, MI, 48009, at 7:00 p.m. on April 27, 2026, the following resolution was offered by Commissioner Kozlowski and supported by Commissioner Longe:

WHEREAS, since at least 2011, all rental property, regardless of length of lease requires the property

owner to apply for and receive a temporary or annual license for such rental or leasing of their property; and

WHEREAS, the regulations for all rental property is enumerated in Sec. 22-331 through Sec. 22-345 which includes the ability to revoke such annual license for violating any terms of the rental ordinance or for violation of any other ordinances impacting the property; and

WHEREAS, the common term of short-term rental, which is considered a commercial use, and which is commonly defined as the offer of possession or occupancy of a dwelling for less than thirty (30) days; and

WHEREAS, on July 9, 2025, in Melvin R. Berlin Revocable Trust, et al. v. Rubin, et al., 22 N.W.3d 531 (2025), the Michigan Supreme Court affirmed the judgment of the Court of Appeals, holding that the use of residential property for even short-term rentals, constitutes a commercial use rather than a residential use;

WHEREAS, the prohibition against rentals of short-term rentals has been discussed in the past, as we awaited action of proposed State law changes and a pending Supreme Court ruling regarding regulations involving short-term rentals;

WHEREAS, the City of Birmingham has experienced an emergent and tragic situation with a short-term rental property in the City that had a drastic impact on the health, safety and welfare of the citizens of the City of Birmingham; and

WHEREAS, the City of Birmingham with due diligence and swiftness will assess, review, and determine all rental premises regulations further; and

WHEREAS, the City Commission will utilize its legislative powers to place a six (6) month moratorium, which is a temporary suspension, halt and or pause, to protect the health, safety and welfare of the citizens of the City of Birmingham, of the specific activity of providing either a temporary or annual license for renting or leasing, or of offering possession or occupancy of a dwelling in the City of Birmingham for thirty (30) days or less in which the owner does not reside in that property, and offering the possession or occupancy to another who is not the legal owner of record pursuant to a written or oral agreement; and

WHEREAS, the City Commission will direct the Birmingham City Planning Board to review the current general and zoning ordinances and determine if all rental premises should be regulated and controlled by the Birmingham Zoning Ordinance, including all necessary regulations to ensure the health, safety and welfare of Birmingham residents; and

WHEREAS, the Planning Board should review how best to protect the character and peace of the City's neighborhoods by determining if the City should, at the minimum, regulate and:

- Establish a minimum rental occupancy of thirty (30) days.
- Evaluate the impact of rental housing density.

- Provide key contacts online for community complaints and enforcement actions.
- Enforce behavior and nuisance rules with hosts being held responsible for noise, parking, and property maintenance.
- Establish inspection and enforcement protocols that carry penalties with fees for each complaint, and consequences that can lead to revoking licenses.

As part of the Zoning Ordinances.

THEREFORE, LET IT BE RESOLVED that no person now and until the moratorium is lifted, apply to receive a rental license to rent, lease, or offer to rent or lease a dwelling for possession or occupancy for less than thirty (30) days to a person who is not the legal owner of record pursuant to a written or oral agreement; and

FURTHER RESOLVED that the Building Department, while under a six (6) month moratorium, shall not grant either a temporary or annual license for rental or leasing of property or premises for less than thirty (30) days; and

FURTHER RESOLVED that the Planning Board of the City of Birmingham shall review, analyze, and determine all appropriate changes to the Zoning Ordinance, return a draft ordinance and recommendations to the City Commission forthwith.

Public Comment

David Wynn supported a halt on the operation of all short term rentals due to safety concerns.

Eve Pickman supported banning short term rentals, using software to search for rentals for enforcement purposes, commented regarding illegal rentals, commented regarding sexual offender reporting requirements and short term rentals, and commented regarding the number of phone calls to law enforcement regarding short term rentals.

Chris Cardine supported requiring that all homes be owner-occupied or long-term rentals.

Larry Lyng supported the motion, supported the matter being addressed more expeditiously if possible, and supported removing short term rentals from Birmingham.

Brian Gordon supported the motion, and noted that short term rental owners may try to preserve their rentals via procedural and legal avenues.

Donna Voorhees supported shutting down any short term rentals that violate present codes, ordinances, and laws.

Steve Sandy supported additional regulations to allow the continued operation of short term rentals.

Kelly Kozlowski commented regarding the pace at which short term rental concerns have been addressed in the City, and supported increased enforcement of the City's present codes, ordinances,

and laws.

Eric Kohler supported expediting efforts to address the short term rental issue.

Cassie Sobelton commented regarding responsible short term rental operations in Birmingham.

Paul Reagan commented regarding increasing the resources allocated to code enforcement, expediting the Planning Board's review of the issue, concerns about accessory dwelling units, and State House bills that could impact the City's ability to regulate short term rentals.

Dana Woodburn supported addressing nuisance short term rentals via enforcement of the present codes, ordinances, and laws while allowing law-abiding short term rentals to continue operation.

Narlu Castellano supported a motion in clearer language, addressing the short term rental issues more expeditiously, and a greater understanding of the concerns of the neighbors affected by short term rental issues.

'Shawn' supported increased enforcement of the present codes, ordinances, and laws, commented regarding the overlap between short term rental concerns and Woodward noise concerns, and supported increased protections for Birmingham residents vis-a-vis short term rentals.

Commissioners discussed the following regarding the motion:

- Short term rentals have been an ongoing issue for residents, and have been raised at the Commission a number of times.
- Short term rentals should presently be prohibited from operation. A 180 day moratorium to address short term rentals is too long to wait.
- The 180 day moratorium is the maximum review period. Action could be taken sooner.
- The prospect of a lawsuit if short term rental licenses are revoked matters less than addressing residents' concerns.
- Neither Ferndale or Ann Arbor fully ban short term rentals.
- When short term rentals were addressed by the Commission in 2023, it was concluded that the City had implemented the most appropriate regulation options available at the time.
- Residents' experiences regarding complaints likely stems from two different focuses in enforcement. Enforcement's focus had been on resolving issues with short term rentals and bringing them up to code. Enforcement's focus will now be on making sure all short term rental requirements are adhered to rigorously, with violations resulting in the revocation of a license.
- The Commission could receive a report at every meeting of complaints to the Police Department, with rental properties being flagged. This would make these complaints publicly available and would reveal possible patterns.
- Revoking licenses without cause, and saying that the Commission is doing that with foreknowledge, would likely result in any court finding for the short term rental owner and would have tax implications for residents.
- This motion is an effort to act in the best interest of all residents.

- If a short term rental violates regulations, they should remain shut down during the moratorium even if they go to the Housing Board of Appeals.
- The Commission hears and understands the pain and the grief of residents negatively impacted by short term rentals.
- While there are likely good short term rental owners, the irresponsible ones raise a lot of concern.
- The Commission is charged in part with maintaining and increasing security and safety in the City. Protecting businesses such as short term rentals is likely not part of that charge.
- The fact that an obvious issue with short term rentals has arisen means that likely there were already issues before that.
- Stronger options for addressing this issue were desired.
- The Community Survey will be asking respondents if they feel safe in Birmingham. That answer for many may have changed after the recent incident with short term rentals.
- This moratorium and motion is the best way for the City to develop an enforceable ordinance.
- The Planning Board will be directed to make this its highest priority. All staff and officials will work on this as expeditiously as possible.
- The City may legally revoke licensing for a single infraction.
- Unlicensed short term rentals are already operating in violation.

ROLL CALL VOTE
Ayes: Haig, Kolb, Longe, Baller, Kozlowski
Nays: Host
Recused: None

04-099-26 Short Term Rentals (Motion II)

Commissioner Host moved to create an ordinance eliminating all short term rentals under 30 days immediately, unless they are owner-occupied. Motion died for lack of support.

Commissioners discussed the following:

- Per the City Attorney, this seemed like a strong mandate that would be unenforceable.
- It might be more appropriate to ask staff to return with a recommendation in a week. That recommendation should entail documentation, enforcement, and all other tools that would be legally and appropriately at the City's disposal.

MOTION: Motion by Haig, seconded by Host:
To make a motion requesting the City Attorney and staff to look into generating language by the next meeting to create a greater level of enforcement over and above the previous motion for management and control of short term rentals within the City of Birmingham.

Public Comment
Mr. Wynn and Ms. Castellano supported the motion.

Mr. Sandy opposed the motion.

ROLL CALL VOTE
Ayes: Haig, Host, Kolb, Longe, Baller, Kozlowski
Nays: None
Recused: None

5. CONSENT AGENDA

04-100-26 Consent Agenda

MOTION: Motion by Long, seconded by Kolb:
To move the consent agenda as presented, including Items A through G.

ROLL CALL VOTE

Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None
Recused: None

A. Resolution to approve the City Commission Workshop meeting minutes from April 13, 2026.

B. Resolution to approve the regular City Commission meeting minutes of April 13, 2026.

C. Resolution to approve the warrant list, including Automated Clearing House payments, April 15, 2026, in the amount of $738,297.16.

D. Resolution to approve the warrant list, including Automated Clearing House payments, dated April 22, 2026, in the amount of $1,143,670.87.

E. Resolution to approve a special event permit as requested by the Michigan Men's Health Foundation to hold the Cogs & Kegs event on June 15, 2026 contingent upon compliance with all permit and insurance requirements and payment of all fees and, further pursuant to any minor modifications that may be deemed necessary by administrative staff at the time of the event, or event cancellation that may be deemed necessary by administrative staff, leading up to or at the time of the event.

F. Resolution to award contract for Phase 3 Barrier Free Boardwalk and Path, John West Hunter Park.

G. Resolution to approve Contract No. 25-5304, Control Section CRU 63000, Job Number 21496CON, Project 25A0662 between the Michigan Department of Transportation and the City of Birmingham. In addition, authorize the City Engineer to sign the agreement on behalf of the City.

6. CITY MANAGER'S REPORT

The opening date of the Farmer's Market and the Police Department's findings on electric motorcycles were noted.

7. UNFINISHED BUSINESS

04-101-26 Draft Community Survey

ACM Fairbairn presented the item.

Commissioners discussed the following regarding the item:

- This draft was more clear, more succinct, and had a higher likelihood of producing actionable information.
- The work of all involved was appreciated.
- While there might be some value to asking whether people would be willing to pay more for increased infrastructure improvements, this need not delay approval of the survey.
- There was some disagreement as to whether Commissioners providing input on the draft survey had been appropriate and/or useful.

MOTION: Motion by Longe, seconded by Haig:
To make a motion adopting a resolution approving the draft community survey questions and authorizing the distribution of the survey to the public.

VOICE VOTE
Ayes: Haig, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

8. NEW BUSINESS

04-102-26 Confirmation of the Roll - 2025 and 2026 Asphalt Resurfacing Program Confirmation of the Roll for Staircase Special Assessment District Roll 919

The Mayor opened the public hearing at 10:14 p.m.

DT Katz presented the item.

Seeing no public comment, the Mayor closed the public comment at 10:16 p.m.

MOTION: Motion by Haig, seconded by Host:
To move the suggested resolution as documented on pages 488-491 of tonight's Commission package.

ROLL CALL VOTE

Ayes: Haig, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

04-103-26 Police Department Renovation/Expansion

PC Grewe presented the item and answered questions.

Commissioners discussed the following regarding the item:

- The report and proposal were well done.
- The addition will be small relative to the size of the building, and the brick in the addition will not perfectly match the brick of the rest of the building.
- This project is being undertaken as part of the Police Department's accreditation process.
- It may be appropriate to increase the differentiation between the addition and the rest of the building in order to comply with the Secretary of the Interior standards for historic buildings. It would have been interesting to see additional options from the architect.
- Aesthetically, the resemblance between the building and the addition was pleasing.

MOTION: Motion by Haig, seconded by Longe:
To adopt a resolution to approve the Police Department Renovation/Expansion for the interview room project within City Hall and the garage renovations within the DPS campus in an amount not to exceed $300,000.00.

AND

To adopt a resolution to approve the final design of the proposed sally port included in Phase 2 of the Police Department upgrade project.

Commissioners discussed the following regarding the motion:

- This represented a cost savings over a previous proposal for the Police Department.
- It was appropriate for this approval not to be held up over the design.

ROLL CALL VOTE

Ayes: Haig, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

04-104-26 Changes to the Evening Monthly Parking Permit Program

PSM Ford presented the item and answered questions.

Commissioners discussed the following regarding the item:

- Staff and the APC deserved thanks for this proposal.
- This program may offer a sufficient incentive to encourage people employed in the City to use the decks in the afternoons and evenings. If it does not, there would be an opportunity to consider next steps.

MOTION: Motion by Longe, seconded by Host:
To adopt a resolution to amend the 2025 fee schedule, and to reflect the proposed changes to the Evening Monthly Parking Permit Program; moving the start time from 4 p.m. to 3 p.m. and increasing the discounted rate from a flat $20.00 to 40% off the monthly permit rate at each garage.

Commissioners discussed the following regarding the motion:

- Increasing the metered parking rates would offset this change and would allow the Parking System to maintain its projected revenue.

ROLL CALL VOTE

Ayes: Haig, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

04-105-26 2025 and 2026 Asphalt Resurfacing Program Project Contract#2-25(P) and #2-26(P)

ACE Akram presented the item and answered questions.

Commissioners discussed the following regarding the item:

- Moving forward, it is intended that individual contractors will perform an increased proportion of the trench repair.

MOTION: Motion by Host, seconded by Kolb:
To adopt a resolution to award the 2025 and 2026 Asphalt Resurfacing Program Project Contract#2-25(P) and #2-26(P) to Al's Asphalt in the amount of $2,182,392.90 plus a 10% construction contingency for a total of $2,400,632.19. In addition, to authorize the Mayor and Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all the insurance and bond requirements by Al's Asphalt.

ROLL CALL VOTE

Ayes: Haig, Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: None

Commission discussion on items from a prior meeting

Builder's Bond Agreements

BO Zielke presented the item and staff answered questions.

Commissioners discussed the following regarding the item:

- It should be determined whether the present $5,000 bond amount is appropriate.
- Some builders have expressed concern about any increase in a bond amount.
- Damage to an entire road might be one factor to consider.
- An email submitted by Ed Kickham offered some further considerations.
- Questions remained about proving the source of a damage, allocating costs, and other matters.

Commission Items for Future Discussion

Wimbleton Project Reporting

Commissioners discussed the following regarding the item:

- Staff was directed to supply a report at each subsequent regular meeting regarding the construction on Wimbleton.
- There was discussion of whether an analysis of the successes and challenges of the project should be created.
- The Commission should be supplied with all information that will be supplied to residents at the upcoming Wimbleton Phase II resident meeting.

04-106-26 Closed Session Pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act

MOTION: Motion by Kolb, seconded by Host:
To meet in closed session pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

ROLL CALL VOTE
Ayes: Host, Kolb, Kozlowski, Baller, Longe
Nays: None
Recused: Haig

The Commission entered into closed session at 11:15 p.m., and returned from closed session at 12:44 a.m.

9. REMOVED FROM CONSENT AGENDA

10. COMMUNICATIONS

A. Communications regarding Short Term Rentals

B. Communications regarding the City Commission Vacancy
C. Communications regarding 400 E. Lincoln, YMCA & NEXT
D. Communication regarding trash

11. REPORTS

A. Commissioner Reports
    1. Notice of Intention to Appoint to the Historic District Study Committee
B. Commissioner Comments

The Mayor reported on the City's participation in the national Planning Conference, on PD Dupuis being under consideration for an award from the American Planning Association, on City messaging regarding Woodward Avenue, and on the Chaldean American Chamber of Commerce Annual Awards Ceremony.

The Mayor and Commissioner Kozlowski reported on their attendance at a SEMCOG meeting regarding Woodward.

Commissioner Host reported on his attendance at a Bloomfield Township meeting regarding the Birmingham Country Club and its proposed pickleball courts.

The function of the Communications section of the Agenda was discussed.

C. Advisory Boards, Committees, Commissions' Report
D. Legislation
E. City Staff
    1. Flock Safety LPR Camera Staff Report

PC Grewe answered questions regarding the report.

Commissioners discussed the following regarding the item:

- The database stores images of vehicles and their license plates, along with the times and locations of the image capture.

F. Information Only

12. ADJOURN

The Commission motioned to adjourn at 12:45 a.m.



Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

BIRMINGHAM

City Commission Special Meeting
Monday, May 4, 2026 - 6:00 PM
151 Martin Street, Birmingham
City Commission Room 205
Vimeo Link: https://vimeo.com/1189134911

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1. Call To Order
Clinton Baller, Mayor

2. Roll Call
City Clerk Bingham called the roll.

Present: Mayor Clinton Baller
Temporary Mayor Pro Tem Therese Longe
Commissioner Brad Host
Commissioner William Kolb
Commissioner Kevin Kozlowski

Absent: Commissioner Andrew Haig

Staff: Assistant City Manager Clemence; City Clerk Bingham, Assistant City Manager Fairbairn, City Attorney Gaudenzi, City Attorney Kucharek

3. Open To The Public For Matters Not On The Agenda

David Bloom commented regarding filling the vacancy on the Commission.

4. Request For Closed Session

05-107-26 Closed Session Pursuant to MCL § 15.268, Sec.8(1)(d) of the Open Meetings Act

MOTION: Motion by Longe, seconded by Kolb:
To meet in closed session pursuant to MCL § 15.268, Sec.8(1)(d) of the Open - Meetings Act to consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained.

ROLL CALL VOTE
Ayes: Host, Kolb, Kozlowski, Baller, Longe
Nays: None

Recused: None

The Commission entered into closed session at 6:04 p.m. and returned from closed session at 6:56 p.m.

5. Adjourn

The Commission motioned to adjourn at 6:56 p.m.



Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

City Commission Minutes
Monday, May 4, 2026 - 7:00 p.m.
151 Martin Street, Birmingham
City Commission Room 205
Vimeo Link: https://vimeo.com/1189134911

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1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Clinton Baller, Mayor, opened the meeting with the Pledge of Allegiance.

2. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor Clinton Baller
Temporary Mayor Pro Tem Therese Longe
Commissioner Andrew Haig
Commissioner Brad Host
Commissioner William Kolb
Commissioner Kevin Kozlowski

Absent: None

Staff: Assistant City Manager Clemence; City Clerk Bingham, City Engineer Coatta, Planning Director Dupuis, Assistant City Manager Fairbairn, Police Chief Grewe, City Attorney Gaudenzi, Building Official Zielke

3. PROCLAMATIONS, CONGRATULATORY RESOLUTIONS, AWARDS, APPOINTMENTS, RESIGNATIONS AND CONFIRMATIONS, ADMINISTRATION OF OATHS, INTRODUCTION OF GUESTS AND ANNOUNCEMENTS.

PROCLAMATION

Proclamation - National Public Works Week May 17 - 23, 2026

ANNOUNCEMENTS

The 2026 Celebrate Birmingham Parade and Party will take place on Sunday, May 17, 2026, from 1:00 to 4:00 p.m. The event will begin with a community parade featuring local organizations marching along Old Woodward to Shain Park. Immediately following the parade, the celebration will continue with the Party in the Park, where residents and visitors can enjoy crafts and activity booths hosted by local organizations, along with family-friendly entertainment including face painting, magic shows, a bounce

house, and other activities throughout the afternoon. This annual event is free for all and a wonderful opportunity for the community to come together and celebrate Birmingham!

APPOINTMENTS

05-108-26 Housing Board of Appeals

Dennis Mando was interviewed for the appointment.

MOTION: Motion by Longe:
To appoint Dennis Mando as a regular member of the Housing Board of Appeals to serve a three-year term to expire May 4, 2029.

ROLL CALL VOTE
Ayes: Longe, Baller, Kozlowski, Haig, Host, Kolb
Nays: None
Recused: None

05-109-26 Birmingham Area Cable Board

Darby Hadley was interviewed for the appointment.

MOTION: Motion by Host:
To appoint Darby Hadley as a regular member to the Birmingham Area Cable Board to serve the remainder of a three-year term to expire May 1, 2029.

ROLL CALL VOTE
Ayes: Longe, Baller, Kozlowski, Haig, Host, Kolb
Nays: None
Recused: None

In light of Julie Pincus' absence, it was noted that she could reschedule her interview for the Public Arts Board if she remained interested.

CC Bingham swore in the present appointees.

4. OPEN TO THE PUBLIC FOR MATTERS NOT ON THE AGENDA

None.

6. CITY MANAGER'S REPORT

None.

7. UNFINISHED BUSINESS

05-110-26 Architectural Design Plan and Request For Proposals (RFP) for the Renovation of the First Floor of 400 E. Lincoln

Jim Stock of Neumann/Smith and Cris Braun of Next presented the item.

MOTION: Motion by Longe, seconded by Haig:
To adopt a resolution to approve the architectural design plan for the renovation of the first floor of the building at 400 E. Lincoln as presented by Neumann Smith Architects and direct City staff to issue a request for proposals (RFP) for a contractor to develop construction design-build plans for 400 E. Lincoln consistent with the design plan.

Mr. Stock answered questions.

Commissioners discussed the following regarding the motion:

- It would be appropriate to include a barrier-free elevator as part of this construction.
- This proposal is only the first phase of renovating the building. Since Next needs a new location by May 2027, the most urgent first floor uses are being addressed first.
- Opportunities to make the lower and upper floors more accessible may be addressed in future phases.
- There might be an opportunity to make the storage room off the multipurpose room a bit bigger.
- Some concerns were raised in the past that Next would not have an adequate location after May 2027. This proposal demonstrates the Commission's commitment to creating an appropriate location for Next.
- This is a reasonable, cost-efficient, well thought out design that maximizes the available square footage. A minimal number of load bearing walls are moved, the hallways and gym are maintained, a small efficient kitchen is included, and all prior areas of concern seem to have been addressed.
- While ensuring that the lower and upper floors are accessible would be appropriate in the future, this is a positive first step.

ROLL CALL VOTE
Ayes: Longe, Baller, Kozlowski, Haig, Kolb
Nays: Host
Recused: None

05-111-26 Acceptance of Nominations for City Commissioner from City Commissioners

MOTION: Motion by Kozlowski:
To nominate Debra Horner.

Commissioners discussed the following regarding the motion:

- In one opinion, one 'side' of this issue was behaving differently from the other 'side'.
- This was not a matter of 'sides'. The disagreement about the best candidate for the Commissioner vacancy seemed to stem from a fundamental difference of opinion about the role of the Commission in City government and the person best suited to fill this role.
- Ms. Jaye has excellent business experience and would be an excellent selection for a department head or a City Manager.
- The Commission functions as a Board of Directors. It does not direct employees, projects, or staff.
- Ms. Horner is the candidate who would add the most to the Commission because she would bring new perspectives and would bring her expertise in fiscal models and fiscal sustainability in municipal governments. As the Commission considers how to pay for infrastructure improvements, this expertise would be relevant. This expertise is also practical and not merely academic.
- A political party may or may not have been trying to influence the outcome of this appointment. Commissioners are obligated to operate 'free from partisan distinction or control'. If a political party was trying to influence the appointment, there was some feeling that would be disappointing and inappropriate.

Public Comment

Rackeline Hoff commented that Commissioners should find a way to break the tie vote and fill the Commission vacancy.

Danielle Mallon, Stacy Schreiber, Wendy Friedman, Diana Lopez Negrete, Michael Mckeown, Michael Smith, Issa Jurassi Ackerman, and George Dilgard supported Debra Horner's candidacy for the Commission appointment.

ROLL CALL VOTE
Ayes: Kozlowski, Longe, Baller
Nays: Host, Haig, Kolb
Recused: None

05-112-26 Acceptance of Nominations for City Commissioner from City Commissioners (Part II)

MOTION: Motion by Kolb:
To nominate Mary Jaye to serve the remainder of a term ending November 2027.

ROLL CALL VOTE
Ayes: Haig, Host, Kolb
Nays: Kozlowski, Longe, Baller
Recused: None

05-113-26 Acceptance of Nominations for City Commissioner from City

Commissioners (Part III)

MOTION: Motion by Kozlowski:
To nominate Debra Horner.

ROLL CALL VOTE
Ayes: Kozlowski, Longe, Baller
Nays: Haig, Host, Kolb
Recused: None

05-114-26 Acceptance of Nominations for City Commissioner from City Commissioners (Part IV)

MOTION: Motion by Kolb:
To nominate Mary Jaye to serve the remainder of a term ending November 2027.

ROLL CALL VOTE
Ayes: Haig, Host, Kolb
Nays: Kozlowski, Longe, Baller
Recused: None

05-115-26 Commissioner Appointment Next Steps (Part I)

CA Kucharek presented the item.

MOTION: Motion by Kolb, seconded by Haig:
To move that all six Commissioners must be present for nominations and voting, as our charter states that the appointment is made by a majority of the remaining members, and the remaining members are all six City Commissioners.

Commissioners discussed the following regarding the motion:

- This motion could be revisited in the event that a Commissioner becomes unavailable to serve, and only five Commissioners remain.
- This is a resolution until circumstances change.

VOICE VOTE
Ayes: Haig, Longe, Kozlowski, Host, Kolb, Baller
Nays: None
Recused: None

05-116-26 Commissioner Appointment Next Steps (Part II)

Commissioners discussed the following regarding the item:

- It would be most appropriate to table this without a date certain to allow for a period of

reflection and calming of emotions.

- It is necessary to determine whether to seek a new applicant pool, and how this matter should be re-raised.
- It would be best if any Commissioner were allowed to re-raise the topic following the Commission's standard three step process for adding an item to future Commission agendas. This would standardize the process and also allow sufficient notice for all parties.
- The first step would be a motion for the Commission to consider filling the vacancy at the following meeting. The second step would be discussing, at this subsequent meeting, whether the Commission should consider filling the vacancy, and whether it should draw from a new pool of applicants or the present pool of applicants. The third step would be implementing the conclusions from the second meeting as appropriate.

MOTION: Motion by Haig, seconded by Longe:
To make a motion that we table future discussion of a replacement City Commissioner until such time that it is brought up by a Commissioner following our three-step process to place it back on the agenda. All voting must be with six members present, and a simple majority vote is required for an affirmative vote.

Commissioners discussed the following regarding the motion:

- The discussion of this item demonstrated the Commission's ability to work together on items.

VOICE VOTE
Ayes: Haig, Longe, Kozlowski, Host, Kolb, Baller
Nays: None
Recused: None

8. NEW BUSINESS

05-117-26 Public Hearing of Necessity for Sewer and Water Lateral Special Assessment District (SAD) - Wimbleton Phase 2 Project, Contract #6-26(W)

The Mayor opened the public hearing at 8:14 p.m.

CE Coatta presented the item and answered questions.

Public Comment
Robert Geenens, 1070 Wimbleton, asked about how the assessed properties would be billed.

Travis Bouchard, 715 Wimbleton, supported preserving a tree on his property that might otherwise be affected by this project.

Andrew Baran, 612 Wimbleton, also supported preserving a tree on his property that might otherwise be

affected by this project.

Josie Connolly, 900 Wimbleton, asked why her house was not in blue on the project map.

Larry Lyng, 644 Byrd, supported Messrs. Bouchard and Baran in their requests to preserve their trees.

Christine Boyle, 840 Wimbleton, asked whether the project could avoid disrupting their driveway, and whether their water line would need to be replaced or not.

Cliff Rager, 541 Wimbleton, commented that his home is in between two project phases and that the construction staging should be communicated to residents.

Sally Swift, 541 Wimbleton, asked about the project's design in front of her home, whether the planned Stop Sign in front of her home could be moved, and whether her property's water and sewer laterals would need to be replaced.

Lanie Cosgrove, 868 Wimbleton, commented that her sewer lateral had recently been replaced and asked whether that would affect her charges.

Danny Seidman, 652 Wimbleton, asked about the water and sewer lateral installation method.

Commissioners discussed the following regarding the item:

- Staff should determine whether Messrs. Bouchard's and Baran's requests can be accommodated and report their findings to the Commission.
- Staff should also provide a report on the health of the 14 trees that might otherwise be cut down for this project, since preservation of the City's tree canopy is a Commission priority.
- Residents should understand that it is possible that healthy-looking trees still have health issues, and the City may find that is the case with some of the trees affected by this project.
- For 541 Wimbleton, the property owner's assessment will not be known until Wimbleton – Phase II located the water and sewer laterals.
- Residents pay 100% for the replacement of water and sewer laterals because it is the individual resident that wholly benefits from the replacement.
- These replacements only go up to each individual property line.

Seeing no further public comment, the Mayor closed the public hearing at 8:41 p.m.

MOTION: Motion by Longe, seconded by Kozlowski:
WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project replacing sewer services 50 years of age or older or constructed of material that is not acceptable for City standards and replacing water services that are 60 years or older or less

than 1 inch in diameter on Wimbleton Drive from Oxford Road to Adams Road; and

WHEREAS, The City has previously established a policy requiring replacement of sewer services 50 years of age or older or constructed of materials that are not acceptable for City standards and water services less than 1 inch in diameter and the City street is open for repairs or reconstruction; and

WHEREAS, The City Commission, after the public hearing, has determined that the Wimbleton Phase 2 Project, the replacement of sewer services that are 50 years of age or older or of material that is not acceptable for City standards, the replacement of water services that are 60 years or older or less than 1 inch in diameter, is a necessity and is in the best interest of the City; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Formal bids have been received and the actual cost of sewer service and water service replacement has been determined; and

WHEREAS, The City Engineer has determined the boundaries of sewer service lateral and water service laterals located within the limits of the following streets shall be installed as part of the Wimbleton Phase 2 Project (Contract #6-26(W)):

Wimbleton Drive - Oxford Road to Woodward Avenue

WHEREAS, The formula used in making the assessment is 100% of the contractor's charge for replacing the lateral service that is 50 years of age or older or constructed of materials that are not acceptable and water service that is 60 years of age or older or less than 1 inch in diameter within the public right-of-way between the utility and the property line (calculated at the rate of $49.77 per foot of 6" diameter sewer service pipe, $35.54 per foot of 1-inch water service pipe).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the public improvement as described is in the best interest of the City and will benefit the properties listed in the assessment roll and is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a Public Hearing of Confirmation on May 18, 2026 and give notice of same.

Sewer and/or Water Lateral

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1925255007	541 WIMBLETON DR	$ 1,990.80	$ 1,066.20
1925255008	921 WARWICK DR	$ -	$ -
1925280008	625 WIMBLETON DR	$ -	$ -
1925280009	647 WIMBLETON DR	$ 995.40	$ -

1925280010	669 WIMBLETON DR	$ 1,542.87	$ 1,421.60	
1925280025	701 WIMBLETON DR	$ -	$ -	
1925280026	715 WIMBLETON DR	$ 1,094.94	$ -	
1925280027	733 WIMBLETON DR	$ -	$ -	
1925280028	777 WIMBLETON DR	$ -	$ -	
1925280029	921 POPPLETON AVE	$ -	$ -	
1925280030	939 POPPLETON AVE	$ -	$ -	
1925281005	928 POPPLETON AVE	$ -	$ -	
1925281010	887 WIMBLETON DR	$ 995.40	$ 1,954.70	
1925281033	923 WIMBLETON DR	$ 995.40	$ 1,954.70	
1925281040	983 WIMBLETON DR	$ -	$ -	
1925281041	1005 WIMBLETON DR	$ -	$ -	
1925281031	1054 ABBEY RD	$ -	$ 22.21	
1925281030	1064 ABBEY RD	$ -	$ 22.21	
1925281029	1074 ABBEY RD	$ -	$ 22.21	
1925281028	1084 ABBEY RD	$ -	$ 22.21	
925281027	971 N ADAMS RD	$ -	$ 22.21	
1925281026	961 N ADAMS RD	$ -	$ 22.21	
1925281025	951 N ADAMS RD	$ -	$ 22.21	
1925281024	941 N ADAMS RD UNIT 9	$ -	$ 22.21	
1925281023	931 N ADAMS RD	$ -	$ 22.21	
1925281022	921 N ADAMS RD	$ -	$ 22.21	
1925281021	911 N ADAMS RD	$ -	$ 22.21	
1925281020	901 N ADAMS RD	$ -	$ 22.21	
1925281019	1085 WIMBLETON DR	$ -	$ 22.21	
1925281018	1075 WIMBLETON DR	$ -	$ 22.21	
1925281017	1065 WIMBLETON DR	$ -	$ 22.21	
1925281016	1055 WIMBLETON DR	$ -	$ 22.21	
1925258002	554 WIMBLETON DR	$ 1,493.10	$ 746.34	
1925258003	612 WIMBLETON DR	$ 2,040.57	$ -	
1925258004	636 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925258005	652 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925258006	680 WIMBLETON DR	$ 2,040.57	$ 1,101.74	
1925258007	700 WIMBLETON DR	$ 2,040.57	$ 1,243.90	
1925258008	871 POPPLETON AVE	$ 2,040.57	$ -	*
1925282001	812 WIMBLETON DR	$ 3,085.74	$ 1,883.62	
1925282002	824 WIMBLETON DR	$ 1,990.80	$ -	
1925282003	840 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282004	868 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282015	886 WIMBLETON DR	$ 1,990.80	$ 1,101.74	

1925282008	900 WIMBLETON DR	$ 2,040.57	$ 1,243.90
1925282024	930 WIMBLETON DR	$ -	$ -
1925282025	980 WIMBLETON DR	$ -	$ -
1925282012	1004 WIMBLETON DR	$ 2,040.57	$ 1,066.20
1925282013	1038 WIMBLETON DR	$ 2,040.57	$ 710.80
1925282017	1078 WIMBLETON DR	$ 291.51	$ -
1925282023	1050 WIMBLETON DR	$ 291.51	$ -
1925282022	1060 WIMBLETON DR	$ 291.51	$ -
1925282021	1064 WIMBLETON DR	$ 291.51	$ -
1925282020	1070 WIMBLETON DR	$ 291.51	$ -
1925282019	1072 WIMBLETON DR	$ 291.51	$ -
1925282018	1076 WIMBLETON DR	$ 291.51	$ -

* Records indicate Lead Water Service, Zero Costs per the State of Michigan

ROLL CALL VOTE
Ayes: Haig, Longe, Kozlowski, Host, Kolb, Baller
Nays: None
Recused: None

5. CONSENT AGENDA

05-118-26 Consent Agenda

MOTION: Motion by Longe, seconded by Host:
To move the consent agenda as presented, excluding Items G and H.

ROLL CALL VOTE
Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None
Recused: None

A. Resolution to approve the warrant list, including Automated Clearing House payments, dated April 29, 2026, in the amount of $420,517.94.

B. Resolution to set the Public Hearing of Necessity for the replacement and improvements of sewer and water laterals meeting the requirements of assessments, for all properties within the project area on North Old Woodward from Oak Street to Woodward Avenue on Monday, June 8, 2026, at 7:00 p.m.; and

   If necessity is determined on June 8, 2026, to meet on Monday, June 22, 2026, at 7:00 p.m., for the purpose of conducting the Public Hearing to Confirm the Assessment Roll for the replacement and improvements of sewer and water lateral meeting the requirements for the assessments, for all properties with the project area on North Old Woodward from Oak Street to Woodward

Avenue.

C. Resolution to set the Public Hearing of Necessity for the road surface cape seal treatment meeting the requirements for assessment, for all properties within the project area on Glenhurst Drive from Raynale Street to Redding Road, Lyonhurst Road from Raynale Street to Redding Road, Fairview Avenue from Chesterfield to west dead end, Pleasant Avenue from Lincoln Avenue to Maple Road, Stanley Avenue from Lincoln Avenue to Wallace Street, Stanley Avenue from Hanna Street to Brown Street, and Buckingham Road from Edenborough Road to St. Andrews Road on June 8, 2026, at 7:00 p.m.; and

   If necessity is determined on June 8, 2026, to meet on June 22, 2026, at 7:00 p.m., for the purpose of conducting the Public Hearing to Confirm the Assessment Roll for the new pavement installation meeting the requirements for assessment, for all properties within the project area on Glenhurst Drive from Raynale Street to Redding Road, Lyonhurst Road from Raynale Street to Redding Road, Fairview Avenue from Chesterfield to west dead end, Pleasant Avenue from Lincoln Avenue to Maple Road, Stanley Avenue from Lincoln Avenue to Wallace Street, Stanley Avenue from Hanna Street to Brown Street, and Buckingham Road from Edenborough Road to St. Andrews Road.

D. Resolution to approve an agreement with Russell Landscaping for 2026 Tree Purchase and Plant (3 Phases) in the amount not to exceed $419,364.00, and to authorize the Mayor and City Clerk to sign the agreement on behalf of the City; and further to appropriate and amend the 2025-2026 City Commission budget as follows:

   Local Streets
   Revenue
   Draw from Fund Balance 203.0-000.000-400.0000 $39,522.00
   Expenditures
   Local Streets Forestry Services 203.0-449.005-819.0000 $39,522.00

E. Resolution to receive reimbursement from Oakland County for the purchased larvicide materials from Clarke Mosquito Control.

F. Motion adopting an ordinance to amend the City Code, Chapter 2, Administration, Article VI., Employee Benefits – Division 2. – Retirement System, Sections 2-222 and 2-223 to include gender-inclusive language, reflect current positions and current union names, and to amend the retirement age eligibility for the Police Chief to be consistent with the retirement age eligibility of the Fire Chief and all other police and fire employees.

05-119-26 Right-of-Way Parking Request for 33202 Woodward Pursuant to Article 4, Section 4.45 (G)(1)

Commissioner Haig pulled Item G. Staff answered questions.

Commissioners discussed the following regarding the item:

- The 'in perpetuity' regarding the parking spaces in the applicant's letter is not binding on the Commission or the City.
- The motion would allow the applicant to presently count these parking spaces towards its parking requirement.
- The required parking could change with a changed use.
- The applicant recently improved the pavement in this area.

MOTION: Motion by Haig, seconded by Host:
To approve the right-of-way parking request for 33202 Woodward to permit 27 on-street parking spaces in the Woodward right-of-way to be counted towards the required off-street parking requirements of the subject site pursuant to Article 4, Section 4.45 (G)(1).

ROLL CALL VOTE
Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None
Recused: None

05-120-26 Right-of-Way Parking Request for 33401 Woodward Pursuant to Article 4, Section 4.45 (G)(1)

Commissioner Haig pulled Item H.

Commissioners discussed the following regarding the item:

- This item is similar to Item G, and also does not define how long the applicant may count these parking spaces towards its parking requirements.

MOTION: Motion by Haig, seconded by Host:
To approve the right-of-way parking request for 33401 Woodward to permit 2 on-street parking spaces in the Woodward right-of-way to be counted towards the required off-street parking requirements of the subject site pursuant to Article 4, Section 4.45 (G)(1).

ROLL CALL VOTE
Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None
Recused: None

8. NEW BUSINESS (Part II)

05-121-26 Public Hearing of Necessity for Paving Special Assessment District (SAD) - Wimbleton Phase II Project, Contract #6-25(W)

The Mayor opened the public hearing at 8:57 p.m.

CE Coatta presented the item and answered questions.

Mr. Brodsky, 652 Wimbleton, reserved his right to protest, commented regarding major roads funding, commented regarding individual special assessment amounts, and thanked the Commission.

Mr. Brodsky also reserved the right to protest of Chuck Greening, 647 Wimbleton, per Mr. Greening's request.

Ms. Connolly, 900 Wimbleton, supported residents in Wimbleton Phase II being able to park in the Derby Middle School parking lot.

Mr. Seidman, 652 Wimbleton, reserved his right to protest, thanked the Commission, commented that Wimbleton had not been cape sealed since before 2016, and commented regarding the contractor's road use and adherence to a timeline.

Matt Shalhoub, 980 Wimbleton, reserved his right to protest if Wimbleton Phase II does not have the same cost split as Wimbleton Phase II.

Mr. Rager, 541 Wimbleton, reserved his right to protest, and thanked the Commission and commented regarding the paving in front of his house, the potential sign in front of his house,

Ms. Swift, 541 Wimbleton, commented regarding the paving in front of her house, the potential stop sign in front of her house, and a request for a sign at Warwick and Wimbleton.

Joelle Kezlarian, 554 Wimbleton, reserved her right to protest.

Mr. Bouchard, 715 Wimbleton, reserved his right to protest.

Brian Duffy, 700 Wimbleton, reserved his right to protest.

Ming Tsu, 733 Wimbleton, reserved his right to protest and supported ensuring that the issues that arose during Wimbleton Phase I would not recur during Wimbleton Phase II.

Seeing no further public comment, the Mayor closed the public hearing at 9:17 p.m.

Commissioners discussed the following regarding the item:

- There was Commission consensus that Wimbleton Phase II should have the same cost split as the one approved by the Commission for Wimbleton Phase I.
- Every Commissioner is a Birmingham resident. Commissioners seek to accommodate residents' needs and concerns. It is inaccurate when discussions on social media seem to characterize Commission-resident interactions as inherently adversarial.
- The cost split for Wimbleton Phase I was changed because the Commission considered the fact that Wimbleton is a major road per the MDOT Public Act 51 roadway map. Major roads have additional uses not originated by residents, and so a 50-50 split was fair.

- Prices are higher for Wimbleton Phase II in part because the grading will require more work, and the base needs to be built up a bit more.
- If the City receives funding for major road repairs from the State, that funding would go into the City's major streets fund. This would help offset the City's 50% of the costs to repair Wimbleton and other major streets.
- It is most likely that any funding received from the State for major roads would be used in addition to the City's major streets fund, rather than replacing some of the City's major streets fund.

MOTION: Motion by Host, seconded by Kolb:
WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project paving on Wimbleton Drive from Oxford Road to Adams Road; and

WHEREAS, The City has previously established a policy to defray the costs of Cape Seal treatments on unimproved streets by creating a Special Assessment District (SAD) consisting of the properties that are benefiting from this treatment; and

WHEREAS, The City Commission, after the public hearing, has determined that paving Wimbleton Drive from Oxford Road to Adams Road, is a necessity and is in the best interest of the City and will specially benefit the properties included in the Special Assessment District; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Formal bids and quotes have been received and the actual cost of paving has been determined; and

WHEREAS, The City Engineer has determined the boundaries of sewer service lateral and water service laterals located within the limits of the following streets shall be installed as part of the Wimbleton Phase 2 Project (Contract #6-26(W)):

Wimbleton Drive - Oxford Road to Adams

WHEREAS, the City Commission does not find that the assessments of 85%-15%, as policy generally dictates, are in proportion to the benefits received to the parcels in Phase 2 of Wimbleton paving special assessment district as the City Commission has confirmed that Wimbleton is a major road in a residential area that is unimproved; and

WHEREAS, the City Commission, as they found for Wimbleton Phase 1, has determined that the 85-15% split is not proportional in this particular circumstance; and

WHEREAS, The formula used in making the assessment for paving is 50% of the front-foot costs for improvement are assessed on all properties fronting on the improvement, 25% of the side-foot costs for improvement are assessed on all residential properties siding on the cape seal treatment

improvement, replacement of sidewalk ramps to meet ADA compliance, and for approaches is 100% of the contractor's charge for replacing the approach with concrete within the public right-of-way between the proposed curb and the property line if the lateral is located underneath the approach (calculated at the rate of $113.01 per front footage for paving, $66.47 per square yard for removed concrete approach and installed concrete approach, $65.31 per square yard for remove asphalt approach and installed concrete approach).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the public improvement as described is in the best interest of the City and will benefit the properties listed in the assessment roll is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a Public Hearing of Confirmation on May 18, 2026 and give notice of same.

The sidwells, street addresses, and the 50% SAD costs in the agenda are outlined on page seven and eight.

ROLL CALL VOTE
Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None
Recused: None

05-122-26 Public Hearing for 126 S. Old Woodward – Snap Taco – Special Land Use Permit and Final Site Plan & Design Review

PD Dupuis presented the item and answered questions.

The Mayor opened the public hearing at 9:27 p.m.

The applicant spoke on behalf of the item and thanked the Commission.

Seeing no public comment, the Mayor closed the public hearing at 9:28 p.m.

Commissioners discussed the following regarding the item:

- The City has more restaurants than contemplated by the 1980 Birmingham Master Plan. This might relate to Mr. Bloom's comment regarding the City's atmosphere on Friday and Saturday nights.

MOTION: Motion by Longe, seconded by Kolb:
To approve the Special Land Use Permit and Final Site Plan & Design Review application for 126 S. Old Woodward, to permit the sale of alcoholic beverages for on premise consumption as a bistro establishment and a new outdoor dining facility with the condition that the applicant complete the required investigation pursuant to Chapter 10, Section 10-43 of the Birmingham Code of Ordinances.

ROLL CALL VOTE
Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None

Recused: None

Review the recommended rate structure and provide direction regarding the adoption and implementation of the proposed water and sewer rate fee structure

CE Coatta introduced the item. Jamie Burton of Hubbell, Roth, and Clark presented the item. Staff and Mr. Burton answered questions.

Commissioners discussed the following regarding the item:

- Under this proposal, properties with higher anticipated water usage rates would be charged a larger fixed amount every quarter.
- It is not intuitively apparent why water and sewer rates in the region increase when Michigan is located in the Great Lakes region.
- Commission questions on this item should be limited to the proposed water and sewer rate fee structure.
- This proposal recommends creating a $10 million reserve. The City presently has approximately $7 million in reserve, and it is estimated that the City will spend approximately $3 million a year for capital improvements. Based on projections, it is estimated that the City should reach the $10 million in reserve within four to five years.
- This approach is thoughtful and appropriate. It is a hybrid system that gradually changes to fixed-cost billing and still maintains a usage-based rate.
- As residents become more environmentally conscious and make efforts to conserve water, the City receives less revenue due to the decreased usage. At the same time, the City's fixed costs continue to increase. Consequently, this proposal is necessary step.
- The City administration finds this proposal appropriate.
- The City staff report said the minimum increase would be approximately $18 per quarter, $6 per month, assuming several things. This amount would not include stormwater changes.
- Trying to decrease costs in this system is a complicated topic with many variables.
- The Commission seemed generally supportive of the proposal overall.

11. REPORTS

B. City Staff
   2. Short Term Rental Follow-up Report

CAs Kucharek and Gaudenzi and BO Zielke presented the report and answered questions.

Commissioners discussed the following regarding the report:

- The Commission intends for the City to eliminate short-term rental licenses after April 15, 2027 via zoning mechanisms, with a possible carveout for owner-occupied rentals.
- The City recently gained the capacity to regulate short term rentals via zoning, which was not true when short term rentals were initially discussed by the Commission.
- The Commission views this as an urgent issue.
- Any residents with addresses of particularly problematic short term rentals should provide said address to the Chief of Police, Building Official, or City Attorneys.
- Enforcement of short term rental concerns has been via the Police Department or via the

Building Department. If the matter was addressed via the Police Department, they would determine whether a law was broken, and proceed with creating either a D card or an incident report. When this occurred, these issues were not then forwarded to the Building Department for separate consideration. If the matter was addressed via the Building Department, the Building Department approached the issue through a customer service lens and sought to bring the properties into compliance through working with the owner. Sometimes a notice of violation would also be issued in these circumstances.

- Both of these approaches will change moving forward. If the Police Department encounters an issue at any rental, and especially a short-term rental, the matter will also be referred to the Building Department. If the Building Department comes across a violation that warrants a revocation of a license, then it will do so.
- At the last meeting, the Commission imposed a moratorium of six months on new short-term rental applications. Staff has returned to this meeting with additional measures it will take to address issues arising from short term rentals.
- Residents will need to assist the City by reporting issues as they arise. Resident attestations regarding issues at rental properties can assist the Building Official in determining whether a notice of violation or a potential revocation of a license might be appropriate.
- The City's GovAlert app has added a new section where concerns specific to rental properties may be reported to the City.
- It might be appropriate to punitively fine renters or rental property owners for Police, Building, or Fire Department visits to the rental property.
- Alternatively, the City likely cannot charge renters or rental property owners for all Police, Building, or Fire Department visits to the rental property.
- Rental properties are commercial businesses in residentially zoned areas.
- Staff's emphasis on landlord education and enforcement regards extant licenses that the City cannot legally revoke at this time.
- Airbnb and VRBO have both stated that they will remove unlicensed properties from their platforms if they are notified.
- Commissioners and residents are enabled to write proposed ordinance language and to submit it to the Commission for consideration.
- While there has been a contention that municipalities like Ann Arbor or Manhattan were able to stop short term rentals very quickly and with finality, a review of the relevant meeting minutes, history, results, or lawsuits does not reflect that contention. Both used zoning or other regulations to reduce short term rentals.
- Under the City's Rules of Procedure, Michigan law, and the Michigan Zoning Enabling Act, in order to create an enforceable ordinance, the development of an ordinance must follow the recommended process.
- As long as an ordinance has been adopted before the six month moratorium lifts, no new short term rental licenses can be issued.
- The City will continue to pursue and police unregistered rentals.
- Every Commission meeting moving forward should include a brief update on the Planning Board's work regarding short term rentals and on short term rental enforcement actions.
- Residents were thanked for participating in the conversation.

Commissioner Host made a resolution to have a new zoning ordinance May 18th, and the motion died for lack of a second.

Public Comment
David Wynn thanked everyone for their work on the matter, and commented regarding rental license renewals, varying landlord quality, the Planning Board's upcoming meeting on short term rentals, and regarding short term rental locations.

Narlu Castellano supported immediate responsiveness to safety issues stemming from short term rentals, the creation of enforceable ordinance language to further address short term rental issues, and commented regarding how the shooting on E. Lincoln has impacted the community.

Kelly Kozlowski supported Ms. Castellano's comments, and commented regarding the Police and Building Departments' prior coordination on short term rental issues, residents' reporting of past short term rental issues, the Commission's response to the matter, and the feeling that more urgent action remained necessary.

Larry Lyng supported changing the zoning so that short term rentals are no longer permitted in residential neighborhoods after their licenses expire on April 15.

Cassie Sobelton asked about the possible implications for owner-occupied short term rentals.

Shawn Scott supported Mses. Castellano and Kozlowski, supported increased responsiveness regarding these issues, commented regarding her experiences with short term rentals, and commented regarding her experience in reporting those issues to the City.

Donna Voorhees commented that nuisance behavior seemed correlated to weekend-long rentals, commented regarding reporting, supported the creation of a hotline for short term rental issues, and supported urgent action to eliminate short term rentals in the City.

Commission discussion on items from a prior meeting

None

Commission Items for Future Discussion

05-123-26 Phase II – YMCA

MOTION: Motion by Host, seconded by Haig:
To make a motion that we talk about phase two of the YMCA building at our next reasonable agenda.

Commissioners discussed the following regarding the motion:

- This has been a matter of concern for some time.

VOICE VOTE
Ayes: Haig, Longe, Baller, Host, Kozlowski, Kolb
Nays: None
Recused: None

The Mayor noted this was a unanimous decision.

9. REMOVED FROM CONSENT AGENDA

10. COMMUNICATIONS

A. Communication regarding the City Commission vacancy
B. Communication regarding Short Term Rentals
C. Communication regarding Woodward noise
D. Communication regarding capeseal on Northlawn

Public Comment

Nicholas Herdzik commented regarding his intended appeal of his Northlawn assessment to the Michigan Tax Tribunal and regarding his communication to the Commission about capeseal on Northlawn.

It was noted this matter could be further addressed with staff outside of this meeting.

11. REPORTS

A. Commissioner Reports
    1. Notice of Intention to Appoint to the Museum Board
    2. Notice of Intention to Appoint to the Ethics Board
    3. Notice of Intention to Appoint to the Greenwood Cemetery Advisory Board
C. Commissioner Comments
D. Advisory Boards, Committees, Commissions' Report
E. Legislation
F. City Staff
    1. Wimbleton Phase I Update

Staff was thanked for the update.

G. Information Only

12. ADJOURN

The Commission motioned to adjourn at 11:39 a.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

City of Birmingham
Warrant List Dated 05/06/2026

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
309104		009372	ALLIED FIRE SALES & SERVICE	1,252.82
309105		MISC	ANN ARBOR DISTRICT LIBRARY	18.99
309106	*	006759	AT&T	639.22
309107		001122	BOB BARKER CO INC	644.34
309108		001282	BEAR PACKAGING & SUPPLY INC	587.00
309109		009568	BEDROCK EXPRESS LTD	3,333.22
309110	*	002231	BILLINGS LAWN EQUIPMENT INC.	51.73
309111		008355	BIRMINGHAM PUBLIC SCHOOLS	590.71
309112		003907	CADILLAC ASPHALT, LLC	7,134.15
309113		BDREFUND	CAMDEN, CARL	1,000.00
309114	*	003904	CAPITAL ONE BANK	8,949.82
309116		008959	CASS COLLISION CLAWSON, INC	2,622.65
309117		000151	CCI-ATX, LLC	328.63
309118	*	000627	CONSUMERS ENERGY	1,604.00
309119		008512	COOL THREADS EMBROIDERY	48.00
309120	*	006115	CORRIGAN MOVING SYSTEMS	1,000.00
309121	*	009815	CULLIGAN OF ANN ARBOR/DETROIT	11.00
309122		004386	CYNERGY PRODUCTS	1,494.00
309123		010022	DAVIS & STATON, INC	159.50
309124	*	000179	DTE ENERGY	130.46
309125	*	000179	DTE ENERGY	555.73
309126	*	000179	DTE ENERGY	34.16
309127	*	000179	DTE ENERGY	1,098.51
309128	*	000179	DTE ENERGY	226.66
309129	*	000179	DTE ENERGY	21.17
309130	*	000179	DTE ENERGY	69.02
309131	*	000179	DTE ENERGY	312.31
309132	*	000179	DTE ENERGY	150.15
309133	*	000179	DTE ENERGY	2,432.63
309134	*	000179	DTE ENERGY	137.80
309135	*	000179	DTE ENERGY	94.72
309136	*	000179	DTE ENERGY	2,867.17
309137	*	000180	DTE ENERGY	56,464.79
309138		008164	GARY EISELE	93.53
309139		BDREFUND	FLOYD STREET, III, LLC	750.00
309140		010073	FRESCO COMMERICAL CLEANING	900.00
309141		010040	GREAT LAKES BREATHING AIR	2,030.05
309142		000249	GA BUSINESS PURCHASER LLC	284.64
309143	*	001377	HAGOPIAN CLEANING SERVICES	135.00
309144		003132	HASTINGS AIR-ENERGY CONTROL INC	2,347.00
309145	*	001846	HIGHWAY MAINTENANCE&CONSTRUCTION CO	30,029.46
309146	*	MISC	HINDERLITER HEARING SERVICES	150.00

City of Birmingham
Warrant List Dated 05/06/2026

Check Number	Early Release	Vendor #	Vendor	Amount
309147	*	001956	HOME DEPOT CREDIT SERVICES	1,020.17
309148		010198	IAFCI	95.00
309149		006521	INTERSTATE BILLING SERVICE INC	2,298.33
309150		001625	J.B. DLCO & MULTISTATE TRANSMISSION	443.59
309151		009724	JOHN CONNOR	500.00
309152		010089	K & R TRUCK SALES	1,352.14
309153	*	UBREFUND	MADELINE ROURKE	135.06
309154		009866	MARSHALL LANDSCAPE	985.00
309155	*	000369	MCMI	1,581.25
309156	*	009085	MGSE SECURITY LLC	150.00
309157		009200	MICHAEL MORRISON	2,530.00
309158		001660	MICHIGAN CAT	60.98
309159		009730	NASRO	650.00
309160		MISC	NEW JERSEY RECREATION & PARK ASSOC	525.00
309161		009915	OAKLAND COMMUNITY HEALTH NETWORK	13,435.67
309162	*	008712	OAKLAND COUNTY HEALTH DIVISION	73.00
309163	*	004370	OCCUPATIONAL HEALTH CENTERS OF MI	584.00
309164	*	009478	ODP BUSINESS SOLUTIONS, LLC	89.14
309165		009612	PLAYAWAY PRODUCTS LLC	10,131.47
309166		009614	PROGRESSIVE PLUMBING SUPPLY CO	135.23
309167		010079	RELIANT FIRE APPARATUS OF MICHIGAN	155.13
309168		000218	ROYAL OAK P.D.Q. LLC	62.00
309169	*	002806	SAM'S CLUB/SYNCHRONY BANK	387.52
309170	*	010230	SPARTAN TURF PRODUCTS LLC	142.52
309171		010112	SUMMER ALDRED-ARENS	164.84
309172		010112	SUMMER ALDRED-ARENS	63.28
309173		BDREFUND	SYNNESTVEDT, JANE	100.00
309174	*	000272	TENNANT SALES & SVC CO	4,095.15
309175	*	009552	TRAFFIC & SAFETY CONTROL SYSTEMS	9,740.00
309176		010172	VERTICAL SUPPLY GROUP INC	1,359.98
309177	*	005631	ULTIMATE REEL GRINDING LLC	2,980.00
309178	*	000158	VERIZON WIRELESS	699.28
309179	*	000158	VERIZON WIRELESS	149.79
309180	*	000158	VERIZON WIRELESS	89.94
309181	*	000158	VERIZON WIRELESS	831.07
309182	*	000158	VERIZON WIRELESS	295.50
309183	*	000158	VERIZON WIRELESS	49.25
309184		005112	WOLVERINE FREIGHTLINER-EASTSIDE INC	62.71
			SUBTOTAL PAPER CHECK	$190,987.73
ACH TRANSACTION				
15817	*	000855	48TH DISTRICT COURT	523,884.00
15818	*	002284	ABEL ELECTRONICS INC	1,150.00

City of Birmingham
Warrant List Dated 05/06/2026

Check Number	Early Release	Vendor #	Vendor	Amount
15819	*	009186	BILL PEASLEY	1,428.28
15820	*	007345	BEVERLY HILLS ACE	85.62
15821	*	009355	SHAUN BROWN	1,095.61
15822		000605	CINTAS CORPORATION	272.98
15823		000605	CINTAS CORPORATION	46.33
15824	*	000605	CINTAS CORPORATION	194.19
15825		009840	THOMAS S. KLISE COMPANY, INC	576.21
15826		009024	D.M. BURR GROUP	4,964.66
15827		009873	D/A CENTRAL INC.	10,909.62
15827	*	009873	D/A CENTRAL INC.	6,512.51
15828		009181	DELTA TEMP SERVICES INC	15,800.00
15829	*	000565	DORNBOS SIGN & SAFETY INC	922.76
15830	*	001077	DUNCAN PARKING TECH INC	12,404.70
15831	*	003801	JANA ECKER	524.00
15832		009916	FASTFIELD, INC.	117.30
15833		000331	HUBBELL ROTH & CLARK INC	89,344.46
15834		000948	HYDROCORP	11,393.00
15835		000261	J.H. HART URBAN FORESTRY	23,296.71
15836	*	003458	JOE'S AUTO PARTS, INC.	536.56
15837	*	003527	LOWER HURON SUPPLY CO INC	1,197.08
15838	*	009555	STEVEN MCINERNEY	18.50
15839	*	008723	BRADLEY MCNAB	1,514.00
15840		002013	MIDWEST TAPE	357.24
15841		001194	NELSON BROTHERS SEWER	149.00
15842	*	010015	NEUMANN/SMITH ARCHITECTURE	22,799.53
15843	*	006359	NYE UNIFORM COMPANY	816.00
15844	*	009827	PARKER TECHNOLOGY, LLC	4,892.67
15845	*	001181	ROSE PEST SOLUTIONS	144.00
15846	*	010174	SEGUIN MORRIS USA INC	3,432.61
15847	*	003785	SIGNS-N-DESIGNS INC	561.00
15848	*	007899	NICHOLAS SLANDA	25.00
15849	*	001097	SOCWA	51,268.00
15850		005787	SOUTHEASTERN EQUIPMENT CO. INC	2,498.24
15851		000273	TERMINAL SUPPLY CO.	59.47
15852	*	004887	TRUCK & TRAILER SPECIALTIES INC	1,255.00
15853		005806	ULINE	3,655.35
15854		000666	NATIONAL LADDER & SCAFFOLD	952.84
15855	*	007278	WHITLOCK BUSINESS SYSTEMS, INC.	1,855.38
15856	*	002037	TOTAL ARMORED CAR SERVICE, INC.	303.97
			SUBTOTAL ACH TRANSACTION	$803,214.38

City of Birmingham
Warrant List Dated 05/06/2026

Meeting of 05/18/2026

Check Number	Early Release	Vendor #	Vendor	Amount
			GRAND TOTAL	$994,202.11

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mary Chavez
Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

City of Birmingham
Warrant List Dated 05/13/2026

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
309185		BDREFUND	180 CONTRACTORS	100.00
309186		005430	21ST CENTURY MEDIA- MICHIGAN	583.54
309187	*	008872	ACE DOOR COMPANY	200.00
309188		006638	ACTION MAT & TOWEL RENTAL, INC	35.36
309188	*	006638	ACTION MAT & TOWEL RENTAL, INC	35.36
309189	*	007266	AETNA BEHAVIORAL HEALTH LLC	579.09
309190		BDREFUND	ALLIED SIGNS INC	200.00
309191	*	MISC	ANDY AUBREY	200.00
309192		009202	AQUARIUM DESIGN INC	245.00
309193		BDREFUND	ASHUR C TAMOU	35.00
309194	*	010122	AVINEON, INC	20,700.00
309195		BDREFUND	BAKER BUILDING COMPANY LLC	300.00
309196		009568	BEDROCK EXPRESS LTD	4,906.71
309197	*	BDREFUND	BEST ASPHALT	4,125.00
309198	*	006520	BS&A SOFTWARE, INC	1,742.00
309199		005717	BSB COMMUNICATIONS, INC.	1,386.90
309200	*	009788	BUREAU DETROIT	3,500.00
309201		003907	CADILLAC ASPHALT, LLC	159.80
309202	*	009078	CANON SOLUTIONS AMERICA INC	279.12
309203		BDREFUND	CAPALDI BUILDERS	1,000.00
309204	*	000444	CDW GOVERNMENT INC	220.30
309205		010243	MERSIHA CHAVEZ	586.07
309206		BDREFUND	CONSTANTINE CONSTRUCTION INC	100.00
309207		008582	CORE & MAIN LP	23.70
309208		010080	CRIME PREVENTION ASSOC. OF MICHIGAN	525.00
309209		003923	CUMMINS SALES AND SERVICE	311.97
309210	*	009207	D'ANGELO BROTHERS INC	139,385.00
309211		010022	DAVIS & STATON, INC	47.50
309212		000233	DEAN SELLERS	272.96
309213		000575	DEMCO, INC	287.62
309214		BDREFUND	DEPENDABLE SERVICE GROUP	200.00
309215		010067	DESTINEE WATSON	63.59
309216	*	010034	DEVYN MITCHELL	200.00
309217	*	000179	DTE ENERGY	19.24
309218	*	000179	DTE ENERGY	21.71
309219		000179	DTE ENERGY	49.01
309220	*	000179	DTE ENERGY	59.71
309221	*	000179	DTE ENERGY	64.35
309222		000493	ED RINKE CHEVROLET BUICK GMC	135.07
309223		010008	ELIZABETH C. CHIAPELLI, PLLC	1,216.00
309224		BDREFUND	EMILIO CONSTRUCTION	2,500.00
309225		001495	ETNA SUPPLY	6,917.84

City of Birmingham
Warrant List Dated 05/13/2026

Check Number	Early Release	Vendor #	Vendor	Amount
309226	*	008574	DENNIS FARAC	200.00
309227		010156	FOLLETT CONTENT SOLUTIONS LLC	1,583.23
309228		007212	FOSTER BLUE WATER OIL	1,882.64
309229		BDREFUND	HAMEED, ZIA	300.00
309230		010006	HJP LEGAL	3,968.00
309231	*	001956	HOME DEPOT CREDIT SERVICES	556.68
309232		BDREFUND	HOME INSPECTION PLUS INC	200.00
309233		BDREFUND	HOOVER ELECTRIC INC	3,250.00
309234		BDREFUND	HRH CONSTRUCTION LLC	3,750.00
309235		001090	INGRAM LIBRARY SERVICES	486.29
309236	*	009551	INTERMEDIA. NET INC	777.05
309237		000342	INTERSTATE BATTERIES OF SE MICH	367.40
309238		BDREFUND	JASMAN CONSTRUCTION	200.00
309239	*	009234	JEFFREY RONDEAU	232.39
309240		010031	JOHN J KENNEDY	524.80
309241		010065	K & M TIRE INC	460.00
309242		010089	K & R TRUCK SALES	1,110.72
309243		BDREFUND	KBJ GROUP, LLC	1,575.00
309244		BDREFUND	KELLY BUILDING & DEVELOPMENT CO LLC	500.00
309245		BDREFUND	KM & MD CEMENT CO	100.00
309246	*	005049	SHEILA C. LANDIS	200.00
309247		003620	LANGUAGE LINE SERVICES INC	35.00
309248	*	009963	LAW OFFICE OF ROBERT J MORAD PLLC	384.00
309249		009913	LEAH BLIZINSKI	124.25
309250	*	009451	LIFESTYLE PUBLICATIONS LLC	1,250.00
309251		MISC	LINT LIFTER	555.00
309252		BDREFUND	LOSSIA-ACHO, RENEE M	200.00
309253		010003	MANOOGIAN LAW PLLC	1,152.00
309254		BDREFUND	MARTINO ENTERPRISES INC	200.00
309255		009351	MERRITT CIESLAK DESIGN PLC	4,000.00
309256		BDREFUND	MESTER EXTERIORS	100.00
309257	*	009200	MICHAEL MORRISON	1,500.00
309258		000230	MIKE SAVOIE CHEVROLET INC	1,387.65
309259		010240	LAUREN MILIA	241.88
309260		BDREFUND	MITTEN HOME CO	100.00
309261	*	009047	ROBERT MONTELEONE	200.00
309262		BDREFUND	MOORE DEVELOPMENT GROUP LLC	200.00
309263		005986	MRWA	3,000.00
309264		BDREFUND	MULLIGAN CONSTRUCTION	100.00
309265	*	000668	NATIONAL TIME & SIGNAL CORP	1,000.00
309266	*	004827	NICK'S MAINTENANCE SERVICE	10,700.00
309267		BDREFUND	NIGHTINGALE COMPANY	200.00
309268		BDREFUND	OAKES ROOFING SIDING & WINDOWS INC	100.00

City of Birmingham
Warrant List Dated 05/13/2026

Check Number	Early Release	Vendor #	Vendor	Amount
309269	*	000477	OAKLAND COUNTY	563,680.42
309270	*	004370	OCCUPATIONAL HEALTH CENTERS OF MI	1,539.00
309271		000678	OCLC, INC.	25.26
309272	*	009478	ODP BUSINESS SOLUTIONS, LLC	345.11
309273		BDREFUND	Old Woodward STA, LLC	400.00
309274		BDREFUND	PARAMOUNT BUILDING	100.00
309275	*	009835	PATRICK BRZOZOWSKI	139.83
309276		BDREFUND	PECK CONTRACTING LLC	100.00
309277		BDREFUND	PELLA WINDOWS & DOORS, INC.	500.00
309278		BDREFUND	PELLERITO & SONS CONSTRUCTION	200.00
309279		009612	PLAYAWAY PRODUCTS LLC	1,618.14
309280	*	009951	PRINTMASTERS	75.70
309281		BDREFUND	PRISM	100.00
309282	*	009394	RABAA & NACHAWATI PLLC	384.00
309283	*	MISC	REINDERS INC.	87.67
309284		BDREFUND	RENEWAL BY ANDERSEN	500.00
309285		007507	RIEDELL SHOES INC	64.93
309286		BDREFUND	RILEY, ROBERT F	100.00
309287	*	010055	RUSSELL LANDSCAPING INC	1,930.00
309288		BDREFUND	SHARMA, AMIT	200.00
309289		BDREFUND	SHERER CONSTRUCTION	100.00
309290	*	007882	MICHAEL SIMPSON	180.20
309291		BDREFUND	SMOLYANOV HOME IMPROVMENT	100.00
309292		010230	SPARTAN TURF PRODUCTS LLC	2,347.80
309293		010144	BONDY LAW, PLLC	768.00
309294		BDREFUND	SRK BLUE VENTURES II LLC	100.00
309295	*	009964	STAGE2 DATA INC.	4,233.60
309296	*	003743	STANLEY STEEMER	1,518.00
309297		BDREFUND	STATEWIDE ASPHALT PAVING	100.00
309298	*	007781	SWANK MOTION PICTURES, INC	785.00
309299		BDREFUND	SYNNESTVEDT, JANE S	100.00
309300		007408	T-MOBILE	832.48
309301		010143	TACTICAL ENCOUNTERS INC	800.00
309302	*	009384	THE EDITH BLAKNEY LAW FIRM, PLLC	384.00
309303	*	MISC	THE PIN CENTER	273.00
309304		BDREFUND	THE REPAIR MEN LLC	100.00
309305	*	009552	TRAFFIC & SAFETY CONTROL SYSTEMS	6,176.60
309306		003760	UNUM LIFE INSURANCE CO. OF AMERICA	27,469.38
309307	*	009863	US BANK EQUIPMENT FINANCE	69.93
309308		BLREFUND	VALET KING COMPANY	36.00
309309	*	007226	VALLEY CITY LINEN, INC	65.04
309310		BDREFUND	VANDENBROEK, HEATHER	100.00
309311	*	000158	VERIZON WIRELESS	831.07

City of Birmingham
Warrant List Dated 05/13/2026

Check Number	Early Release	Vendor #	Vendor	Amount
309312	*	000158	VERIZON WIRELESS	152.49
309313		BDREFUND	WALLSIDE INC	500.00
309314		002171	WEISSMAN'S COSTUMES	48.45
309315		009026	WELLS FARGO VENDOR FIN SERV	72.02
309316		005112	WOLVERINE FREIGHTLINER-EASTSIDE INC	4,131.57
309317		008314	WOODLANDS LIBRARY COOPERATIVE	30.00
309318	*	005360	WORRY FREE INC	7,732.80
			SUBTOTAL PAPER CHECK	$874,700.99
ACH TRANSACTION				
15873		007329	ALL AMERICAN ARENA PRODUCTS LLC	1,861.69
15874	*	007033	APPLIED INNOVATION	735.19
15875		009609	BALIAN LEGAL, PLC	1,369.60
15876	*	006683	BIRMINGHAM LAWN MAINTENANCE, INC	124.00
15877		008545	JAIMI BROOK	3.98
15878		000605	CINTAS CORPORATION	378.99
15879		000605	CINTAS CORPORATION	292.92
15880	*	000605	CINTAS CORPORATION	246.82
15881	*	008044	CLUB PROPHET	594.00
15882		009840	THOMAS S. KLISE COMPANY, INC	436.32
15883		009873	D/A CENTRAL INC.	9,952.27
15883	*	009873	D/A CENTRAL INC.	5,945.93
15884		009557	ZECO, LLC	330.00
15885		009515	KAMERON DIMITRY	67.90
15886	*	000565	DORNBOS SIGN & SAFETY INC	767.84
15887	*	006528	DOWNTOWN PUBLICATIONS INC	420.00
15888		000213	FIRE DEFENSE EQUIP CO INC	43.95
15889	*	009387	FRAIBERG & PERNIE PLLC	5,422.55
15890	*	010153	FRAIBERG, MATTHEW	1,152.00
15891	*	004604	GORDON FOOD	729.15
15892	*	000243	GRAINGER	929.51
15893		001672	HAYES PRECISION INC	105.00
15894		010193	MOISE LEGAL PLLC	896.00
15895		009910	IDI	152.00
15896		000261	J.H. HART URBAN FORESTRY	39,703.59
15897	*	009482	JAMIL KIM	1,800.00
15898		009249	JCC CREATIVE LLC	200.00
15899		009298	JCR SUPPLY INC	726.60
15900	*	003458	JOE'S AUTO PARTS, INC.	233.40
15901	*	000891	KELLER THOMA	220.00
15902	*	004085	KONE INC	1,315.22
15903	*	009392	LAMB LEGAL CONSULTING SERVICES	768.00
15904	*	005550	LEE & ASSOCIATES CO., INC.	1,199.90
15905		000795	LIBRARY DESIGN ASSOCIATES, INC.	5,190.00

City of Birmingham
Warrant List Dated 05/13/2026

Check Number	Early Release	Vendor #	Vendor	Amount
15906		009663	MACQUEEN EQUIPMENT, LLC	807.08
15907	*	000377	MICHIGAN MUNICIPAL LEAGUE	8,802.00
15908		002013	MIDWEST TAPE	691.34
15909	*	010019	NARGIZ NESIMOVA, PLLC	2,099.20
15910		001194	NELSON BROTHERS SEWER	612.00
15910	*	001194	NELSON BROTHERS SEWER	228.00
15911	*	002767	OSCAR W. LARSON CO.	1,250.51
15912	*	010194	PIETROSKI, DAVID	640.00
15913	*	001062	QUALITY COACH COLLISION	3,531.50
15914	*	005344	RESERVE ACCOUNT	8,000.00
15915	*	003554	RKA PETROLEUM	14,503.99
15916	*	000478	ROAD COMM FOR OAKLAND CO	2,046.14
15917	*	001181	ROSE PEST SOLUTIONS	424.00
15918	*	009939	RYAN KATZ	39.10
15919	*	003785	SIGNS-N-DESIGNS INC	1,293.00
15920		000254	SOCRRA	91,020.00
15921	*	001097	SOCWA	167,028.36
15922		010218	SUPERIOR GROUNDCOVER, INC	3,700.00
15923		009746	MTECH	1,221.55
15924	*	009266	US SIGNAL COMPANY LLC	3,565.34
15925		009223	VARI SALES CORPORATION	7,918.21
15925	*	009223	VARI SALES CORPORATION	1,276.80
15926		000666	NATIONAL LADDER & SCAFFOLD	1,638.73
15927		009128	WITMER PUBLIC SAFETY GROUP INC	3,762.54
15928		009971	WT COX INFORMATION SERVICES	322.47
			SUBTOTAL ACH TRANSACTION	$410,736.18
			GRAND TOTAL	$1,285,437.17

All bills, invoices and other evidences of claim have been audited and approved for payment.



Mary Chavez
Finance Director/ Treasurer

*-Indicates checks released in advance and prior to commission approval in order to avoid penalty or to meet contractual agreement/obligation.

MEMORANDUM

Treasurer's Office

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Ryan Katz, Deputy Treasurer
Mary Chavez, Finance Director

SUBJECT: Delinquent Special Assessments/Invoices to the Tax Roll

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INTRODUCTION:
By City ordinance, special assessments and other invoices shall be transferred to the following year's tax roll.

BACKGROUND:
As provided in the Birmingham City Code delinquent, unpaid special assessments and invoices shall be transferred to the subsequent year tax roll. Attached is a listing of those special assessments and invoices that have been determined to be delinquent. This listing includes penalties and interest as of May 1, 2026 and will be placed on the 2026 City tax roll.

LEGAL REVIEW:
No legal review is required.

FISCAL IMPACT:
The unpaid accounts are detailed on the attached listing and represent a cumulative total of $305,979.03 including interest and penalties as of May 1, 2026.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
N/A

PUBLIC COMMUNICATIONS:
During the month of May 2026, property owners with delinquent special assessments and invoices will be notified of their account status and provided with a deadline to pay the unpaid balance prior to the assessment of the penalty and transfer to the tax roll.

SUMMARY:

The City Commission is requested to direct the Treasurer to transfer the delinquent special assessments and invoices, including interest and penalties, to the 2026 tax roll and to authorize the removal from the list any bill paid after City Commission approval.

ATTACHMENTS:
None

SUGGESTED COMMISSION ACTION:
Make a motion adopting the following resolution:

WHEREAS, the City Treasurer, in accordance with the provisions in the City Code has reported certain special assessments and invoices, including interest and penalty, unpaid and delinquent on May 1, 2026, and

WHEREAS, the City Code provides that these delinquent special assessments and invoices shall be carried to the next annual City tax roll,

NOW THEREFORE BE IT RESOLVED, that the listing of unpaid and delinquent special assessments and invoices, including interest and penalty, be transferred and reassessed to the 2026 City tax roll with an additional 15% penalty, and that authorization is provided to remove from the list any bills paid after Commission approval.

District	Name	Parcel #	Installment	15% Penalty	Total
SAD863	CUMMINGS ST PAVING	08-19-36-479-008	604.33	90.65	694.98
SAD864A	ALLEY PAVING-HAMILTON TO PARK ST	08-19-25-456-029	1,749.42	262.41	2,011.83
SAD872	VILLA PAVING	08-20-31-102-019	1,031.78	154.77	1,186.55
SAD872	VILLA PAVING	08-20-31-127-012	1,094.45	164.17	1,258.62
SAD872	VILLA PAVING	08-20-31-103-012	430.35	64.55	494.90
SAD872	VILLA PAVING	08-20-31-103-019	1,030.85	154.63	1,185.48
SAD872	VILLA PAVING	08-20-31-103-023	1,032.72	154.91	1,187.63
SAD873	HAMILTON AVE SEWER LATERALS	08-19-25-454-008	267.13	40.07	307.20
SAD874A	HAMILTON AVE SIDEWALK/STREETSCAPE	08-19-25-454-008	471.46	70.72	542.18
SAD874A	HAMILTON AVE SIDEWALK/STREETSCAPE	08-19-25-456-001	1,566.05	234.91	1,800.96
SAD874A	HAMILTON AVE SIDEWALK/STREETSCAPE	08-19-25-456-007	1,668.54	250.28	1,918.82
SAD874A	HAMILTON AVE SIDEWALK/STREETSCAPE	08-19-25-456-029	423.62	63.54	487.16
SAD875A	HAMILTON STREET LIGHTING	08-19-25-456-029	1,335.34	200.30	1,535.64

SAD876	WEBSTER STREET SEWER LATERALS	08-20-31-154-017	167.38	25.11	192.49
SAD880	OLD WOODWARD SEWER LATERALS	08-19-36-201-014	667.15	100.07	767.22
SAD880W	OLD WOODWARD WATER LATERALS	08-19-36-129-004	342.08	51.31	393.39
SAD880W	OLD WOODWARD WATER LATERALS	08-19-36-201-014	399.43	59.91	459.34
SAD881	OLD WOODWARD STREETSCAPE ENHANCEMNT	08-19-36-201-014	3,409.06	511.36	3,920.42
SAD881	OLD WOODWARD STREETSCAPE ENHANCEMNT	08-19-25-456-001	3,333.71	500.06	3,833.77
SAD883W	2018 WATER LATERALS LOCAL STREETS	08-19-36-404-009	153.59	23.04	176.63
SAD891	QUARTON LAKE SEWER LATERALS	08-19-26-177-010	122.45	18.37	140.82
SAD891	QUARTON LAKE SEWER LATERALS	08-19-26-178-006	244.89	36.73	281.62
SAD893	LAKEVIEW AVENUE PAVING	08-19-25-301-006	1,417.90	212.69	1,630.59
SAD893	LAKEVIEW AVENUE PAVING	08-19-26-427-025	1,414.78	212.22	1,627.00
SAD893	LAKEVIEW AVENUE PAVING	08-19-26-427-027	1,314.02	197.10	1,511.12
SAD895S	TOWNSEND ST SEWER	08-19-36-135-060	14.34	2.15	16.49
SAD896	MAPLE ROAD STREETSCAPE	08-19-25-456-029	6,719.22	1,007.88	7,727.10
SAD896	MAPLE ROAD STREETSCAPE	08-19-36-129-004	3,561.89	534.28	4,096.17
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-034	75.09	11.26	86.35
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-063	97.48	14.62	112.10
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-069	66.70	10.01	76.71
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-118	53.16	7.97	61.13
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-138	47.06	7.06	54.12
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-142	97.48	14.62	112.10
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-168	75.09	11.26	86.35
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-208-207	8,012.66	1,201.90	9,214.56
SAD897	S. OLD WOODWARD STREETSCAPE	08-19-36-278-012	9,528.47	1,429.27	10,957.74
SAD898	WESTWOOD CAPE SEAL	08-19-26-176-003	492.46	73.87	566.33

SAD898S	WESTWOOD SEWER LATERALS	08-19-26-176-003	370.45	55.57	426.02
SAD898S	WESTWOOD SEWER LATERALS	08-19-26-177-002	740.91	111.14	852.05
SAD898S	WESTWOOD SEWER LATERALS	08-19-26-176-002	277.84	41.68	319.52
SAD898S	WESTWOOD SEWER LATERALS	08-19-26-177-001	393.61	59.04	452.65
SAD899	2022 CAPE SEAL	08-20-31-382-012	332.00	49.80	381.80
SAD899	2022 CAPE SEAL	08-20-31-380-005	204.17	30.63	234.80
SAD899	2022 CAPE SEAL	08-20-31-378-010	230.80	34.62	265.42
SAD899	2022 CAPE SEAL	08-20-31-376-017	234.40	35.16	269.56
SAD899	2022 CAPE SEAL	08-20-31-329-004	539.71	80.96	620.67
SAD899	2022 CAPE SEAL	08-20-31-354-048	247.49	37.12	284.61
SAD899	2022 CAPE SEAL	08-20-31-356-007	271.64	40.75	312.39
SAD899	2022 CAPE SEAL	08-20-31-376-007	362.18	54.33	416.51
SAD899	2022 CAPE SEAL	08-20-31-331-025	301.81	45.27	347.08
SAD899	2022 CAPE SEAL	08-20-31-331-026	294.67	44.20	338.87
SAD899	2022 CAPE SEAL	08-20-31-331-005	313.88	47.08	360.96
SAD899	2022 CAPE SEAL	08-20-31-331-007	313.88	47.08	360.96
SAD899	2022 CAPE SEAL	08-20-31-329-016	380.29	57.04	437.33
SAD899	2022 CAPE SEAL	08-20-31-329-017	513.09	76.96	590.05
SAD899	2022 CAPE SEAL	08-20-31-332-011	325.97	48.90	374.87
SAD899	2022 CAPE SEAL	08-20-31-382-008	332.00	49.80	381.80
SAD899	2022 CAPE SEAL	08-20-31-381-009	368.21	55.23	423.44
SAD899	2022 CAPE SEAL	08-20-31-380-006	579.47	86.92	666.39
SAD899	2022 CAPE SEAL	08-20-31-382-025	362.18	54.33	416.51
SAD899	2022 CAPE SEAL	08-20-31-382-026	368.21	55.23	423.44
SAD899	2022 CAPE SEAL	08-20-31-330-004	301.81	45.27	347.08
SAD899	2022 CAPE SEAL	08-20-31-330-006	301.81	45.27	347.08
SAD899	2022 CAPE SEAL	08-20-31-329-011	332.00	49.80	381.80
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-328-005	447.27	67.09	514.36
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-328-006	556.86	83.53	640.39
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-328-007	503.49	75.52	579.01
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-328-009	631.28	94.69	725.97
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-328-023	550.95	82.64	633.59
SAD903	PRINCIPAL SHOPPING F/Y	08-19-25-328-033	259.38	38.91	298.29

	2025-2026				
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-454-006	2,015.62	302.34	2,317.96
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-454-008	1,211.05	181.66	1,392.71
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-455-015	13,134.73	1,970.21	15,104.94
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-456-001	7,278.19	1,091.73	8,369.92
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-456-007	3,799.29	569.89	4,369.18
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-456-029	2,634.73	395.21	3,029.94
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-460-019	6,785.48	1,017.82	7,803.30
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-486-018	6,180.61	927.09	7,107.70
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-25-487-008	401.21	60.18	461.39
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-128-022	486.78	73.02	559.80
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-129-004	5,101.05	765.16	5,866.21
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-129-006	2,418.37	362.76	2,781.13
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-129-010	9,318.96	1,397.84	10,716.80
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-132-007	6,986.78	1,048.02	8,034.80
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-138-001	7,612.97	1,141.95	8,754.92
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-138-003	11,249.97	1,687.50	12,937.47
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-201-014	5,875.10	881.27	6,756.37
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-202-017	10,242.70	1,536.41	11,779.11
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-202-018	20,600.43	3,090.06	23,690.49
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-204-007	1,153.94	173.09	1,327.03
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-204-016	754.72	113.21	867.93
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-208-015	5,015.83	752.37	5,768.20
SAD903	PRINCIPAL SHOPPING F/Y	08-19-36-226-009	1,231.70	184.76	1,416.46

	2025-2026				
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-227-006	985.83	147.87	1,133.70
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-227-007	581.19	87.18	668.37
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-227-008	1,401.62	210.24	1,611.86
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-227-024	2,805.21	420.78	3,225.99
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-253-026	414.21	62.13	476.34
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-278-012	2,019.56	302.93	2,322.49
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-285-001	14,444.55	2,166.68	16,611.23
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-285-009	1,076.44	161.47	1,237.91
SAD903	PRINCIPAL SHOPPING F/Y 2025-2026	08-19-36-283-026	2,373.06	355.96	2,729.02
SAD904	BROWN STREET PAVING	08-19-36-208-015	765.46	114.82	880.28
SAD905	PIERCE STREET PAVING	08-19-36-333-022	1,204.63	180.69	1,385.32
SAD905	PIERCE STREET PAVING	08-19-36-379-025	1,505.79	225.87	1,731.66
			228,145.05	**34,221.76**	**262,366.81**

Invoice #	Parcel #	Invoice Type	Amount Due Thru 5/1/2026	15 % Penalty	Total
8996	08-20-31-104-035	SNOW REMOVAL-RESIDENTIAL	112.00	16.80	128.80
8998	08-20-31-382-008	SNOW REMOVAL-RESIDENTIAL	112.00	16.80	128.80
9001	08-20-30-452-028	SNOW REMOVAL-RESIDENTIAL	112.00	16.80	128.80
9003	08-20-30-452-031	SNOW REMOVAL-RESIDENTIAL	224.00	33.60	257.60
9004	08-20-30-429-014	SNOW REMOVAL-RESIDENTIAL	112.00	16.80	128.80
9005	08-20-30-428-021	SNOW REMOVAL-RESIDENTIAL	112.00	16.80	128.80
9018	08-19-36-185-023	SNOW REMOVAL-RESIDENTIAL	112.00	16.80	128.80
9021	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9023	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9024	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9025	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	327.00	49.05	376.05
9026	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	327.00	49.05	376.05
9032	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9033	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9035	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	132.00	19.80	151.80

9036	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9045	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9046	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9047	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9048	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9049	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9050	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9051	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9052	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9053	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9067	08-19-25-454-008	SNOW REMOVAL-COMMERCIAL	132.00	19.80	151.80
9223	08-19-36-254-013	SNOW REMOVAL-RESIDENTIAL	12.00	1.80	13.80
9304	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9307	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9308	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9309	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	327.00	49.05	376.05
9312	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	327.00	49.05	376.05
9320	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	132.00	19.80	151.80
9321	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9331	08-19-36-129-010	SNOW REMOVAL-COMMERCIAL	594.00	89.10	683.10
9340	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9341	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9342	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9343	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9349	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9350	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9351	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9352	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	130.80	19.62	150.42
9353	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9365	08-19-25-453-011	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9370	08-19-25-453-011	SNOW REMOVAL-COMMERCIAL	594.00	89.10	683.10
9376	08-19-25-453-011	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9377	08-19-25-456-001	SNOW REMOVAL-COMMERCIAL	726.00	108.90	834.90
9379	08-19-25-453-011	SNOW REMOVAL-COMMERCIAL	198.00	29.70	227.70
9388	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	196.20	29.43	225.63
9563	08-19-25-487-006	GRASS/WEED CUTTING	149.85	22.48	172.33
9580	08-19-35-303-016	GRASS/WEED CUTTING	148.50	22.28	170.78
9695	08-20-31-332-001	GRASS/WEED CUTTING	128.52	19.28	147.80
9705	08-19-25-379-009	RETURNED PAYMENT FEE	40.00	6.00	46.00
9723	08-20-31-357-055	RETURNED PAYMENT FEE	40.00	6.00	46.00

9735	08-20-30-380-076	RETURNED PAYMENT FEE	40.00	6.00	46.00
9749	08-19-35-129-003	RETURNED PAYMENT FEE	40.00	6.00	46.00
9750	08-19-25-433-002	RETURNED PAYMENT FEE	40.00	6.00	46.00
9753	08-20-30-478-019	RETURNED PAYMENT FEE	40.00	6.00	46.00
9796	08-19-35-202-044	RETURNED PAYMENT FEE	40.00	6.00	46.00
9861	08-19-35-202-039	RETURNED PAYMENT FEE	40.00	6.00	46.00
9865	08-20-31-357-055	RETURNED PAYMENT FEE	40.00	6.00	46.00
9898	08-20-31-357-043	RETURNED PAYMENT FEE	40.00	6.00	46.00
10005	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	306.00	45.90	351.90
10057	08-20-30-326-012	SNOW REMOVAL-RESIDENTIAL	208.00	31.20	239.20
10060	08-19-36-428-041	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10065	08-19-36-308-020	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10071	08-19-36-178-012	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10074	08-20-30-456-020	RETURNED PAYMENT FEE	40.00	6.00	46.00
10075	08-19-36-253-006	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10079	08-20-31-154-006	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10082	08-20-31-178-026	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10084	08-19-36-378-022	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10092	08-20-31-154-028	SNOW REMOVAL-RESIDENTIAL	208.00	31.20	239.20
10093	08-20-31-155-019	SNOW REMOVAL-RESIDENTIAL	50.00	7.50	57.50
10095	08-20-31-301-010	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10096	08-20-31-104-035	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10098	08-20-31-453-038	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10101	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10103	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10104	08-19-36-211-013	SNOW REMOVAL-COMMERCIAL	686.40	102.96	789.36
10107	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10109	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	306.00	45.90	351.90
10111	08-19-36-201-014	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10112	08-19-36-201-014	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10115	08-19-36-201-014	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10116	08-19-36-201-014	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10117	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	244.80	36.72	281.52
10118	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10120	08-19-36-208-015	SNOW REMOVAL-COMMERCIAL	249.60	37.44	287.04
10121	08-19-25-456-001	SNOW REMOVAL-COMMERCIAL	686.40	102.96	789.36
10122	08-19-25-456-001	SNOW REMOVAL-COMMERCIAL	686.40	102.96	789.36
10125	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10126	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10128	08-19-25-378-010	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52

10129	08-19-25-456-050	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10130	08-19-25-456-050	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10131	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10132	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10133	08-19-25-456-027	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10134	08-19-25-456-027	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10141	08-19-25-456-050	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10142	08-19-25-456-050	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10145	08-19-25-454-008	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10152	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10154	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10155	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10156	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10157	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10159	08-19-25-454-008	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10168	08-19-25-453-011	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10184	08-19-36-204-016	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10185	08-19-36-204-016	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10188	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10189	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10190	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10191	08-19-36-202-015	SNOW REMOVAL-COMMERCIAL	122.40	18.36	140.76
10196	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10197	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10198	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10199	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	124.80	18.72	143.52
10200	08-19-36-129-010	SNOW REMOVAL-COMMERCIAL	561.60	84.24	645.84
10201	08-19-36-129-010	SNOW REMOVAL-COMMERCIAL	561.60	84.24	645.84
10208	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	187.20	28.08	215.28
10214	08-20-30-455-002	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10216	08-19-26-227-001	SNOW REMOVAL-RESIDENTIAL	208.00	31.20	239.20
10221	08-19-35-129-020	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10232	08-19-25-427-020	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10235	08-20-31-332-001	SNOW REMOVAL-RESIDENTIAL	208.00	31.20	239.20
10236	08-19-36-454-014	SNOW REMOVAL-RESIDENTIAL	208.00	31.20	239.20
10237	08-19-36-454-016	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10238	08-19-35-427-016	SNOW REMOVAL-RESIDENTIAL	208.00	31.20	239.20
10239	08-20-31-130-019	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10244	08-20-31-377-008	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60
10248	08-20-31-179-053	SNOW REMOVAL-RESIDENTIAL	104.00	15.60	119.60

10259	08-19-36-185-023	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10261	08-19-36-430-055	SNOW REMOVAL-RESIDENTIAL	206.00	30.90	236.90
10267	08-19-36-252-028	SNOW REMOVAL-RESIDENTIAL	206.00	30.90	236.90
10270	08-20-31-306-017	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10271	08-20-31-130-017	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10278	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10281	08-19-36-201-014	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10284	08-19-25-456-001	SNOW REMOVAL-COMMERCIAL	679.80	101.97	781.77
10289	08-19-25-456-018	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10293	08-19-25-456-050	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10294	08-19-25-378-009	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10296	08-19-25-456-027	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10300	08-19-25-456-018	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10303	08-19-25-454-007	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10306	08-19-25-454-008	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10312	08-19-36-129-006	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10318	08-19-36-204-016	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10321	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10322	08-19-36-129-010	SNOW REMOVAL-COMMERCIAL	556.20	83.43	639.63
10325	08-20-31-358-011	RETURNED PAYMENT FEE	40.00	6.00	46.00
10331	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10335	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10338	08-19-25-456-001	SNOW REMOVAL-COMMERCIAL	679.80	101.97	781.77
10339	08-19-25-378-016	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10340	08-19-25-378-016	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10345	08-19-25-456-028	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10346	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10347	08-19-25-456-027	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10348	08-19-36-129-004	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10360	08-19-36-129-006	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10364	08-19-36-204-016	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10367	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10368	08-19-36-202-017	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10369	08-19-36-129-010	SNOW REMOVAL-COMMERCIAL	556.20	83.43	639.63
10370	08-19-36-206-021	SNOW REMOVAL-COMMERCIAL	244.80	36.72	281.52
10371	08-19-36-278-012	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10375	08-19-25-456-001	SNOW REMOVAL-COMMERCIAL	679.80	101.97	781.77
10380	08-19-25-456-028	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10381	08-19-25-378-023	SNOW REMOVAL-COMMERCIAL	183.60	27.54	211.14
10382	08-19-25-456-027	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14

10383	08-19-36-129-002	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10384	08-19-36-129-002	SNOW REMOVAL-COMMERCIAL	123.60	18.54	142.14
10400	08-19-36-204-016	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10403	08-19-36-138-003	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10404	08-19-36-202-017	SNOW REMOVAL-COMMERCIAL	185.40	27.81	213.21
10405	08-19-36-129-010	SNOW REMOVAL-COMMERCIAL	556.20	83.43	639.63
10406	08-20-31-401-007	RETURNED PAYMENT FEE	40.00	6.00	46.00
10407	08-19-26-402-011	RETURNED PAYMENT FEE	40.00	6.00	46.00
10408	08-20-30-176-017	SNOW REMOVAL-RESIDENTIAL	202.00	30.30	232.30
10409	08-20-31-103-045	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10412	08-20-31-327-001	SNOW REMOVAL-RESIDENTIAL	206.00	30.90	236.90
10413	08-19-36-227-006	SNOW REMOVAL-RESIDENTIAL	206.00	30.90	236.90
10418	08-19-35-201-068	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10424	08-19-25-451-001	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10431	08-19-35-177-029	SNOW REMOVAL-RESIDENTIAL	206.00	30.90	236.90
10434	08-20-31-155-030	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10435	08-20-31-155-033	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10436	08-20-31-155-045	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10437	08-20-31-328-010	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10440	08-19-36-255-014	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10441	08-19-36-455-022	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10443	08-19-36-480-027	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10448	08-20-31-358-053	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10452	08-20-31-357-035	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10453	08-20-31-358-019	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10458	08-19-36-454-024	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10459	08-19-36-454-023	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10461	08-19-36-454-018	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10464	08-19-36-476-021	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10465	08-20-31-355-008	SNOW REMOVAL-RESIDENTIAL	103.00	15.45	118.45
10483	08-20-30-427-023	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10484	08-20-30-405-025	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10490	08-20-30-356-020	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10491	08-20-30-378-009	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10492	08-20-31-101-014	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10495	08-20-30-356-013	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10510	08-19-26-202-002	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10513	08-19-26-177-004	SNOW REMOVAL-RESIDENTIAL	204.00	30.60	234.60
10514	08-19-26-177-013	SNOW REMOVAL-RESIDENTIAL	204.00	30.60	234.60
10519	08-19-35-102-027	SNOW REMOVAL-RESIDENTIAL	204.00	30.60	234.60

10520	08-19-26-454-026	SNOW REMOVAL-RESIDENTIAL	102.00	15.30	117.30
10522	08-20-30-478-019	RETURNED PAYMENT FEE	40.00	6.00	46.00
10524	08-19-36-426-026	RETURNED PAYMENT FEE	40.00	6.00	46.00
10525	08-20-31-154-006	RETURNED PAYMENT FEE	40.00	6.00	46.00
10526	08-20-30-378-012	RETURNED PAYMENT FEE	40.00	6.00	46.00
10528	08-20-31-304-047	RETURNED PAYMENT FEE	40.00	6.00	46.00
10531	08-20-31-454-008	RETURNED PAYMENT FEE	40.00	6.00	46.00
10545	08-20-31-302-020	RETURNED PAYMENT FEE	40.00	6.00	46.00
			37,923.67	**5,688.55**	**43,612.22**

MEMORANDUM

Treasurer's Office

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Ryan Katz, Deputy Treasurer
Mary Chavez, Finance Director

SUBJECT: Delinquent Water/Sewer Charges to the Tax Roll

INTRODUCTION:
By City ordinance, water and sewer bills which are delinquent for more than 6 months on April 30th shall be transferred to the following year's tax roll.

BACKGROUND:
As provided in Chapter 114, Section 114-303 of the City Code, the properties on the attached listing represent delinquent and unpaid water/sewage services that have remained delinquent for a period of six months or greater as of April 30, 2026. The ordinance states that a 15% penalty is to be assessed on these delinquent balances when they are transferred to the tax roll.

LEGAL REVIEW:
No legal review is required.

FISCAL IMPACT:
The unpaid accounts are detailed on the attached listing and represent a cumulative total of $432,628.07 including interest and penalties as of May 1, 2026.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
N/A

PUBLIC COMMUNICATIONS:
During the month of April 2026, property owners with delinquent accounts were notified of their account status and provided with a deadline to pay the unpaid balance prior to the assessment of the penalty and transfer to the tax roll.

SUMMARY:
The City Commission is requested to direct the Treasurer to transfer the unpaid bills, including interest and penalty, to the 2026 tax roll and to authorize removal from the list any bills paid or a payment plan agreement signed after City Commission approval.

ATTACHMENTS:
None

SUGGESTED COMMISSION ACTION:
Make a motion adopting the following resolution:

WHEREAS, The City Treasurer, in accordance with Chapter 114, Section 114-303, of the City Code has reported certain water/sewage accounts, including interest and penalty, unpaid and delinquent on May 1, 2026, and

WHEREAS, Chapter 114, Section 114-303, of the City Code provides that these payments shall be carried to the next annual City tax roll.

NOW, THEREFORE, BE IT RESOLVED, that the properties with unpaid and delinquent water/sewage accounts, listed in the Delinquent Water/Sewer Tax Roll, dated May 18, 2026, including interest and penalty, be transferred and reassessed to the 2026 City tax roll and authorization be given to remove from the list any bills paid or a payment plan agreement signed after Commission approval.

Parcel #	Account #	Service Address	Delinquent Amount	15% Penalty	Total
08-19-25-101-007	00000-11388	WOODWARD AVE UTIL	$52.21	$7.83	$60.04
08-19-25-180-004	00083-49416	144 WIMBLETON DR	$1,369.55	$205.43	$1,574.98
08-19-25-226-011	00199-13428	805 SHEPARDBUSH ST	$476.06	$71.41	$547.47
08-19-25-251-009	00082-35500	289 ABBEY ST	$924.27	$138.64	$1,062.91
08-19-25-258-002	00083-79698	554 WIMBLETON DR	$495.64	$74.35	$569.99
08-19-25-280-001	00081-93850	770 HENLEY ST	$2,417.79	$362.67	$2,780.46
08-19-25-301-006	03377-91024	764 LAKEVIEW AVE	$314.58	$47.19	$361.77
08-19-25-304-039	03429-71182	575 GREENWOOD ST	$570.32	$85.55	$655.87
08-19-25-328-022	00707-71504	588 N OLD WOODWARD AVE STE 1	$103.75	$15.56	$119.31
08-19-25-328-030	32361-31222	554 N OLD WOODWARD AVE	$251.79	$37.77	$289.56
08-19-25-328-032	03277-31524	534 N OLD WOODWARD AVE	$188.62	$28.29	$216.91
08-19-25-328-048	00716-51556	612 PARK ST	$3,093.04	$463.96	$3,557.00
08-19-25-328-052	02240-51562	576 PARK ST	$1,756.17	$263.43	$2,019.60
08-19-25-328-063	00712-91582	531 BROOKSIDE AVE	$609.25	$91.39	$700.64
08-19-25-330-006	03277-91634	181 EUCLID AVE	$1,235.78	$185.37	$1,421.15

08-19-25-351-009	00692-31678	367 BALDWIN RD	$737.75	$110.66	$848.41
08-19-25-378-010	06547-23138	154 W MAPLE RD	$96.70	$14.51	$111.21
08-19-25-379-015	23887-25702	333 FERNDALE AVE	$6,098.10	$914.72	$7,012.82
08-19-25-427-023	03098-72402	1067 KENNESAW ST	$1,801.70	$270.26	$2,071.96
08-19-25-451-026	25005-26306	490 PARK ST	$195.03	$29.25	$224.28
08-19-25-452-009	01850-72588	485 PARK ST	$854.88	$128.23	$983.11
08-19-25-456-029	00763-92746	395 E MAPLE RD	$872.76	$130.91	$1,003.67
08-19-25-460-016	00799-72838	567 RIDGEDALE AVE	$1,699.36	$254.90	$1,954.26
08-19-25-477-004	02984-72870	876 MADISON ST	$2,242.89	$336.43	$2,579.32
08-19-25-481-005	00748-12938	908 OAKLAND AVE	$1,191.73	$178.76	$1,370.49
08-19-25-481-008	00748-72944	968 OAKLAND AVE	$2,388.71	$358.31	$2,747.02
08-19-25-484-010	00756-13064	815 KNOX ST	$698.63	$104.79	$803.42
08-19-25-487-006	00759-93148	165 N ADAMS RD	$653.59	$98.04	$751.63
08-19-26-129-003	00295-73224	1298 N GLENHURST DR	$2,446.82	$367.02	$2,813.84
08-19-26-131-016	03497-53312	1177 CHESTERFIELD AVE	$602.34	$90.35	$692.69
08-19-26-177-004	00305-73348	1000 WESTWOOD DR	$162.53	$24.38	$186.91
08-19-26-178-006	00294-53388	1973 RAYNALE ST	$3,168.82	$475.32	$3,644.14
08-19-26-203-001	00346-53572	1567 QUARTON RD	$1,340.45	$201.07	$1,541.52
08-19-26-205-002	00329-33638	1356 FAIRFAX ST	$2,797.24	$419.59	$3,216.83
08-19-26-226-007	02826-93780	1027 QUARTON RD	$1,522.73	$228.41	$1,751.14
08-19-26-276-003	03432-54198	1060 PURITAN AVE	$578.52	$86.78	$665.30
08-19-26-328-019	02337-94466	615 KIMBERLEY ST	$1,123.01	$168.45	$1,291.46
08-19-26-328-023	00277-34474	531 KIMBERLEY ST	$455.41	$68.31	$523.72
08-19-26-330-005	02310-94544	1805 PINE ST	$1,956.96	$293.54	$2,250.50
08-19-26-330-019	03053-54572	1776 WINTHROP LN	$2,019.23	$302.88	$2,322.11
08-19-26-378-051	00262-94656	1835 FAIRVIEW ST	$786.66	$118.00	$904.66
08-19-26-402-018	02553-94790	783 SUFFIELD AVE	$855.71	$128.36	$984.07
08-19-26-403-012	00236-14832	580 SUFFIELD AVE	$1,497.88	$224.68	$1,722.56
08-19-26-404-006	00223-74890	750 PILGRIM AVE	$144.17	$21.63	$165.80
08-19-26-404-024	00220-94926	639 PURITAN AVE	$1,392.44	$208.87	$1,601.31
08-19-26-427-002	02108-14994	840 LAKESIDE DR	$2,231.07	$334.66	$2,565.73
08-19-26-452-004	00247-15134	362 FAIRFAX ST	$510.67	$76.60	$587.27
08-19-26-452-014	00240-95154	483 SUFFIELD AVE	$3,250.72	$487.61	$3,738.33
08-19-26-477-013	00608-15414	1128 W MAPLE RD	$868.01	$130.20	$998.21
08-19-35-101-009	00493-75502	2452 DEVON LN	$2,640.48	$396.07	$3,036.55
08-19-35-102-027	02189-95560	2435 DEVON LN	$4,282.66	$642.40	$4,925.06
08-19-35-103-008	03541-35578	411 BRYN MAWR ST	$499.80	$74.97	$574.77
08-19-35-104-026	01901-55694	412 BERWYN ST	$3,022.85	$453.43	$3,476.28
08-19-35-105-016	00495-55732	2234 AVON LN	$41.61	$6.24	$47.85
08-19-35-127-032	02138-55920	245 ARGYLE ST	$1,107.62	$166.14	$1,273.76

08-19-35-129-004	00549-16006	181 WESTCHESTER WAY	$5,037.07	$755.56	$5,792.63
08-19-35-177-010	00522-56218	899 WOODLEA ST	$2,564.76	$384.71	$2,949.47
08-19-35-177-028	00520-76254	1062 S GLENHURST DR	$2,498.79	$374.82	$2,873.61
08-19-35-180-010	03320-16436	883 LARCHLEA DR	$1,998.90	$299.84	$2,298.74
08-19-35-201-043	00560-56538	1717 MIDVALE ST	$1,801.94	$270.29	$2,072.23
08-19-35-202-026	03038-96654	1073 PLEASANT ST	$3,570.97	$535.65	$4,106.62
08-19-35-202-036	00584-36674	316 ARLINGTON ST	$11,350.71	$1,702.61	$13,053.32
08-19-35-202-068	03510-56738	400 ARLINGTON ST	$48,315.97	$7,247.40	$55,563.37
08-19-35-226-016	02865-96770	377 ARLINGTON ST	$5,058.91	$758.84	$5,817.75
08-19-35-276-006	01937-16996	779 ARLINGTON ST	$4,114.25	$617.14	$4,731.39
08-19-35-303-002	03313-37166	2371 W LINCOLN ST	$810.80	$121.62	$932.42
08-19-35-305-005	03499-17232	1375 CRANBROOK RD	$1,778.84	$266.83	$2,045.67
08-19-35-305-006	00450-57234	1356 GREENLAWN ST	$498.97	$74.85	$573.82
08-19-35-306-008	03454-57256	2366 NORTHLAWN BLVD	$1,306.34	$195.95	$1,502.29
08-19-35-326-026	02361-97340	1974 FAIRWAY DR	$5,250.77	$787.62	$6,038.39
08-19-35-327-035	02464-57452	1768 NORTHLAWN BLVD	$1,149.43	$172.41	$1,321.84
08-19-35-401-010	02750-97532	1463 W LINCOLN ST	$3,014.58	$452.19	$3,466.77
08-19-35-401-022	00479-97556	1462 FAIRWAY DR	$144.55	$21.68	$166.23
08-19-35-426-005	02758-57642	1122 LATHAM RD	$4,059.36	$608.90	$4,668.26
08-19-35-426-014	00401-57660	1362 LATHAM ST	$1,404.81	$210.72	$1,615.53
08-19-35-427-006	00436-37684	1025 W LINCOLN ST	$387.05	$58.06	$445.11
08-19-35-427-017	00437-17706	1200 SOUTHFIELD RD	$1,474.90	$221.24	$1,696.14
08-19-35-430-001	03500-57804	1187 NORTHLAWN BLVD	$1,048.35	$157.25	$1,205.60
08-19-35-481-017	00412-58032	1090 SAXON DR	$306.03	$45.90	$351.93
08-19-36-103-054	00080-98196	713 MAPLE HILL LN	$1,597.24	$239.59	$1,836.83
08-19-36-129-002	00204-98378	175 W MAPLE RD	$52.56	$7.88	$60.44
08-19-36-137-003	02711-18774	211 TOWNSEND ST	$666.33	$99.95	$766.28
08-19-36-138-003	00167-22010	107 TOWNSEND ST	$426.82	$64.02	$490.84
08-19-36-155-013	29989-25120	699 HANNA ST	$544.08	$81.61	$625.69
08-19-36-156-009	00103-79128	873 WATKINS ST	$2,281.67	$342.25	$2,623.92
08-19-36-156-025	02823-59160	556 WALLACE ST	$459.78	$68.97	$528.75
08-19-36-184-009	03194-59688	843 S BATES ST	$1,572.39	$235.86	$1,808.25
08-19-36-184-022	01974-79714	768 HENRIETTA ST	$2,919.14	$437.87	$3,357.01
08-19-36-184-031	00171-99732	956 HENRIETTA ST	$2,553.18	$382.98	$2,936.16
08-19-36-185-012	00000-11585	875 HENRIETTA ST	$847.73	$127.16	$974.89
08-19-36-185-023	00012-99800	764 PIERCE ST	$357.44	$53.62	$411.06
08-19-36-185-024	01865-19802	788 PIERCE ST	$2,575.26	$386.29	$2,961.55
08-19-36-185-030	00011-59814	908 PIERCE ST	$643.15	$96.47	$739.62
08-19-36-185-033	21289-25266	990 PIERCE ST	$1,601.76	$240.26	$1,842.02
08-19-36-203-014	00030-39954	608 PURDY ST	$2,322.51	$348.38	$2,670.89

08-19-36-227-012	30595-10340	941 FOREST AVE	$39.43	$5.91	$45.34
08-19-36-227-014	30771-10344	967 FOREST AVE	$570.82	$85.62	$656.44
08-19-36-229-024	09987-10430	312 S ADAMS RD	$373.85	$56.08	$429.93
08-19-36-253-009	00711-10716	691 ANN ST	$1,053.67	$158.05	$1,211.72
08-19-36-253-011	32443-10720	723 ANN ST	$1,001.33	$150.20	$1,151.53
08-19-36-284-010	00000-11460	S WORTH ST PRKNG	$280.15	$42.02	$322.17
08-19-36-285-001	13303-11230	1001 S WORTH ST	$9,118.89	$1,367.83	$10,486.72
08-19-36-285-001	13309-24418	1001 S WORTH ST FIRE	$47.51	$7.13	$54.64
08-19-36-301-011	17511-11276	1252 SHIPMAN BLVD	$1,423.58	$213.54	$1,637.12
08-19-36-303-013	23885-11342	1332 MARYLAND BLVD	$5,217.16	$782.57	$5,999.73
08-19-36-306-022	34007-11434	1640 BIRMINGHAM BLVD	$965.07	$144.76	$1,109.83
08-19-36-307-003	17221-11444	1469 BIRMINGHAM BLVD	$1,710.23	$256.53	$1,966.76
08-19-36-307-007	17229-11452	1563 BIRMINGHAM BLVD	$1,383.42	$207.51	$1,590.93
08-19-36-308-001	33231-11500	1411 MARYLAND BLVD	$945.40	$141.81	$1,087.21
08-19-36-308-002	28459-11502	1433 MARYLAND BLVD	$3,399.84	$509.98	$3,909.82
08-19-36-327-010	28585-28526	1323 WASHINGTON BLVD	$135.09	$20.26	$155.35
08-19-36-328-014	32669-11720	280 NORTHLAWN BLVD	$5,117.71	$767.66	$5,885.37
08-19-36-331-016	19667-11916	1643 WASHINGTON BLVD	$455.26	$68.29	$523.55
08-19-36-332-006	16499-11974	1493 S BATES ST	$1,943.69	$291.55	$2,235.24
08-19-36-332-008	16503-11978	1521 S BATES ST	$1,143.63	$171.54	$1,315.17
08-19-36-332-017	31797-30150	1657 S BATES ST	$1,862.26	$279.34	$2,141.60
08-19-36-351-022	33803-12162	1850 SHIPMAN BLVD	$80.84	$12.13	$92.97
08-19-36-351-027	17419-12172	1932 SHIPMAN BLVD	$80.84	$12.13	$92.97
08-19-36-351-046	21403-12210	1741 SOUTHFIELD RD	$1,204.74	$180.71	$1,385.45
08-19-36-352-011	17397-12262	1899 SHIPMAN BLVD	$1,844.55	$276.68	$2,121.23
08-19-36-352-019	17855-12278	1750 BIRMINGHAM BLVD	$1,465.21	$219.78	$1,684.99
08-19-36-353-006	17251-12316	1821 BIRMINGHAM BLVD	$703.64	$105.55	$809.19
08-19-36-377-021	18007-12542	1740 S BATES ST	$620.96	$93.14	$714.10
08-19-36-377-028	16575-12556	1844 S BATES ST	$1,517.26	$227.59	$1,744.85
08-19-36-379-029	31807-27986	1825 HENRIETTA ST	$1,687.82	$253.17	$1,940.99
08-19-36-401-051	20815-25456	1446 CEDAR DR	$1,646.84	$247.03	$1,893.87
08-19-36-402-014	30465-12826	1393 CEDAR DR	$475.23	$71.28	$546.51
08-19-36-403-031	14755-12956	1160 GRANT ST	$202.49	$30.37	$232.86
08-19-36-426-014	18073-13030	872 E LINCOLN ST	$1,074.58	$161.19	$1,235.77
08-19-36-426-024	32775-28528	745 RUFFNER AVE	$403.28	$60.49	$463.77
08-19-36-426-027	33435-28564	809 RUFFNER AVE	$1,215.43	$182.31	$1,397.74
08-19-36-426-034	35497-13070	951 RUFFNER AVE	$170.78	$25.62	$196.40
08-19-36-428-035	26455-28188	879 HUMPHREY AVE	$46.11	$6.92	$53.03
08-19-36-430-038	15091-13418	831 CHAPIN AVE	$410.21	$61.53	$471.74
08-19-36-430-053	34733-29970	806 BENNAVILLE AVE	$2,054.68	$308.20	$2,362.88

08-19-36-430-055	33463-13452	618 BENNAVILLE AVE	$50.56	$7.58	$58.14
08-19-36-432-007	34575-30964	746 CHAPIN AVE	$1,641.36	$246.20	$1,887.56
08-19-36-432-048	15243-13562	615 EMMONS AVE	$2,618.40	$392.76	$3,011.16
08-19-36-451-008	34173-25208	174 CATALPA DR	$3,307.55	$496.13	$3,803.68
08-19-36-457-006	33113-13910	498 BIRD AVE	$575.71	$86.36	$662.07
08-19-36-457-010	16125-13918	556 BIRD AVE	$336.74	$50.51	$387.25
08-19-36-457-015	16191-13928	525 E 14 MILE RD	$14,088.40	$2,113.26	$16,201.66
08-19-36-476-018	15371-13964	635 DAVIS AVE	$186.02	$27.90	$213.92
08-19-36-480-066	24789-14290	731 BIRD AVE	$231.56	$34.73	$266.29
08-19-36-482-054	26605-14418	807 E 14 MILE RD	$841.06	$126.16	$967.22
08-19-36-482-057	00000-11382	673 E 14 MILE RD	$221.21	$33.18	$254.39
08-20-30-151-001	32223-23570	1100 N ADAMS RD	$1,926.04	$288.91	$2,214.95
08-20-30-153-038	11939-14718	1685 DERBY RD	$1,601.53	$240.23	$1,841.76
08-20-30-326-012	12009-14886	1799 PEMBROKE RD	$246.15	$36.92	$283.07
08-20-30-327-019	35087-15102	1997 PEMBROKE RD	$1,687.16	$253.07	$1,940.23
08-20-30-328-018	09875-15138	753 N ETON ST	$416.89	$62.53	$479.42
08-20-30-328-044	33673-15190	1987 GRAEFIELD RD	$516.62	$77.49	$594.11
08-20-30-328-120	19827-15342	722 GRAEFIELD CT UNIT 155	$301.34	$45.20	$346.54
08-20-30-328-125	32305-15352	712 GRAEFIELD CT UNIT 160	$125.32	$18.80	$144.12
08-20-30-328-141	27519-15384	1905 GRAEFIELD RD UNIT 176	$917.58	$137.64	$1,055.22
08-20-30-329-013	09385-15410	1816 GRAEFIELD RD UNIT 13	$37.45	$5.62	$43.07
08-20-30-329-034	09435-15452	1756 GRAEFIELD RD UNIT 34	$191.22	$28.68	$219.90
08-20-30-329-042	09459-15468	1734 GRAEFIELD RD UNIT 42	$1,181.49	$177.22	$1,358.71
08-20-30-329-046	09467-15476	1722 GRAEFIELD RD UNIT 46	$572.58	$85.89	$658.47
08-20-30-329-051	22459-15486	1704 GRAEFIELD RD UNIT 51	$149.31	$22.40	$171.71
08-20-30-353-002	08903-15708	1150 YORKSHIRE RD	$2,089.81	$313.47	$2,403.28
08-20-30-353-019	35493-15742	1351 E MAPLE RD	$1,039.16	$155.87	$1,195.03
08-20-30-354-019	08747-15782	1655 DORCHESTER RD	$550.36	$82.55	$632.91
08-20-30-356-009	22703-15842	1648 YORKSHIRE RD	$305.17	$45.78	$350.95
08-20-30-356-013	22765-15850	1489 E MAPLE RD	$2,312.44	$346.87	$2,659.31
08-20-30-356-014	26703-15852	1511 E MAPLE RD	$117.05	$17.56	$134.61
08-20-30-376-005	08753-15874	1763 DORCHESTER RD	$1,457.23	$218.58	$1,675.81
08-20-30-401-012	11894-01123	2202 DERBY RD	$2,065.66	$309.85	$2,375.51
08-20-30-402-033	26411-16314	2281 MANCHESTER RD	$562.19	$84.33	$646.52

08-20-30-403-011	32757-16340	2494 PEMBROKE RD	$1,404.31	$210.65	$1,614.96
08-20-30-403-013	11687-16344	2534 PEMBROKE RD	$923.91	$138.59	$1,062.50
08-20-30-403-016	25343-16350	2590 PEMBROKE RD	$1,169.54	$175.43	$1,344.97
08-20-30-403-022	11589-16362	2413 MANCHESTER RD	$3,053.60	$458.04	$3,511.64
08-20-30-404-014	24143-16410	2246 MANCHESTER RD	$3,188.98	$478.35	$3,667.33
08-20-30-404-016	11467-16414	2282 MANCHESTER RD	$2,324.33	$348.65	$2,672.98
08-20-30-404-017	11435-16416	2015 WINDEMERE RD	$1,905.03	$285.75	$2,190.78
08-20-30-404-022	33593-16426	2107 WINDEMERE RD	$482.21	$72.33	$554.54
08-20-30-405-002	11471-16450	2338 MANCHESTER RD	$490.27	$73.54	$563.81
08-20-30-426-024	11837-16624	2734 DERBY RD	$1,590.91	$238.64	$1,829.55
08-20-30-427-031	11727-16764	755 COOLIDGE HWY	$293.91	$44.09	$338.00
08-20-30-428-021	11359-16812	2735 WINDEMERE RD	$1,152.21	$172.83	$1,325.04
08-20-30-428-024	22893-16818	2787 WINDEMERE RD	$373.85	$56.08	$429.93
08-20-30-428-031	33315-16832	657 COOLIDGE HWY	$888.87	$133.33	$1,022.20
08-20-30-429-014	35065-16868	2850 WINDEMERE RD	$682.80	$102.42	$785.22
08-20-30-429-032	20437-16904	463 COOLIDGE HWY	$410.91	$61.64	$472.55
08-20-30-452-028	23375-17018	2529 DORCHESTER RD	$825.20	$123.78	$948.98
08-20-30-476-023	29735-17266	2711 DORCHESTER RD	$207.16	$31.07	$238.23
08-20-31-101-013	08985-17510	1602 E MAPLE RD	$919.43	$137.91	$1,057.34
08-20-31-101-024	09013-17532	1171 YOSEMITE BLVD	$1,801.17	$270.18	$2,071.35
08-20-31-101-036	09037-17556	1609 YOSEMITE BLVD	$1,960.21	$294.03	$2,254.24
08-20-31-102-003	09121-17578	1224 YOSEMITE BLVD	$299.23	$44.88	$344.11
08-20-31-103-002	31419-17664	1136 VILLA RD	$949.45	$142.42	$1,091.87
08-20-31-130-014	10547-18026	1998 HAZEL ST	$91.32	$13.70	$105.02
08-20-31-130-017	10523-18030	1831 BOWERS ST	$379.18	$56.88	$436.06
08-20-31-151-003	10283-18058	1300 HAYNES ST	$250.22	$37.53	$287.75
08-20-31-151-006	26981-18064	1336 HAYNES ST	$274.39	$41.16	$315.55
08-20-31-151-016	10257-18084	1506 HAYNES ST	$1,030.66	$154.60	$1,185.26
08-20-31-151-032	12393-18116	1291 HOLLAND ST	$938.11	$140.72	$1,078.83
08-20-31-151-033	12395-18118	1311 HOLLAND ST	$1,312.06	$196.81	$1,508.87
08-20-31-151-038	35095-18128	1395 HOLLAND ST	$70.66	$10.60	$81.26
08-20-31-152-011	32499-18174	1622 BOWERS ST	$532.06	$79.81	$611.87
08-20-31-152-036	19409-18224	1645 HAYNES ST	$411.39	$61.71	$473.10
08-20-31-154-017	22455-18426	1408 WEBSTER ST	$574.98	$86.25	$661.23
08-20-31-154-041	25739-18474	1315 COLE ST	$1,961.52	$294.23	$2,255.75
08-20-31-154-047	12885-18486	1395 COLE ST	$267.11	$40.07	$307.18
08-20-31-155-014	13151-18536	1376 COLE ST	$54.52	$8.18	$62.70
08-20-31-155-015	13149-18538	1392 COLE ST	$268.87	$40.33	$309.20
08-20-31-155-033	13191-18574	1211 E LINCOLN ST	$1,588.71	$238.31	$1,827.02
08-20-31-155-044	29913-18596	1379 E LINCOLN ST	$616.48	$92.47	$708.95

08-20-31-176-009	33989-18654	1930 BOWERS ST	$1,180.03	$177.00	$1,357.03
08-20-31-177-023	19567-18734	1960 HAYNES ST	$697.98	$104.70	$802.68
08-20-31-177-040	23019-18768	1775 HOLLAND ST	$1,209.29	$181.39	$1,390.68
08-20-31-178-020	26239-18842	1840 HOLLAND ST	$136.54	$20.48	$157.02
08-20-31-178-068	29653-30210	1629 WEBSTER ST	$1,694.20	$254.13	$1,948.33
08-20-31-179-023	35329-18970	1954 WEBSTER ST	$251.71	$37.76	$289.47
08-20-31-179-040	34751-19004	1771 COLE ST	$1,563.47	$234.52	$1,797.99
08-20-31-179-047	24011-19018	1859 COLE ST	$277.58	$41.64	$319.22
08-20-31-301-036	29758-30707	1259 RUFFNER AVE	$593.42	$89.01	$682.43
08-20-31-302-042	34177-19436	1351 HUMPHREY AVE	$1,051.29	$157.69	$1,208.98
08-20-31-302-054	13479-19460	1539 HUMPHREY AVE	$1,309.94	$196.49	$1,506.43
08-20-31-302-055	31895-19462	1555 HUMPHREY AVE	$27.42	$4.11	$31.53
08-20-31-306-002	30507-24458	33668 WOODWARD AVE	$141.75	$21.26	$163.01
08-20-31-306-040	13665-19688	1537 CHAPIN AVE	$748.70	$112.31	$861.01
08-20-31-329-013	28189-19798	1845 HUMPHREY AVE	$526.21	$78.93	$605.14
08-20-31-330-018	23901-19850	1711 BANBURY ST	$558.56	$83.78	$642.34
08-20-31-330-021	13925-19856	1755 BANBURY ST	$436.31	$65.45	$501.76
08-20-31-331-025	13905-19910	1875 BANBURY ST	$1,569.84	$235.48	$1,805.32
08-20-31-351-011	18353-19972	1247 EMMONS AVE	$332.51	$49.88	$382.39
08-20-31-353-037	29481-20126	33401 WOODWARD AVE	$27.23	$4.08	$31.31
08-20-31-354-047	32349-20226	1772 TAUNTON RD	$1,251.39	$187.71	$1,439.10
08-20-31-354-048	34779-20228	1760 TAUNTON RD	$321.30	$48.20	$369.50
08-20-31-356-004	19785-20330	1761 TAUNTON RD	$913.23	$136.98	$1,050.21
08-20-31-356-007	22891-20336	1744 TORRY ST	$890.28	$133.54	$1,023.82
08-20-31-357-040	34001-20430	1471 BIRD AVE (1473)	$3,573.82	$536.07	$4,109.89
08-20-31-357-050	29005-24640	33255 WOODWARD AVE	$246.55	$36.98	$283.53
08-20-31-357-052	22739-20454	1236 SMITH AVE	$904.94	$135.74	$1,040.68
08-20-31-358-023	24339-20500	1492 BIRD AVE	$451.61	$67.74	$519.35
08-20-31-358-029	15863-20512	1223 E 14 MILE RD	$627.53	$94.13	$721.66
08-20-31-377-008	14157-20626	1621 TORRY ST	$880.69	$132.10	$1,012.79
08-20-31-380-006	21445-20720	1741 BRADFORD RD	$1,381.50	$207.23	$1,588.73
08-20-31-381-003	33889-20734	1872 SHEFFIELD RD	$1,641.19	$246.18	$1,887.37
08-20-31-381-009	27003-20746	1628 PENISTONE ST	$1,515.74	$227.36	$1,743.10
08-20-31-382-007	13847-20776	1994 SHEFFIELD RD	$436.17	$65.43	$501.60
08-20-31-382-008	32495-20778	1617 PENISTONE ST	$192.02	$28.80	$220.82
08-20-31-382-020	21893-20802	1736 S ETON ST	$197.73	$29.66	$227.39
08-20-31-403-027	14715-21038	2193 SHEFFIELD RD	$168.73	$25.31	$194.04
08-20-31-451-019	27353-21150	1590 CHELTENHAM RD	$1,073.16	$160.97	$1,234.13
08-20-31-452-028	34631-21206	1704 MANSFIELD RD	$875.13	$131.27	$1,006.40
08-20-31-453-038	27891-21298	1716 E MELTON RD	$982.51	$147.38	$1,129.89

08-20-31-456-014	31905-21376	1688 HANLEY CT	$792.43	$118.86	$911.29
			$376,198.31	**$56,429.76**	**$432,628.07**

BIRMINGHAM
A WALKABLE CITY

May 2026 City Manager's Report

Baldwin Public Library

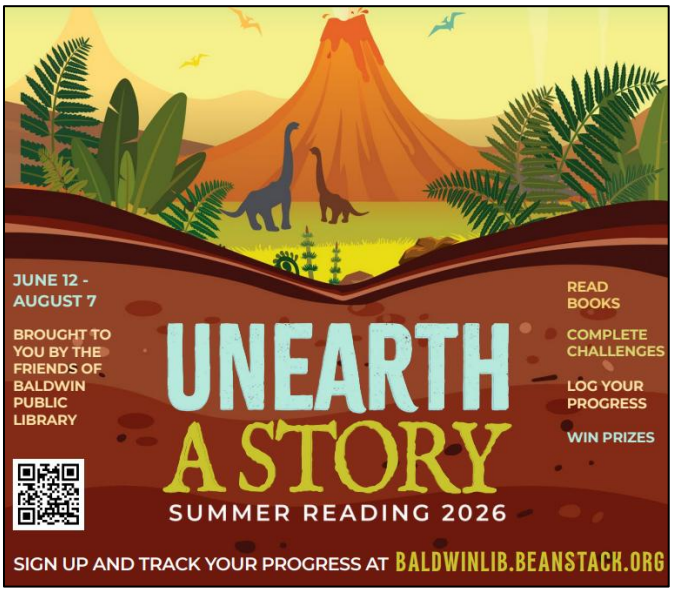
Library Board
The Library Board will meet on Monday, May 18 at 7:30 p.m. for its regular meeting. The Trust Board meeting will be held immediately after the Library Board meeting. The board will vote to withdraw $60,544 in interest earnings to help fund programs and services at the library in the following year.

Holiday Closures
The library will be closed on Memorial Day weekend from Saturday, May 23 through Monday, May 25 and will reopen on Tuesday, May 26 at 9:30 a.m.

The library will be closed on Friday, June 19, in honor of Juneteenth.

RFP for Lower Level Updates
An RFP for Lower Level Updates was issued on May 6 on the Michigan Intergovernmental Trade Network (MITN). The mandatory contractor walkthrough will be held on May 20. All applications are due Tuesday, June 23, 2026 at 3 p.m.

Partnership with Birmingham Public Schools
May is a busy month for Baldwin staff as we host 24 local history tours for each of Birmingham's second grade classrooms and visit 47 different K-11 classrooms or school assemblies to share information about our 2026 Summer Reading Program. Baldwin staff will be meeting with more than 5,000 BPS students over the course of a month.



Summer Newsletter Mailed to Homes
Baldwin's quarterly Learn.Connect.Discover newsletter has been mailed to all homes in Birmingham and includes information about upcoming programs this summer. Register for these upcoming programs and more at baldwinlib.org/calendar.

Library Tours
If you'd like to learn even more about the library, join Director Rebekah Craft for a Behind the Scenes Tour. You'll visit staff areas, learn how items are added to the collection, and hear about new programs and services. The next tour will meet in the library's atrium on Wednesday, June 17 at 11 a.m.

Idea Lab: The Grand Tour
Have you always wondered what the Idea Lab is all about, but were afraid to ask? On Wednesday, June 3 at 7 p.m., Jeff will take you on a tour of the Idea Lab, including a quick demo of our exciting equipment. Registration required.

Upcoming events of interest

ELL Talk Time
Tuesdays from 10-11 a.m.
Join us to practice English conversation skills. We'll meet every Tuesday at the library. All levels are welcome. Coffee, tea and snacks will be provided.

Craft To Go: Whimsical Garden Woodcuts
June 1, 2026, All Day
Decorate a whimsical summer woodcut of a garden gnome and cheerful mushrooms. The woodcut was made from birch plywood and cut with the Idea Lab's laser cutter. Limit 1. First come, first served.

After Hours Teen Study Night with Therapy Dogs: Grades 9-12
Saturday, May 30 from 5:30-8:30 p.m.
Is school stressing you out? Maybe petting dogs will help! After the library closes to the public, the library will remain open for students in grades 9-12. Pizza will be provided.

Summer Reading Kickoff!
Friday, June 12 from 3-5 p.m.
Unearth your story at Baldwin's Summer Reading Kickoff. Visit the ice cream truck, play games and decorate the patio with chalk art. Sign up and track your progress at baldwinlib.beanstack.org. Summer Reading runs from June 12 to August 7.

Learn more about these events and other programs coming to Baldwin at baldwinlib.org/calendar.

Birmingham Museum

They Changed Birmingham
The museum is featuring W.D. Clizbe (1858-1926) in its monthly series of articles and exhibit posters at the municipal building entitled, "They Changed Birmingham." Clizbe was a controversial public figure at the turn of the 20th century who loved Birmingham and was determined to bring it into the modern era. Over forty years, Clizbe continuously advocated to improve schools, cultural facilities and public infrastructure. He also showed foresight by introducing early municipal planning concepts like a tree ordinance and street paving, and was often seen cleaning up trash in empty lots around town. But he really made waves in 1922 when he contracted to modernize Birmingham's water system despite a public vote defeating the bond issue. Within

two years, however, the bond issue was approved when Birmingham voters realized just how necessary the water system was. Clizbe (whose daughter Marion married Harry Allen and built the Allen House) had followers and detractors in Birmingham, but he never compromised on his dedication to what he saw as the public good. When he died in 1926, his funeral drew the largest number of mourners Birmingham had ever seen. Look for the *Around Town* article in June for more information on this fascinating character who changed Birmingham.

"Juneteenth Celebration of the Taylor and Harris Family" at Greenwood Cemetery Friday, June 19.

This special event will honor the stories of George and Eliza Dosier Taylor and Abe and Abbie Farmer Harris who formed an early Black community in Birmingham. The Taylors were both formerly enslaved and met in the area after the Civil War, making Birmingham their final home. They were the first African American property owners here and were connected through their daughter to the Harris family of Royal Oak. Abe and Abbie Harris' descendants resided in Birmingham more than 100 years until the late 20th century. Museum staff invite the public to join them in a Juneteenth celebration of the Taylors and Harrises on Friday, June 19 at noon at the Taylor burial site in Section E of Greenwood Cemetery.

Birmingham Shopping District

Birmingham Farmers Market and Upcoming Special Events:

The Birmingham Farmers Market's 24th season is off to a busy start! Join us every Sunday through October 25 from 9 a.m. – 2 p.m. for fresh, local produce and plants, live music, kids' activities, food trucks and more. Save the date for the Strawberry Jam-Boree and a free Second Sunday Fitness class on June 14. Learn more and register on our website.

The Outdoor Movie Nights series will begin on Friday, June 5. Join us at Booth Park starting at 6:30 p.m. for free, family-friendly entertainment including the featured presentation, Smurfs.

View all upcoming events by visiting the BSD Event Calendar.





Volunteer Opportunities:

For those looking for a fun way to give back to the community or complete volunteer service hours, the BSD offers a variety of opportunities for ages 14+ at our events throughout the year. Volunteer shifts and duties vary, offering flexible options to fit a variety of schedules and interests. Learn more at downtownbirmingham.com/volunteer.

Building Department

Board of Zoning Appeals

There were five cases on the May 12, 2026 Board of Zoning Appeals regular meeting agenda, however one was postponed.

1. 400 Westchester Way: The property owner requested a variance regarding the lot coverage for a constructed pergola and T.V. wall in the rear yard. There was a 3/3 vote, which resulted in no action by the board. The petitioner will have the opportunity to request the variance at the next regularly scheduled meeting when all members are present.

2. 1788 Bowers: The property owner requested a variance for a side setback and distance between structures to construct a second floor addition. The appeal was approved 6/0.

3. 488 Willits: The property owner requested three variances on the maximum height of the structure and eave to construct a new home with an attached garage. The appeal was approved 6/0.

4. 1573 Chesterfield: The property owner requested a variance regarding the street-facing side yard setback to construct a new home with an attached garage. There was a 3/3 vote, which resulted in no action by the board. The petitioner will have the opportunity to request the variance at the next regularly scheduled meeting when all members are present.

Online Permit Applications
In the month of April, we processed 324 permits online bringing this year's total permits processed electronically to 1091.

Monthly Report
The Building Department's monthly report shows the previous month's permit activity, along with charts showing the building permit activity trend over the past year.

City Clerk's Office

Celebrate Birmingham Hometown Parade & Party

Thank you to everyone who helped make this year's Celebrate Birmingham Hometown Parade & Party such a wonderful success! With 44 participants between the parade and Party in the Park, the event brought the community together for a fun, inclusive and memorable day enjoyed by families throughout Birmingham.

A very special thank you to our Presenting Sponsors, Bloom Pediatrics and Bank of Ann Arbor, for their generous support, which helped make this beloved community event possible.

We are also incredibly grateful to additional sponsors:

Mills Pharmacy & Apothecary
Planning Alternatives
Beier Howlett, PC
Milestones Pediatric PT
Birmingham Bloomfield Art Center
Beverly Hills Lions Club
Piety Hill Chapter, National Society Daughters of the American Revolution Birmingham

Your support and participation helped create another unforgettable hometown tradition for our community.

If you missed this year's event, don't worry, Celebrate Birmingham will return on May 16, 2027! Be sure to check bhamgov.org/parade for future updates and event information.

It's time to VOTE for your favorite "I Voted" stickers
The designs are in and it's time to cast your vote in Birmingham's first "I voted" sticker contest! Twenty-five creative designs were submitted by Birmingham residents. Visit bhamgov.org/stickercontest to view the designs and vote for your favorites through June 15.

Winning designs will be featured on stickers given to Birmingham voters during the August and November 2026 elections. Good luck to our artists!

Elections:
Upcoming elections will be held on August 4, 2026 for the State Primary, and November 3, 2026 for the General Election.

In 2025, Birmingham consolidated its precincts from nine locations to five. Follow this link to view a map of the official polling locations.

As always, we are happy to see Birmingham voters at the polls on Election Day! However, if you will be going out of town or wish to obtain an absent voter ballot, one can be requested online at mi.gov/vote. Voters interested in receiving a ballot in advance of every election moving forward can request to join the permanent ballot list at any time at mi.gov/vote.

Voters who are subscribed to receive an absentee ballot application before each election should expect to see those forms in their mailboxes in late May. This will be the last mailing of absentee ballot applications. Voters on the absentee ballot application mailing list will be notified and given the option to continue on the permanent ballot list going forward. Eliminating the application list is an efficiency and cost saving measure. With mail delays, it is recommended that voters wishing to vote by mail opt into the permanent ballot list to receive their ballot directly, eliminating a step in the process and avoiding potential mailing delays.

Official ballots received by mail can also be voted in person at your assigned Birmingham polling location on Election Day or at the early voting sites during the nine days of early voting. Find more information about early voting here.

Drop Box Locations
- 151 Martin Street - City Hall
  - Drive Up entrance From Henrietta
    - Available 24/7
  - In the flower bed at the south entrance to City Hall
    - Available 24/7, 40-days leading up to an election
  - Clerk's Office Counter
    - Available during office hours, M-F 8:00 a.m. to 5:00 p.m., 40-days leading up to an election
- 572 S. Adams Road - Fire Station #1
  - West side of the building to the right of the bay doors
    - Available 24/7, 40 days leading up to an election

August 4, 2026 **State Primary**	**Important Election Deadlines**	**November 3, 2026** **General Election**
Thursday, June 25, 2026	Absentee Ballots available & Permanent Absentee Voter Ballots are mailed	Thursday, September 19, 2026

Tuesday, July 21, 2026 through Election Day	Same-day voter registration with your local clerk, proof of residency required	Tuesday, October 20, 2026 through Election Day
Friday, July 24, 2026	5 p.m. deadline for electors to submit a written request to spoil their absent voter ballot and receive a new absent voter ballot by mail. And, deadline for electors who have returned their absent voter ballot to submit a written request in person to spoil their absent voter ballot and receive a new absent voter ballot in the City Clerk's Office.	Friday, October 23, 2026
Saturday, July 25, 2026 through Sunday, August 2, 2025	Early Voting	Saturday, October 24, 2026 through Sunday, November 1, 2026
Friday, July 31, 2025	5 p.m. deadline for clerks to send an absent voter ballot via First Class mail.	Friday, October 30, 2026
Monday, August 3, 2026	4 p.m. deadline for electors who have lost their absentee ballot or not yet received their ballot in the mail to submit a written request to spoil their absent voter ballot and receive a new absent voter ballot in the City Clerk's Office. And, deadline for a registered voter to apply for an AV ballot in person at the City Clerk's Office.	Monday, November 2, 2026
Tuesday, August 4, 2026	**7:00 a.m. - 8:00 p.m.** **Election Day**	**Tuesday, November 3, 2026**
Friday, August 7, 2026	5 p.m. deadline for voter to cure the signature on AV ballot return envelope, allowing an otherwise valid ballot to be accepted for tabulation	Friday, November 6, 2026
Monday, August 10, 2026	Deadline for a ballot submitted by a MOVE voter and postmarked on or before Election Day to be deemed timely received and	Tuesday, November 10, 2026

	counted.	
Tuesday, August 11, 2026	Deadline for county clerks to notify precinct delegates elected at August Primary; certify delegate names and addresses to chairpersons of county committees.	N/A

Important News:

A new U.S. Postal Service (USPS) rule took effect on December 24, 2025, which states "the presence of a postmark on a mailpiece confirms that the Postal Service was in possession of the mailpiece on the date of the postmark's inscription; the postmark date does not inherently or necessarily align with the date on which the Postal Service first accepted possession of the mailpiece" (Postal Service 39 CFR Part 111).

The Clerk's Office would like to highlight this point for any citizens who rely on postmarks for various reasons. The drive-up drop boxes located at the southeast corner of City Hall are open year-round for the collection of City documents. No postage is required when using the drop box.

For domestic military and overseas voters, please be especially mindful of this as you return election materials. Be sure to return your election mail as early as possible to account for physical transportation delays as well as the possibility of a delayed postmark.

Viewing Meeting Materials Online:

The City Clerk's Office has rolled out a new platform for City Commission and most City board agendas and minutes hosted by CivicPlus. Follow this link to view City Commission and other meeting agendas and minutes via the CivicPlus portal. Access a guide to using the new portal here.

Greenwood Cemetery & Greenwood Cemetery Advisory Board (GCAB)
The next meeting for the Greenwood Cemetery Advisory Board is scheduled for June 6, 2026. To view GCAB agendas and minutes, visit bhamgov.org/GCAB.

For those visiting the cemetery and placing decorations for loved ones, it is important to be aware of the Greenwood Cemetery Operational Procedures, Conditions & Regulations, specifically sections II, III, and V.

Board of Ethics
Stay tuned for announcements regarding the next scheduled Board of Ethics meeting. At this time there are no opinion requests or complaints to be processed. To view the Ethics Board agendas and minutes, visit bhamgov.org/ethics.

Board Appointments
The City of Birmingham is looking for dedicated individuals who want to give back to their community by serving on one of our many boards or committees, which make recommendations that shape the City's future. It's a great way to get involved in your community, meet new people and make a positive impact. Visit bhamgov.org/boardopportunities to view all available openings and apply at bhamgov.org/boardapplication.

City Manager's Office

Communications

WCAG (Web Content Accessibility Guidelines) Compliance Updates
The Department of Justice's Final Rule on web accessibility, announced in 2024 and updated in April 2026, requires state and local governments comply with Web Content Accessibility Guidelines (WCAG) 2.1 Level AA standards for websites and mobile applications. The City's communications and IT departments have been monitoring updates to these requirements, developing instructional materials for staff and identifying best practices to help ensure compliance.

The compliance deadline for local government entities with a population of less than 50,000, such as Birmingham, has been extended from April 26, 2027, to April 26, 2028. IT Director Eric Brunk and Communications Director Marianne Gamboa recently met with Revize, the City's website provider, to review new accessibility tools designed to support compliance with the updated standards. In addition, Communications Specialist Ann Tappan and Gamboa recently attended SEMCOG's Communicators Network meeting, where WCAG compliance was a primary topic of discussion. City staff and legal counsel will continue working to ensure the City meets the new accessibility requirements ahead of the deadline.

June Around Town e-newsletter
The communications team is working on the May edition of the Around Town e-newsletter, which will include information about movie nights, playground improvement projects, In the Park Summer Concerts, golf course updates, new businesses and more. Follow this link to view the May edition.

Receive updates from Birmingham
Receive the latest news from Birmingham by signing up to receive our newsletter and alerts at bhamgov.org/enews. Subscribers receive important information specific to their neighborhood, emergency alerts and our newsletter featuring upcoming events, meetings, City projects, developments and more. Also follow us on Facebook and Instagram @BhamGov, and visit bhamgov.org/communications to view all City communication tools.

Engineering Department

City Construction Projects

Bird Phase 1B Project
The contractor has started construction and is currently working on water main installation.

Wimbleton Phase 1 Project
See Section 11. Reports, Item E: City Staff for information about this project.

2025 Concrete Program
The contractor completed work at some of the park locations and is continuing work on concrete repairs at the intersection of Maple and N. Eton. Local street patching will take place on Donmar Ct, Hamilton Ave, and Smith Ave., and Commerce St. Major street patching will take place on Bates St., Lincoln Road, Maple Road, Merrill St., Pierce St., and concrete patches throughout the City.

2025-2026 Sewer Rehabilitation Program
The contractor has started working on cleaning and televising sewer segments that will receive sewer lining in various locations throughout the City. Residents will receive notice via door hangers before the sewer lining process starts.

Wimbleton Phase 2 Project
The contract award is scheduled for the May 18, 2026 City Commission meeting. A pre-construction meeting will be held after the contract award, and a resident letter will be issued prior to starting construction in June.

2027 Cape Seal Program
The Engineering Department will have a resident meeting on a new date of Thursday, May 27, 2026 from 5:30-6:30 p.m. at City Hall in the City Commission room to answer questions about the project and the upcoming Special Assessment District.

Quarton Road Sidewalk Gap Closure Project
There will be a resident meeting on Monday, June 1, 2026 from 5:30 - 6:30 p.m. in the City Commission room at City Hall.

N. Old Woodward Project
There will be a resident meeting on Tuesday, June 2, 2026, from 5:30– 6:30 p.m. in the City Commission room at City Hall.

Lead Service Replacement Program
Last fall the City issued letters in for EGLE's yearly notice requirements. Those with questions about the letters or who would like to sign up for lead service replacement at no cost should contact the Engineering Department at 248-530-1840.

Consumers Energy Project
Consumers Energy has two projects to replace the gas main in the west part of the City. They have notified residents about these projects. To learn more, reach out to Consumers Energy:

- General construction – Gas Construction Operations: 517-768-3640
- Relight pilot lights after gas service interruption: 1-800-477-5050
- Landscaping, grass, road, and sidewalks: 1-844-660-3477

If you have any questions about these projects or programs, please contact the Engineering Department at (248) 530-1840.

Fire Department

On Sunday, May 3, 2026, six members of the Birmingham Fire Department participated in the annual Fight For Air Climb raising money for the American Lung Association. Firefighters participate in a separate division and perform the event in full firefighting gear, including wearing their self-contained breathing apparatus.

This year's event took place at Ford Field, with the participants climbing 1,548 steps throughout the 100 level at the stadium. Birmingham firefighters helped raise nearly $2,000 and came in second place overall.

We are very proud of our group for their efforts!



Human Resources

Newly Hired Employees

The City of Birmingham extends warm congratulations to our newly hired employees as of May 8, 2026. Their skills, expertise and enthusiasm are a valuable addition to our team. We welcome them to the City of Birmingham!

Department	Name		Position	Type
Building	Kraig	Brown	Inspector Building	FT
DPS - Golf	Alexander	Iannuzzi	Golf Maintenance & Service	Seasonal Rehire
DPS - Golf	Cira	Racco	Golf Maintenance & Service	Seasonal Rehire
DPS - Golf	William	Ging	Golf Maintenance & Service	Seasonal
DPS - Golf	Robert	Heidt	Golf Maintenance & Service	Seasonal
DPS - Golf	Ava	Sucevic	Golf Maintenance & Service	Seasonal
DPS - Golf	Sharmaye-Ann	Becraft	Golf Maintenance & Service	Seasonal
DPS - Golf	Daniel	Willey	Golf Maintenance & Service	Seasonal
DPS - Golf	Clair	Dauer	Golf Maintenance & Service	Seasonal
DPS - Golf	Madison	Moggio	Golf Maintenance & Service	Seasonal
DPS - Golf	Dillon	Guenther	Golf Maintenance & Service	Seasonal
DPS - Golf	Brooke	Harrison	Golf Maintenance & Service	Seasonal
DPS - Golf	William	Shannon	Golf Maintenance & Service	Seasonal
DPS - Ice Arena	Lauren	Di Penti Anderson	Ice Arena Manager	FT
DPS - Parks	Ethan	Gatewood	Parks Laborer	Seasonal Rehire
DPS - Parks	David	Braham	Parks Laborer	PT
DPS - Parks	Stephen	Kulidjian	Parks Laborer	Seasonal

Engineering	Kameron	Dimitry	Public Works Inspector	Seasonal Rehire
Finance	Janet	Peters	Accountant	FT
Police	Daedraeanna	Catanese	Police Dispatch	FT
Police	Caeden	Stauss	Police Officer	FT

Promotions

DPS -Ice Arena	Ryan	Pippin	Ice Arena/Golf Course Operator	FT Teamsters

May Hiring Anniversaries

The City of Birmingham celebrated the hiring anniversaries of several employees. We extend our heartfelt appreciation for their exceptional service and unwavering dedication. Their contributions are deeply valued and recognized.

Years Of Service	**Employee**		**Department**	**Position**
26	Gregory	Wald	Police	Police Captain
23	Thomas	Hughes	Fire	Assistant Fire Chief
14	Douglas	Manigold	Building	Zoning Officer PT
13	Kenneth	Hitchcock, Jr	Police	Clerical Assistant
13	Brian	Freels	Fire	Fire Lt/AEMT
12	Jamie	Debano	Police	Police Officer
11	Gwynn	Duffey	Finance	Payroll Coordinator
10	Jason	Granroth	Fire	Fire / AEMT
9	Nadia	Bertala	Library	Library Page

9	H	Jennings	Library	Library Department Head
9	Ross	Leibold	DPS	P&F Operator
8	James	Adams	Library	Library Assistant
8	Robbie	Terman	Library	Substitute Librarian
7	Melissa	Behrens	Library	Substitute Librarian
7	Joan	Jennings	Library	Library Assistant
7	Hannah	Stoloff	Library	Substitute Librarian
7	Ryan	Neuville	Fire	Fire / AEMT
5	Anthony	Paredes	Police	Police Sergeant
5	Trevor	Hulbert	Fire	Fire / AEMT
5	Emily	Malek	Library	Substitute Librarian
5	Grace	Noble	Library	Library Assistant
4	Kelly	Dolland	Clerk's Office	Clerical Assistant PT
4	Joseph	Roberts	Police	Police Officer
4	Will	Isaacson	Police	Police Officer
3	Samantha	Hollo	Library	Library Assistant
2	Maliek	Humes	Police	Police Officer
1	Joshua	King	Library	Operations Assistant

May Hiring Status
The City is seeking candidates for the following positions. Below is the current status of each opening. To apply or for more information, visit www.bhamgov.org/jobs.

Department	Position	Type	Status
Police	Clerical (FOIA)	Part Time (AFSCME)	Open until May 29, 2026
Golf	Seasonal Clubhouse Service	Seasonal	Onboarding
Golf	Seasonal Maintenance Laborer	Seasonal	Onboarding
DPS	Parks Laborer	Part Time	Onboarding

Planning Department

Planning Board (PB)

Now that the Zoning Ordinance Update Project has officially kicked off, the team is working through the next steps in the scope of work, which is the ordinance "preliminary recommendations report" which will be informed by a detailed assessment of the City's current Zoning Ordinance and provide Houseal Lavigne's recommendations for the Zoning Ordinance Update. It will be based on issues and opportunities identified in outreach, alignment with the Birmingham Plan 2040, information provided by the City and partner agencies, and the experience and expertise of Houseal Lavigne. The Zoning Ordinance Update project is expected to be discussed at the following upcoming meetings of the Planning Board:

- June 10, 2026
- June 15, 2026 (Joint Planning Board & City Commission)
- July 8, 2026
- August 12, 2026

As the project moves forward, please visit www.bhamgov.org/zoningordinanceupdate to stay tuned and access available documents produced throughout the process.

The Planning Board is also working through its ordinary site plan review work, which has been steady to start the year. A list of recently completed items at the Planning Board is provided below:

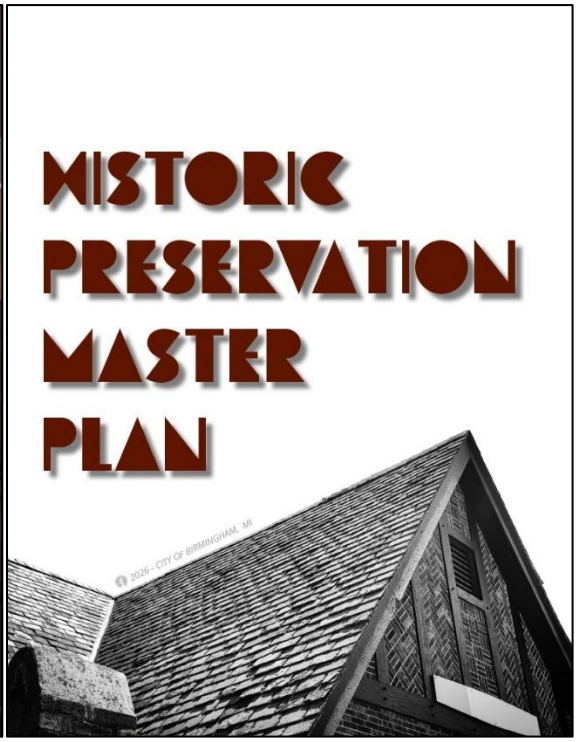
1. 34592 Woodward & 690 E. Maple – Request for Community Impact Study and Preliminary Site Plan Review for new 9-story mixed-use building (5/13/26)
2. 260 N. Old Woodward – Terra – Request for Special Land Use Permit Amendment, Final Site Plan & Design Review for modifications to outdoor dining platform (5/13/26)

Historic District Commission (HDC) & Design Review Board (DRB)

It is National Historic Preservation Month (NHPM)! The City is fortunate to have so much history to celebrate, and especially this year as we recognize the 250th year of the signing of the Declaration of Independence. With such a deep history to pull from, Birmingham is in a position to celebrate America's 250th in an exceptional way - through its architecture! Throughout the month of May, the City will highlight examples of as many architectural styles as possible from older styles such as Dutch Colonial and Federal to more modern styles such as Craftsman and Ranch. Check out the City's Preservation Month 2026 webpage for more.

In addition to celebrating NHPM, the City is also celebrating the receipt of the Michigan Historic Preservation Network's 2026 Government/Institution award for Birmingham's Historic Preservation Master Plan. The award is presented to agencies who have by their actions accomplished significant positive changes in the historic preservation climate and activity in the State of Michigan. The receipt of this award recognizes the importance of protecting and celebrating Birmingham's history and heritage, and we are looking forward to building on this momentum as the plan is implemented. The City was issued the award at the MHPN's statewide preservation conference surrounded by its peers and supporters of historic preservation from all around the State. In addition, the City was also highlighted in the news with other award NHPM award recipients.





Regular Business

The HDC and DRB have also been busy with Design Review applications, and the HDC is continuing its implementation of the Historic Preservation Master Plan alongside its regular business. A tentative list of scheduled items at the HDC and DRB is provided below:

1. Demolition Delay Ordinance Study (6/3/26)
2. Digital Resources for Historic Designation/Preservation (6/3/26)
3. Historic District Commissioner Training 2026 (6/3/26)
4. 40 by 40 Program Initiation (6/3/26)

Environmental Sustainability Committee (ESC)

With a very busy schedule and a growing list of projects, the ESC has had to reschedule its last two meetings and consolidate planned agenda items into its next meeting on May 18, 2026. As spring rounds the corner into summer, the ESC will be planning unique events such as a "Rain Gardens 101" course in partnership with the Huron Clinton Watershed Council and food waste composting informational tables at events like the Farmers Market. Stay tuned to Birmingham Green's social media @bhamgreen for updates on opportunities like these and more!

A tentative list of scheduled items at the Environmental Sustainability is provided below:

1. **W-1** – Develop a City-wide food waste composting program (5/18/26)
2. **WS-1** – Study the hydrology and topography of the City and produce recommendations toward targeting stormwater infrastructure improvements in areas that have the largest impact in reducing the negative effects of stormwater (5/18/26)
3. **NR-1** – Protect and expand the tree canopy in each census tract of the City to at least 40%.
4. **BF-1** – Develop a plan to incentivize or require the transition from natural gas to electric in residential renovation and construction (6/22/26)

Police Department

2026 National Police Week

Sun, May 10, 2026 – Sat, May 16, 2026



Each May, our nation comes together to honor the courage, sacrifice and dedication of law enforcement officers. Originally established by President John F. Kennedy's proclamation in 1962, National Police Week includes Peace Officers Memorial Day on May 15th and a week of observances recognizing officers who gave their lives in the line of duty, as well as those who continue to serve and protect our communities with dedication and courage.

National Police week is both a time of solemn remembrance and a celebration of the men and women who serve with integrity and bravery every day. It reminds us that behind every badge is a story of service, sacrifice and family.

Congratulations to Lt. Alex Linke for graduating from the Northwestern School of Police Staff and Command on May 8, 2026

The Northwestern School of Police Staff & Command (SPSC) is an intensive leadership and management education program that helps prepare experienced law enforcement professionals for success in senior command positions. Through an innovative combination of academic principles with practical applications, the SPSC curriculum zeroes in on such critical command-level content as planning and policies, media relations, organizational behavior, budgeting and resource allocation, human resources, contemporary policing, and more.

Parking Systems Update

City Commission Approves Changes to Evening Monthly Parking Program

At the April 27 meeting, the City Commission approved a series of updates to the Evening Monthly Parking Permit Program. This program continues to serve as an important and flexible parking option for individuals who regularly utilize City-owned parking structures during evening and overnight hours, including employees, patrons and visitors.

The evening monthly parking permit remains valid across all five City-owned parking structures: N. Old Woodward, Peabody, Chester, Pierce and Park Street. Under the current structure, the permit allows parking between 4 p.m. and 8 a.m., seven days per week, with any use outside of these hours subject to standard public parking rates. Approximately 73 permits are issued monthly under the existing program, which has historically been priced at a flat rate of $20 below the standard monthly permit fee.

Following a presentation by staff to the Advisory Parking Committee (APC) on March 11, 2026, and subsequent positive feedback, the proposed changes were presented to the City Commission for approval. Input from the Birmingham Shopping District and local service-industry employees highlighted the need for greater flexibility and affordability within the program.

The approved modifications include:

Earlier Start Time: The evening permit hours will now begin at 3 p.m., rather than 4 p.m., to better accommodate employees with earlier shift start times.
Revised Pricing Structure: The program will transition from a flat $20 discount to a 40% discount off standard monthly parking rates, improving affordability and aligning pricing more closely with usage patterns.

Under the new 40% discount model, monthly evening permit rates will be as follows:

- Pierce Structure: $60
- Park Structure: $54
- Peabody Structure: $54
- N. Old Woodward Structure: $54
- Chester Structure: $42

These changes are intended to enhance the accessibility and value of the program while continuing to support the needs of the downtown workforce and broader community.

Parking Reports
Download the monthly parking report to view data regarding meter revenue, parking garage revenue, monthly parking permits sold, garage occupancy rates and more.

Upcoming agenda items

Items for future discussion and potential workshop topics: 400 East Lincoln Phase 2, Mayor selection process, City Hall improvements, builders' bonds, short-term rentals.

MEMORANDUM

Finance Department

DATE: May 18, 2026

TO: Jana L. Ecker, City Manager

FROM: Mary J. Chavez, Finance Director/Treasurer

SUBJECT: 2026-2027 Budget Appropriations Resolution

INTRODUCTION:
As required by State law and the City Charter, the City Commission must annually approve a budget for the following fiscal year and approve the property tax millage to be assessed on July 1st.

BACKGROUND:
The City held a public hearing on April 25, 2026, to review the 2026-2027 recommended budget and to receive comments and revisions from the City Commission and the general public. Based on the comments received and updates for new information in the recommended budget, there were no changes from the recommended budget amounts. Therefore, staff recommends approval and adoption of the Fiscal Year 2026–2027 Budget Appropriations Act as presented.

LEGAL REVIEW:
None needed.

FISCAL IMPACT:
Fiscal impact is consistent with the recommended Fiscal Year 2026–2027 budget as presented.

PUBLIC COMMUNICATIONS:
The budget hearing was noticed in the newspaper, included in the 2026 City calendar, and communicated on social media.

SUMMARY:
It is recommended that the City Commission approve the budget appropriations resolution adopting the City of Birmingham's budget and establishing the total number of mills for ad valorem property taxes to be levied for the fiscal year commencing July 1, 2026 and ending June 30, 2027.

ATTACHMENTS:
None

SUGGESTED COMMISSION ACTION:
Make a motion adopting the following budget appropriations resolution and establishing the total number of mills for ad valorem property taxes to be levied for the fiscal year commencing July 1, 2026 and ending June 30, 2027.

BUDGET APPROPRIATIONS RESOLUTION

WHEREAS, the City Manager has submitted the proposed 2026-2027 Budget, and:

WHEREAS, the City Commission has reviewed the 2026-2027 Budget, and;

WHEREAS, the City Commission has held a Public Hearing on the 2026-2027 Budget;

WHEREAS, Chapter VII, Section 14 of the Birmingham City Charter requires that the City Commission pass an annual appropriations resolution, and;

NOW THEREFORE, BE IT RESOLVED, that the City Commission does hereby adopt the following estimated revenues for the City of Birmingham for the fiscal year commencing July 1, 2026, and ending June 30, 2027:

GENERAL FUND:	
Taxes	$ 40,903,120
Special Assessments	662,750
Licenses & Permits	2,996,820
Federal Grants	1,232,750
State Grants	2,777,090
Local Contributions	139,520
Charges for Services	3,928,640
Fines and Forfeitures	1,936,900
Interest and Rent	2,291,110
Other Revenue	56,350
Other Financing Sources	100,000
Draw from Fund Balance	1,181,900
Total General Fund	$ 58,206,950
GREENWOOD CEMETERY PERPETUAL CARE FUND:	
Charges for Services	$ 40,000
Interest and Rent	44,000
Total Greenwood Cemetery Perpetual Care Fund	$ 84,000

MAJOR STREETS FUND:		
Special Assessments	$	39,400
State Grants		2,224,700
Interest and Rent		60,000
Other Financing Sources		4,000,000
Total Major Streets Fund	$	6,324,100
LOCAL STREETS FUND:		
Special Assessments	$	664,050
State Grants		908,680
Interest and Rent		50,000
Other Revenue		5,000
Other Financing Sources		7,500,000
Total Local Streets Fund	$	9,127,730
SOLID WASTE DISPOSAL FUND:		
Taxes	$	2,570,180
State Grants		5,000
Interest and Rent		65,000
Total Solid Waste Disposal Fund	$	2,640,180
BROWNFIELD REDEVELOPMENT AUTHORITY FUND:		
Taxes	$	264,250
Interest and Rent		4,000
Other Revenue		10,000
Total Brownfield Redevelopment Authority Fund	$	278,250
PRINCIPAL SHOPPING DISTRICT FUND:		
Special Assessments	$	1,281,610
Charges for Services		25,000
Interest and Rent		50,000
Other Revenue		240,000
Draw from Fund Balance		189,900
Total Principal Shopping District Fund	$	1,786,510
COMMUNITY DEVELOPMENT BLOCK GRANT FUND:		
Federal Grants	$	35,000
TRIANGLE DISTRICT CORRIDOR IMPROVEMENT AUTHORITY FUND:		
Interest and Rent	$	600
INDIGENT DEFENSE FUND:		
State Grants	$	500,150
Local Contributions		17,600
Interest and Rent		7,600
Total Indigent Defense Fund	$	525,350

OPIOID SETTLEMENT FUND:		
Interest and Rent	$	1,000
Other Revenue		50,000
Total Opioid Settlement Fund	$	51,000
LAW AND DRUG ENFORCEMENT FUND:		
Interest and Rent	$	6,000
Fines and Forfeitures	$	30,000
Draw from Fund Balance		16,750
Total Law and Drug Enforcement Fund	$	52,750
SENIOR SERVICES FUND:		
Taxes	$	1,246,400
Interest and Rent		70,000
Total Senior Services Fund	$	1,316,400
SUSTAINABILITY AND CLIMATE ACTION FUND		
Interest and Rent	$	400
Total Sustainability and Climate Action Fund	$	400
BALDWIN LIBRARY FUND:		
Taxes	$	4,913,390
State Grants		47,000
Local Contributions		1,226,890
Charges for Services		28,700
Fines and Forfeitures		7,000
Interest and Rent		15,000
Other Revenue		500
Total Baldwin Library Fund	$	6,238,480
DEBT SERVICE FUND:		
Taxes	$	862,630
Intergovernmental		3,000
Interest and Rent		8,800
Total Debt Service Fund	$	874,430
CAPITAL PROJECTS FUND:		
Federal Grants	$	-
Local Contributions		-
Other Financing Sources		1,837,100
Total Capital Projects Fund	$	1,837,100

PARK SYSTEM CONSTRUCTION FUND:	
State Grants	$ 400,000
Interest and Rent	188,000
Draw from Fund Balance	2,407,000
Total Park System Construction Fund	$ 2,995,000
AUTOMOBILE PARKING SYSTEM FUND:	
Charges for Services	$ 10,419,230
Interest and Rent	1,452,000
Draw from Net Position	11,233,300
Total Automobile Parking System Fund	$ 23,104,530
SEWAGE DISPOSAL FUND:	
Taxes	$ 28,820
Special Assessments	2,000
State Grants	-
Charges for Services	15,783,410
Interest and Rent	150,000
Other Financing Sources	-
Draw from Net Position	2,556,070
Total Sewage Disposal Fund	$ 8,520,300
WATER-SUPPLY SYSTEM RECEIVING FUND:	
Taxes	$ -
Federal Grants	-
State Grants	-
Charges for Services	8,575,260
Interest and Rent	240,000
Draw from Net Position	2,684,410
Total Water-Supply System Fund	$ 11,499,670
LINCOLN HILLS GOLF COURSE:	
Charges for Services	$ 1,157,530
Interest and Rent	108,000
Other Revenue	600
Total Lincoln Hills Golf Course Fund	$ 1,266,130
SPRINGDALE GOLF COURSE:	
Charges for Services	$ 683,960
Interest and Rent	30,000
Other Revenue	200
Draw from Net Position	286,720
Total Springdale Golf Course Fund	$ 1,000,880

COMPUTER EQUIPMENT FUND:

Interest and Rent	$ 1,465,140
Draw from Net Position	93,950
Total Computer Equipment Fund	$ 1,559,090

AND, BE IT FURTHER RESOLVED, that the City Commission does hereby adopt on a budgetary center basis the following expenditures for 2026-2027:

GENERAL FUND:

General Government	$ 8,094,270
Judicial	2,116,490
Public Safety	23,036,990
Public Works	6,165,670
Health and Welfare	237,040
Community and Economic Development	937,560
Recreation and Culture	4,281,830
Transfers Out	13,337,100
Contribution to Fund Balance	-
Total General Fund	$ 58,206,950

GREENWOOD CEMETERY PERPETUAL CARE FUND:

Expenditures	$ -
Contribution to Fund Balance	84,000
Total Greenwood Cemetery Perpetual Care Fund	$ 84,000

MAJOR STREETS FUND:

Public Works	$ 5,987,780
Contribution to Fund Balance	336,320
	$ 6,324,100

LOCAL STREETS FUND:

Public Works	$ 8,499,420
Contribution to Fund Balance	628,310
	$ 9,127,730

SOLID WASTE DISPOSAL FUND:

Public Works	$ 2,578,180
Contribution to Fund Balance	62,000
	$ 2,640,180

BROWNFIELD REDEVELOPMENT AUTHORITY FUND:

Community and Economic Development	$ 274,250
Contribution to Fund Balance	4,000
Total Brownfield Redevelopment Authority Fund	$ 278,250

PRINCIPAL SHOPPING DISTRICT FUND:		
Community and Economic Development	$	1,786,510
COMMUNITY DEVELOPMENT BLOCK GRANT FUND:		
Health and Welfare	$	35,000
TRIANGLE DISTRICT CORRIDOR IMPROVEMENT AUTHORITY FUND:		
Contribution to Fund Balance	$	600
INDIGENT DEFENSE FUND:		
Health and Welfare	$	525,350
OPIOID SETTLEMENT FUND:		
Health and Welfare	$	50,000
Contribution to Fund Balance		1,000
Total Opioid Settlement Fund	$	51,000
LAW AND DRUG ENFORCEMENT FUND:		
Public Safety	$	12,750
Capital Outlay	$	40,000
	$	52,750
SENIOR SERVICES FUND:		
Contribution to Fund Balance		$1,316,400
SUSTAINABILITY AND CLIMATE ACTION FUND		
Contribution to Fund Balance		$400
BALDWIN LIBRARY FUND:		
Recreation and Culture	$	6,211,710
Contribution to Fund Balance		26,770
Total Baldwin Library Fund	$	6,238,480
DEBT SERVICE FUND:		
Debt Service	$	867,630
Contribution to Fund Balance		6,800
	$	874,430
CAPITAL PROJECTS FUND:		
Capital Outlay	$	1,837,100
PARK SYSTEM CONSTRUCTION FUND:		
Capital Outlay	$	2,995,000

AUTOMOBILE PARKING SYSTEM FUND:	
Public Works	$ 23,104,530
Contribution to Net Position	-
Total Automobile Parking System Fund	$ 23,104,530
SEWAGE DISPOSAL SYSTEM FUND:	
Public Works	$ 18,520,300
WATER-SUPPLY SYSTEM RECEIVING FUND:	
Public Works	$ 11,499,670
LINCOLN HILLS GOLF COURSE:	
Recreation and Culture	$ 1,014,330
Contribution to Net Position	251,800
Total Lincoln Hills Golf Course	$ 1,266,130
SPRINGDALE GOLF COURSE:	
Recreation and Culture	$ 1,000,880
COMPUTER EQUIPMENT FUND:	
General Government	$ 1,559,090

BE IT FURTHER RESOLVED that the budget summary above be approved as the 2026-2027 City Budget and that this resolution shall be known as the City of Birmingham 2026-2027 General Appropriations Act.

BE IT FURTHER RESOLVED that the City Commission does hereby designate $40,861,120 to be raised by 10.5005 mills levied for general purposes on the taxable valuation of all real and personal property subject to taxation in the City.

BE IT FURTHER RESOLVED that the City Commission does hereby designate $4,928,390 to be raised by 1.2665 mills levied for library operations on the taxable valuation of all real and personal property subject to taxation in the City.

BE IT FURTHER RESOLVED that the City Commission does hereby designate $2,578,180 to be raised by 0.6625 mills levied on the taxable valuation of all real and personal property subject to taxation in the City for the purpose of the collection and removal of garbage and trash of the City as authorized by MCL 123.261, et seq.

BE IT FURTHER RESOLVED that the City Commission does hereby designate $1,249,510 to be raised by 0.3211 mills levied on the taxable valuation of all real and personal property subject to taxation in the City for the purpose of providing senior services within the City as authorized by MCL 401.571, et seq.

BE IT FURTHER RESOLVED that the City Commission does hereby designate $867,630 to be raised by 0.2225 mills levied for debt service requirements on the taxable valuation of all real and personal property subject to taxation in the City.

BE IT FURTHER RESOLVED that the City Manager is hereby authorized to make budgetary transfers within the budgetary centers established through the adoption of this budget, and that all transfers between budgetary centers may be made only by further action of the City Commission pursuant to the provisions of the Michigan Uniform Accounting and Budgeting Act.

BE IT FURTHER RESOLVED that the 2026-2027 budget shall be automatically amended on July 1, 2026, to re-appropriate encumbrances outstanding and reserved at June 30, 2026.

BE IT FINALLY RESOLVED that the City Treasurer be authorized to add to all taxes paid after August 31, 2026, three-fourths of one percent (3/4 of 1%) penalty each and every month, or fraction thereof, that remains unpaid. On all taxes paid after February 16, 2027, and through March 1, 2027, there shall be added a late penalty charge equal to three percent (3%) of such tax.

MEMORANDUM

Treasurer's Office

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Ryan Katz, Deputy Treasurer
Mary Chavez, Finance Director

SUBJECT: Confirmation of SAD Roll 920S and SAD Roll 920W - Wimbleton Phase 2 Project - Sewer and Water Laterals

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INTRODUCTION:

A Public Hearing of Confirmation of the Special Assessment Roll for the Wimbleton Phase 2 Sewer and Water Lateral Project is being held on May 18, 2026. The special assessment will reimburse the City for improvements made. If the City Commission approves the roll, the property owners who benefit from these improvements will be billed for the cost of the improvements.

Comments during the Hearing of Confirmation of the Special Assessment Roll are limited to those questions specifically addressing the assessment roll pursuant to Section 94-9 of the City Code.

BACKGROUND:

At the City Commission meeting on May 4, 2026, the City Commission determined the necessity of the Wimbleton Phase 2 Sewer and Water Lateral Project and a Hearing of Confirmation of the Special Assessment Roll was set for May 18, 2026.

LEGAL REVIEW:

The City Attorney has reviewed the suggested resolution for compliance with City Code. The purpose of this hearing is to review and hear any objections to the Special Assessment Roll. The Special Assessment Roll is a listing of all of the properties to be assessed for the improvements to the property. Pursuant to the City Code at section 94-9, whenever a Special Assessment Roll shall be confirmed by the City Commission, it shall be final and conclusive.

FISCAL IMPACT:

If confirmed, the preliminary assessment roll would be $60,792.03. Once the project is completed and final costs are known, the roll will be adjusted to actual costs as provided by City Code. Property owners have ten (10) years to pay the special assessment.

SUSTAINABILITY:

This project will install a portion of a separated storm sewer that will drain north of Wimbleton to the Rouge River.

DESIGN CONSIDERATIONS:
Per the motion by the City Commission at the October 27, 2025, meeting, Wimbleton will receive cape seal treatment of the road surfaces within the project area.

PUBLIC COMMUNICATIONS:
Property owners were notified by mail of the public hearing dates. If the City Commission confirms the Special Assessment Roll, the Treasurer's office will notify the property owners in the Special Assessment District of the confirmation and the lien on their property.

SUMMARY:
The Treasurer's office recommends that the City Commission conduct the Hearing of Confirmation of Special Assessment Rolls 920S and 920W and further to confirm the rolls as attached to this report.

ATTACHMENTS:
1. Wimbleton Phase 2 Water & Sewer Hearing of Necessity

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution confirming Special Assessment Rolls 920S and 920W as follows:

WHEREAS, Special Assessment Roll, designated Roll No. 920S and Roll No. 920W, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 05-117-26 provided it would meet this 18th day of May, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this May 18, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 920S and Roll No. 920W be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in ten (10)

payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1925255007	541 WIMBLETON DR	$ 2,388.96	$ 1,421.60
1925280009	647 WIMBLETON DR	$ 995.40	$ -
1925280010	669 WIMBLETON DR	$ 1,542.87	$ 1,421.60
1925280026	715 WIMBLETON DR	$ 1,094.94	$ -
1925281010	887 WIMBLETON DR	$ 995.40	$ 1,954.70
1925281033	923 WIMBLETON DR	$ 995.40	$ 1,954.70
1925281031	1054 ABBEY RD	$ -	$ 22.21
1925281030	1064 ABBEY RD	$ -	$ 22.21
1925281029	1074 ABBEY RD	$ -	$ 22.21
1925281028	1084 ABBEY RD	$ -	$ 22.21
1925281027	971 N ADAMS RD	$ -	$ 22.21
1925281026	961 N ADAMS RD	$ -	$ 22.21
1925281025	951 N ADAMS RD	$ -	$ 22.21
1925281024	941 N ADAMS RD UNIT 9	$ -	$ 22.21
1925281023	931 N ADAMS RD	$ -	$ 22.21
1925281022	921 N ADAMS RD	$ -	$ 22.21
1925281021	911 N ADAMS RD	$ -	$ 22.21
1925281020	901 N ADAMS RD	$ -	$ 22.21
1925281019	1085 WIMBLETON DR	$ -	$ 22.21
1925281018	1075 WIMBLETON DR	$ -	$ 22.21
1925281017	1065 WIMBLETON DR	$ -	$ 22.21

1925281016	1055 WIMBLETON DR	$ -	$ 22.21	
1925258002	554 WIMBLETON DR	$ 1,493.10	$ 746.34	
1925258003	612 WIMBLETON DR	$ 2,040.57	$ -	
1925258004	636 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925258005	652 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925258006	680 WIMBLETON DR	$ 2,040.57	$ 1,101.74	
1925258007	700 WIMBLETON DR	$ 2,040.57	$ 1,243.90	
1925258008	871 POPPLETON AVE	$ 2,040.57	$ -	*
1925282001	812 WIMBLETON DR	$ 3,085.74	$ 1,883.62	
1925282002	824 WIMBLETON DR	$ 1,990.80	$ -	
1925282003	840 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282004	868 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282015	886 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282008	900 WIMBLETON DR	$ 2,040.57	$ 1,243.90	
1925282012	1004 WIMBLETON DR	$ 2,040.57	$ 1,066.20	
1925282013	1038 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925282017	1078 WIMBLETON DR	$ 291.51	$ -	
1925282023	1050 WIMBLETON DR	$ 291.51	$ -	
1925282022	1060 WIMBLETON DR	$ 291.51	$ -	
1925282021	1064 WIMBLETON DR	$ 291.51	$ -	
1925282020	1070 WIMBLETON DR	$ 291.51	$ -	
1925282019	1072 WIMBLETON DR	$ 291.51	$ -	
1925282018	1076 WIMBLETON DR	$ 291.51	$ -	

* Records indicate Lead Water Service, Zero Costs per the State of Michigan

$ 40,960.71 $ 19,831.32

MEMORANDUM

Engineering Department

DATE: May 4, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: Wimbleton Phase 2 Project, Contract #6-26(W)
Hearing of Necessity for Sewer and Water Lateral Special Assessment District (SAD)

INTRODUCTION:

Water and sewer laterals that do not meet useful life criteria will be replaced as part of the Engineering Department's planned project for the sewer and water main improvements on Wimbleton Drive from Oxford Road to Adams Road.

BACKGROUND:

At the October 27, 2025, City Commission meeting (Agenda – Video), the Commission approved a resolution for the Wimbleton Phase 2 Project, which includes water main replacement, sewer improvements, and cape seal treatment of road surfaces within the project area.

The existing 6-inch water main on Wimbleton Drive, originally installed in 1925, will be replaced with a new 12-inch water main.

Wimbleton Drive is currently served by a combined sewer system ranging from 8 to 12 inches in diameter, originally installed between 1925 and 1926. As part of this project, the City will replace the existing sanitary sewer and install a new storm sewer to extend the relief sewer constructed during Phase 1. This improvement will separate a portion of the stormwater runoff in the area.

In accordance with current City policy to protect public investment in roadway capital improvements, the following lateral replacements are proposed:

- All sewer laterals will be replaced if they are 50 years or older, less than 6 inches in diameter, or constructed of unsuitable materials. Replacement laterals will consist of 6-inch Schedule 40 PVC.
- All water services will be replaced if they are 60 years or older, less than 1 inch in diameter, or constructed of unsuitable materials. Replacement services will be 1-inch in diameter, or will match the existing diameter if greater than 1 inch.

In accordance with requirements from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), any lead water service lines must be fully removed from the water main to the water meter located on private property. Any identified lead service lines within the project area will be replaced as part of this project. Per EGLE regulations, the City is prohibited from charging property owners for the replacement of lead water services.

LEGAL REVIEW:
Chapter 94 – Special Assessments of the Birmingham City Code outlines the process by which a special assessment is conducted in the City of Birmingham. This project will follow the prescribed City Code procedures. The City Attorney has no objections.

FISCAL IMPACT:

Revenue generated from the water and sewer lateral Special Assessment District (SAD) for the Wimbleton Phase 2 Project will help offset the City's costs for constructing these improvements. Property owners will be responsible for 100% of the costs associated with lateral replacements within the public right-of-way (ROW).

Property owners may choose to pay the assessment in a lump sum or in installments over a period of up to 10 years, with interest. The applicable interest rate will be established at the Confirmation of Roll Hearing.

SUSTAINABILITY:
This project will install a portion of a separated storm sewer that will drain north of Wimbleton to the Rouge River.

DESIGN CONSIDERATIONS:
Per the motion by the City Commission at the October 27, 2025, meeting, Wimbleton will receive cape seal treatment of the road surfaces within the project area.

PUBLIC COMMUNICATIONS:
The Clerk's Office distributed the notice of Hearing of Necessity. The Engineering Department sent a letter to all property owners explaining the scope of work with the notice. The Engineering Department also held a resident meeting on April 29, 2026, to answer questions about the project and the SAD process.

SUMMARY:
The Engineering Department recommends that the City Commission declare necessity and approve a special assessment district for sewer and water laterals as part of the Wimbleton Phase 2 project. Should the Commission approve the special assessment district, a public hearing for the Confirmation of the Roll should be set for the City Commission meeting on May 18, 2026.

ATTACHMENTS:

1. Map of proposed special assessment district of sewer and water lateral replacement
2. Wimbleton Phase 2 project plans
3. Spreadsheet with estimated cost of lateral replacement
4. Clerk's confirmation of the public hearing notice
5. Presentation

SUGGESTED COMMISSION ACTION:

WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project replacing sewer services 50 years of age or older or constructed of material that is not acceptable for City standards and replacing water services that are 60 years or older or less than 1 inch in diameter on Wimbleton Drive from Oxford Road to Adams Road; and

WHEREAS, The City has previously established a policy requiring replacement of sewer services 50 years of age or older or constructed of materials that are not acceptable for City standards and water services less than 1 inch in diameter and the City street is open for repairs or reconstruction; and

WHEREAS, The City Commission, after the public hearing, has determined that the Wimbleton Phase 2 Project, the replacement of sewer services that are 50 years of age or older or of material that is not acceptable for City standards, the replacement of water services that are 60 years or older or less than 1 inch in diameter, is a necessity and is in the best interest of the City; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Formal bids have been received and the actual cost of sewer service and water service replacement has been determined; and

WHEREAS, The City Engineer has determined the boundaries of sewer service lateral and water service laterals located within the limits of the following streets shall be installed as part of the Wimbleton Phase 2 Project (Contract #6-26(W)):

Wimbleton Drive - Oxford Road to Woodward Avenue

WHEREAS, The formula used in making the assessment is 100% of the contractor's charge for replacing the lateral service that is 50 years of age or older or constructed of materials that are not acceptable and water service that is 60 years of age or older or less than 1 inch in diameter within the public right-of-way between the utility and the property line (calculated at the rate of $49.77 per foot of 6" diameter sewer service pipe, $35.54 per foot of 1-inch water service pipe).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the

public improvement as described is in the best interest of the City and will benefit the properties listed in the assessment roll and is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a Public Hearing of Confirmation on May 18, 2026 and give notice of same.

Sewer and/or Water Lateral

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1925255007	541 WIMBLETON DR	$ 1,990.80	$ 1,066.20
1925255008	921 WARWICK DR	$ -	$ -
1925280008	625 WIMBLETON DR	$ -	$ -
1925280009	647 WIMBLETON DR	$ 995.40	$ -
1925280010	669 WIMBLETON DR	$ 1,542.87	$ 1,421.60
1925280025	701 WIMBLETON DR	$ -	$ -
1925280026	715 WIMBLETON DR	$ 1,094.94	$ -
1925280027	733 WIMBLETON DR	$ -	$ -
1925280028	777 WIMBLETON DR	$ -	$ -
1925280029	921 POPPLETON AVE	$ -	$ -
1925280030	939 POPPLETON AVE	$ -	$ -
1925281005	928 POPPLETON AVE	$ -	$ -
1925281010	887 WIMBLETON DR	$ 995.40	$ 1,954.70
1925281033	923 WIMBLETON DR	$ 995.40	$ 1,954.70
1925281040	983 WIMBLETON DR	$ -	$ -
1925281041	1005 WIMBLETON DR	$ -	$ -
1925281031	1054 ABBEY RD	$ -	$ 22.21
1925281030	1064 ABBEY RD	$ -	$ 22.21
1925281029	1074 ABBEY RD	$ -	$ 22.21
1925281028	1084 ABBEY RD	$ -	$ 22.21
1925281027	971 N ADAMS RD	$ -	$ 22.21
1925281026	961 N ADAMS RD	$ -	$ 22.21
1925281025	951 N ADAMS RD	$ -	$ 22.21
1925281024	941 N ADAMS RD UNIT 9	$ -	$ 22.21
1925281023	931 N ADAMS RD	$ -	$ 22.21
1925281022	921 N ADAMS RD	$ -	$ 22.21
1925281021	911 N ADAMS RD	$ -	$ 22.21
1925281020	901 N ADAMS RD	$ -	$ 22.21

1925281019	1085 WIMBLETON DR	$ -	$ 22.21	
1925281018	1075 WIMBLETON DR	$ -	$ 22.21	
1925281017	1065 WIMBLETON DR	$ -	$ 22.21	
1925281016	1055 WIMBLETON DR	$ -	$ 22.21	
1925258002	554 WIMBLETON DR	$ 1,493.10	$ 746.34	
1925258003	612 WIMBLETON DR	$ 2,040.57	$ -	
1925258004	636 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925258005	652 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925258006	680 WIMBLETON DR	$ 2,040.57	$ 1,101.74	
1925258007	700 WIMBLETON DR	$ 2,040.57	$ 1,243.90	
1925258008	871 POPPLETON AVE	$ 2,040.57	$ -	*
1925282001	812 WIMBLETON DR	$ 3,085.74	$ 1,883.62	
1925282002	824 WIMBLETON DR	$ 1,990.80	$ -	
1925282003	840 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282004	868 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282015	886 WIMBLETON DR	$ 1,990.80	$ 1,101.74	
1925282008	900 WIMBLETON DR	$ 2,040.57	$ 1,243.90	
1925282024	930 WIMBLETON DR	$ -	$ -	
1925282025	980 WIMBLETON DR	$ -	$ -	
1925282012	1004 WIMBLETON DR	$ 2,040.57	$ 1,066.20	
1925282013	1038 WIMBLETON DR	$ 2,040.57	$ 710.80	
1925282017	1078 WIMBLETON DR	$ 291.51	$ -	
1925282023	1050 WIMBLETON DR	$ 291.51	$ -	
1925282022	1060 WIMBLETON DR	$ 291.51	$ -	
1925282021	1064 WIMBLETON DR	$ 291.51	$ -	
1925282020	1070 WIMBLETON DR	$ 291.51	$ -	
1925282019	1072 WIMBLETON DR	$ 291.51	$ -	
1925282018	1076 WIMBLETON DR	$ 291.51	$ -	

* Records indicate Lead Water Service, Zero Costs per the State of Michigan

Wimbleton Drive Phase 2 Project Area



Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

Wimbleton Drive Phase 2 Project Area



Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

Wimbleton Drive Phase 2 Project Area



Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

WIMBLETON DRIVE PHASE 2 PROJECT

CONTRACT #6-26(W)

SHEET INDEX

COVER SHEET (WIMBLETON DRIVE PAVING PROJECT)
C01 Utility Plan Wimbleton Drive Sta. P.O.B. to 4+25
C02 Utility Plan Wimbleton Drive Sta. 4+25 to 9+00
C03 Utility Plan Wimbleton Drive Sta. 9+00 to 12+50
C04 Utility Plan Wimbleton Drive Sta. 12+50 to P.O.E.
C05 Utility Plan Poppleton St. (South) Sta. P.O.B. to P.O.E.
C06 Sewer Profiles 1 of 3
C07 Sewer Profiles 2 of 3
C08 Sewer Profiles 3 of 3
C09 Supplemental Water Main Profiles
C10 Utility Service Plan Sta. P.O.B. to 9+00
C11 Utility Service Plan Sta. 9+00 to P.O.E.
C12 Paving and Grading Plan Sta. P.O.B. to Sta. 4+25
C13 Paving and Grading Plan Sta. 4+25 to Sta. 9+00
C14 Paving and Grading Plan Sta. 9+00 to Sta. 12+50
C15 Paving and Grading Plan Sta. 12+50 to Sta. P.O.E.
C16 Paving and Grading Plan Poppleton St. Sta P.O.B. to P.O.E.
C17 Intersection Grading Detail - Wimbleton & Warwick
C18 Intersection Grading Detail - Wimbleton & Poppleton
C19 Notes and Details
C20 SESC Plan
C21 Wimbleton Drive Storm Outfall Removal & SESC Plan
C22 Wimbleton Drive Storm Outfall Utility Plan
C23 Wimbleton Drive Storm Outfall Grading Plan & Details
C24 Advanced Warning Signage (AWS) Traffic Diagram
Q1 Quantities

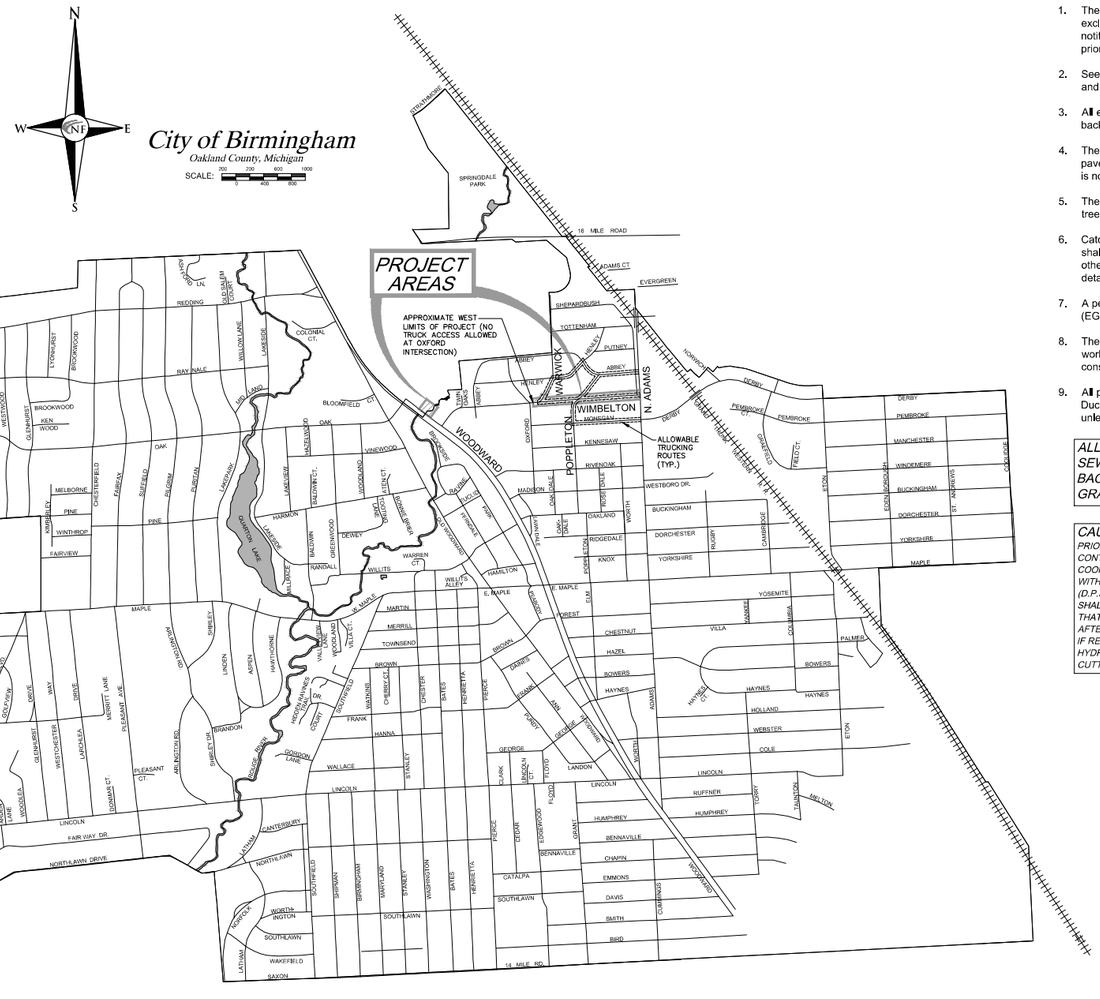
City of Birmingham - Water Main Standard Notes & Details - 1 of 2
City of Birmingham - Water Main Standard Notes & Details - 2 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 1 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 2 of 2
City of Birmingham - Storm Drain Sewer Standard Notes & Details - 1 of 1
City of Birmingham - Paving Standard Notes & Details - 1 of 1

WATER / SEWER SERVICE NOTE

ALL WATER AND SEWER SERVICE LATERAL INFORMATION IS SHOWN PER RECORD, WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL PRIVATE-SIDE WATER AND SEWER LATERAL INFORMATION, AS REQUIRED, TO CONSTRUCT THE PROJECT (INC.).

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CONSTRUCTION NOTES

These notes shall apply for all work within this contract:

1. The contractor shall notify MISS DIG 1-800-482-7171 at least 3 working days excluding Saturday, Sunday, and Holidays before making any excavations and notify the City of Birmingham Engineering Department a minimum of 24 hours prior to the start of construction (248-530-1850).
2. See the City of Birmingham Standard Notes & Details for water main, sewer, and paving work.
3. All excavation under or within three feet of pavement, public or private, shall be backfilled and compacted with sand.
4. The joints at the edges of all excavations in the pavement shall be sawcut, or pavement will be removed to existing joints, as directed by the Engineer. There is no separate pay item for saw cutting pavements.
5. The contractor shall be responsible for damage to existing utilities, pavement, trees, landscaping, gravel, etc., whether located on public or private property.
6. Catch basin and inlet castings scheduled for replacement, or new construction shall be EJIW 5000Z4 DI / 5000M4 DI Hinged Assembly unless specified otherwise. Manhole castings shall be EJIW 1040-A cover as noted on the detail sheets and plans, unless otherwise specified.
7. A permit from the Michigan Department of Environment, Great Lakes & Energy (EGLE) is required for all new water main and sanitary sewer installations.
8. The contractor shall coordinate and cooperate with all other utility companies working in the same area, project related or not, during the same allotted construction period.
9. All proposed Public Water Main for this project shall be Pressure Class 52 Ductile Iron Pipe (D.I.P.) in conformance with City of Birmingham specifications, unless otherwise noted.

ALL WATER MAIN, STORM AND SEWER TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR (SAND) MATERIAL.

CAUTION!!! LIVE WATER MAIN

PRIOR TO CUTTING IN NEW MAIN FITTINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING EXISTING WATER MAIN SHUT-DOWNS WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (D.P.S.). MORE IMPORTANTLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY ENSURING THAT PRESSURES DO NOT EXIST IN THE MAIN AFTER SHUT-DOWN & PRIOR TO CUTTING THE MAIN. IF REQUIRED, THE CONTRACTOR SHALL UTILIZE A HYDRA-STOP DEVICE TO CLOSE OFF FLOW WHILE CUTTING IN NEW TEE.

DESIGN ENGINEER SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

Know what's below Call before you dig.

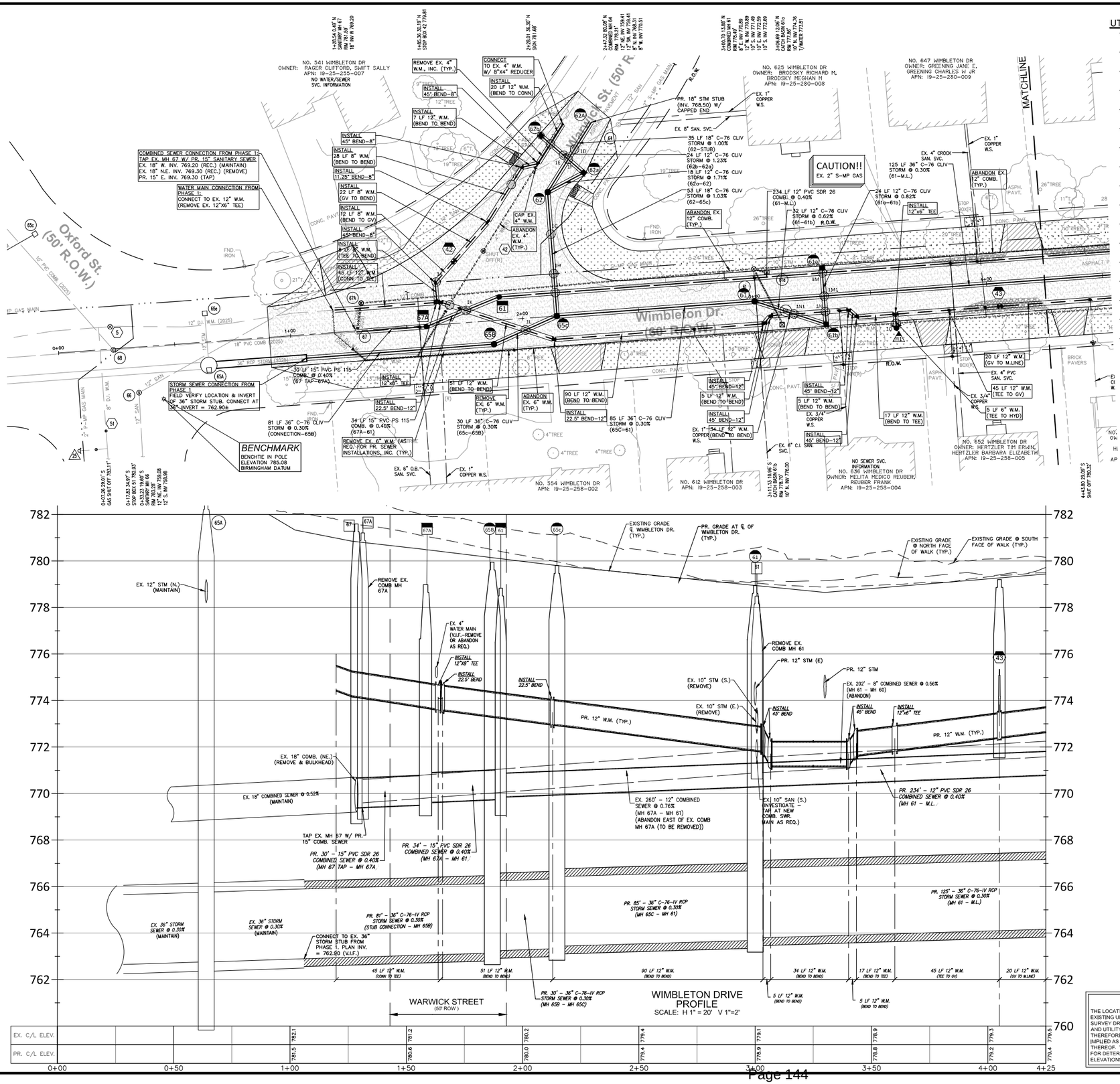
BENCHMARK NOTE

BENCHMARKS SET AND SHOWN PER SHEET WERE ESTABLISHED OFF OF THE CITY OF BIRMINGHAM BENCHMARK DATUM.

APPROVED DATE

03-27-26 ADDENDUM 1

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)



UTILITY CROSSING SCHEDULE

1A	EX. 2" GAS B/P V.I.F. PR. 8" WM T/P 774.49
1B	PR. 8" WM B/P 772.19 PR. 12" SAN T/P 760.36
1C	PR. 12" STM B/P 773.77 PR. 8" WM T/P 772.27
1D	PR. 18" STM B/P 768.16 PR. 12" SAN T/P 760.41
1E	PR. 12" STM B/P 773.75 PR. 12" SAN T/P 760.40
1F	PR. 12" STM B/P 773.74 PR. 18" STM T/P 770.02
1G	EX. 2" GAS B/P V.I.F. PR. 18" STM T/P 769.57
1H	EX. 2" GAS B/P V.I.F. PR. 18" STM T/P 769.39
1I	PR. 12" SAN B/P 769.96 PR. 18" STM T/P 769.31
1J	EX. 4" WM B/P V.I.F. PR. 12" WM T/P 774.55
1K	PR. 8" WM B/P 773.39 PR. 15" COMB T/P 770.97
1L	PR. 12" WM B/P 773.09 PR. 36" STM T/P 766.61
1M	PR. 12" STM B/P 774.00 PR. 12" COMB T/P 771.42
1M1	PR. 12" STM B/P 773.90 PR. 36" STM T/P 767.34
1N	PR. 12" STM B/P 773.88 PR. 12" WM T/P 772.24
1N1	PR. 12" STM B/P 773.74 PR. 12" WM T/P 772.24
1O	PR. 12" STM B/P 774.14 PR. 12" WM T/P 772.64

EX. SEWER STRUCTURE SCHEDULE

(66) MAINTAIN
0+33.23 19.60'S
COMB. MH 66
RIM 783.28
12" INV NE 759.08
12" INV S 758.98

(67A) REMOVE
(INSTALLED 2025 DURING PH. 1 WIMBLETON (#6–25W))
SAN. MH 67A
RIM 781.17
18" S. INV 769.50
(REMOVE)
12" N INV 770.0±
(ABANDON)

(67) TAP, BULKHEAD & ADJUST
(INSTALLED 2025 DURING PH. 1 WIMBLETON (#6–25W))
1+28.54 0.49'N
SAN. MH 67
RIM 781.55
PR. RIM XXX.XX
18" W. INV 769.20
(MAINTAIN)
18" N. INV 769.30
(REM & BULKHEAD)
PR. 15" E INV. 769.40
(TAP)

(64) MAINTAIN
2+47.32 80.08'N
COMB. MH 64
RIM 778.21
12" INV NE 759.41
12" INV SW 759.41
8" INV N 768.31
8" INV W 770.51

(61) REMOVE
3+00.70 13.98' N
COMB. MH 61
RIM 778.49
8" INV E 770.89 (ABANDON)
12" INV W 770.89 (ABANDON)
10" INV S 771.49 (INVESTIGATE)
10" INV E 772.59 (REMOVE)
10" INV S. INV 772.69 (REMOVE)

(68) MAINTAIN
COMB. MH 68

EX. STORM STRUCTURE SCHEDULE

(61a) REMOVE
3+08.34 9.52'N
CATCH BASIN 61a
RIM 778.19 (REC)
12" INV. NW 774.19 (REC)
(REMOVE)

(61b) REMOVE
3+11.13 10.96'S
CATCH BASIN 61b
RIM 778.70
12" INV SE 776.00
(REMOVE)

(65A) MAINTAIN
STORM CB. 65A

(65e) MAINTAIN
STORM CB. 65e

WATER MAIN SCHEDULE

(51) MAINTAIN
0+17.83 34.97'S
STOP BOX 51
RIM 782.93

(A) MAINTAIN
HYDRANT 25

(5) MAINTAIN
GVW 5
(INSTALLED 2025 DURING PH. 1 WIMBLETON (#6–25W))

(42) REMOVE BOX & ABANDON VALVE (INC.)
GV 42 (REC)

(42) PR. 8" GATE VALVE IN 5' DIA. WELL
PR. RIM 779.50
PR. T/PIPE 774.00

(43) PR. 12" GATE VALVE IN 5' DIA. WELL
PR. RIM 779.10
PR. T/PIPE 773.21

(H1) PR. HYDRANT & ASSEMBLY FG 778.60
PR. T/PIPE 773.10

Sanitary Structure Schedule

Structure Name	Structure Details
#61 PR. 4' COMBINED MANHOLE	PR. RIM 778.83 PR. 12" E. INV. 769.86 PR. 15" W. INV. 769.76
#67A PR. 4' COMBINED MANHOLE	PR. RIM 778.98 PR. 15" E. INV. 769.62 PR. 15" W. INV. 769.52

Storm Drainage Structure Schedule

Structure Name	Structure Details
#61 PR. 6' STORM MANHOLE	PR. RIM 778.95 PR. 12" E. INV. 773.80 PR. 36" E. INV. 763.79 PR. 36" W. INV. 763.69
#61a PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.20
#61b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.20 PR. 12" N. INV. 774.00 PR. 12" W. INV. 774.00
#62 PR. 4' STORM MANHOLE	PR. RIM 778.15 PR. 18" NE. INV. 768.15 PR. 12" NE. INV. 773.40 PR. 18" S. INV. 768.05
#62a PR. 4' STORM C.B. W/ 4' SUMP & SED. TRAP	PR. RIM 777.80 PR. 12" NW. INV. 773.70 PR. 12" SW. INV. 773.70
#62A PR. 18" STORM STUB W/ CAPPED END	PR. RIM 770.31 PR. 18" SW. INV. 768.50
#62b PR. 2' STORM INLET	PR. RIM 777.80 PR. 12" SE. INV. 774.00
#65B PR. 6' STORM MANHOLE	PR. RIM 779.95 PR. 36" NE. INV. 763.24 PR. 36" W. INV. 763.14
#65c PR. 6' STORM MANHOLE	PR. RIM 779.80 PR. 36" E. INV. 763.43 PR. 18" N. INV. 767.50 PR. 36" SW. INV. 763.33

LEGEND

EXISTING SAN/COMB SEWER
EXISTING WATER MAIN
EXISTING STORM SEWER
EXISTING BURIED CABLES
EXISTING GAS MAIN
OVERHEAD LINES
EX. PAVERS
PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
PR. 4" CONC. SIDEWALK
PR. FULL-DEPTH ASPH. (4" HMA ON 8" 21AA)
PR. BITUMINOUS CAPESEAL
SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼ of Section 25, T. 2N, R.10E
City of Birmingham, Oakland County, Michigan

SHEET
Utility Plan Wimbleton Drive Sta. P.O.B. to 4+25

Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

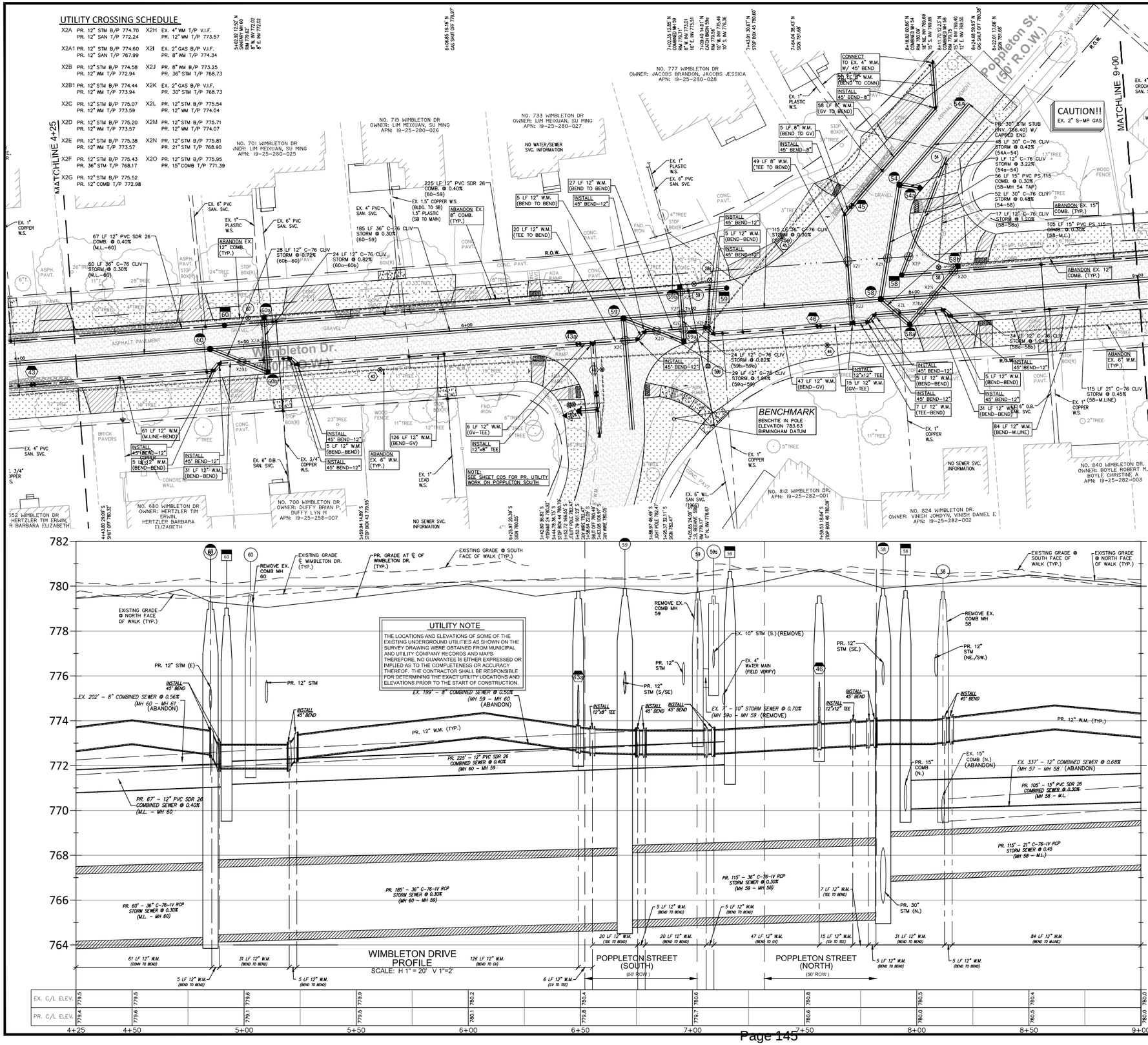
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C01

\2000-2200 Files\2000-FILES\0979\Office\Construction Documents\0979_UTL.dwg, 1/27/2026 2:05 PM

UTILITY CROSSING SCHEDULE

X2A	PR. 12" STM B/P 774.70 PR. 12" SAN T/P 772.24	X2H	EX. 4" WM T/P V.I.F. PR. 12" WM T/P 773.57
X2A1	PR. 12" STM B/P 774.60 PR. 12" SAN T/P 767.99	X2I	EX. 2" GAS B/P V.I.F. PR. 8" WM T/P 774.34
X2B	PR. 12" STM B/P 774.58 PR. 12" WM T/P 772.94	X2J	PR. 8" WM B/P 773.25 PR. 36" STM T/P 768.73
X2B1	PR. 12" STM B/P 774.44 PR. 12" WM T/P 773.94	X2K	EX. 2" GAS B/P V.I.F. PR. 30" STM T/P 768.73
X2C	PR. 12" STM B/P 775.07 PR. 12" WM T/P 773.59	X2L	PR. 12" STM B/P 775.54 PR. 12" WM T/P 774.04
X2D	PR. 12" STM B/P 775.20 PR. 12" WM T/P 773.57	X2M	PR. 12" STM B/P 775.71 PR. 12" WM T/P 774.07
X2E	PR. 12" STM B/P 775.38 PR. 12" WM T/P 773.57	X2N	PR. 12" STM B/P 775.81 PR. 21" STM T/P 768.90
X2F	PR. 12" STM B/P 775.43 PR. 36" STM T/P 768.17	X2O	PR. 12" STM B/P 775.95 PR. 15" COMB T/P 771.39
X2G	PR. 12" STM B/P 775.52 PR. 12" COMB T/P 772.98		



EX. SEWER STRUCTURE SCHEDULE

54	TAP & ADJUST 8+18.82 60.86' N COMBINED MH 54 RIM 780.09' PR. RIM XXX.XX 18" NE. INV. 769.69 (MAINTAIN) 15" S. INV 769.69 (ABANDON) PR. 15" S INV. 769.80 (TAP)	58	REMOVE 8+11.70 12.23' N COMBINED MH 58 RIM 779.75 15" N. INV 769.40 12" E. INV 769.50
60	REMOVE 5+02.92 12.52" N SANITARY MH 60 RIM 779.62' 8" W. INV 772.02 8" E. INV 772.02	59	REMOVE 7+02.35 12.85' N COMBINED MH 59 RIM 779.71' 8" W. INV 773.01 10" E. INV 775.51

EX. STORM STRUCTURE SCHEDULE

59a	REMOVE 7+09.40 14.01' N CATCH BASIN 59a RIM 779.56' 10" W. INV 775.46 (REMOVE) 10" S. INV 776.36 (REMOVE)	61b	REMOVE 7+05.85 24.09' S C.B. BEEHIVE 59b RIM 779.17' 10" N. INV 776.67 (REMOVE)

WATER MAIN SCHEDULE

43	REMOVE BOX & ABANDON VALVE (INC.) 5+59.94 14.89' S STOP BOX 43 779.95'	46	REMOVE BOX & ABANDON VALVE (INC.) 7+59.53 18.64' S STOP BOX 46 780.09'	45	PR. 8" GATE VALVE IN 5' DIA. WELL PR. RIM 780.00 PR. T/PIPE 774.50
44	REMOVE BOX & ABANDON VALVE (INC.) 6+44.78 36.75' S STOP BOX 44 780.70'	24	REMOVE 6+42.80 36.82' S HYDRANT 24 780.92'	46	PR. 12" GATE VALVE IN 5' DIA. WELL PR. RIM 780.35 PR. T/PIPE 773.86
45	REMOVE BOX & ABANDON VALVE (INC.) 7+43.01 30.67' N STOP BOX 45 780.60'	43a	PR. 12" GATE VALVE IN 5' DIA. WELL PR. RIM 780.05 PR. T/PIPE 773.64		

Sanitary Structure Schedule

Structure Name	Structure Details
#58 PR. 4' COMBINED MANHOLE	PR. RIM 779.80 PR. 15" E. INV. 770.07 PR. 15" N. INV. 769.97
#59 PR. 4' COMBINED MANHOLE	PR. RIM 780.66 PR. 12" W. INV. 772.06
#60 PR. 4' COMBINED MANHOLE	PR. RIM 779.02 PR. 12" E. INV. 771.17 PR. 12" W. INV. 771.07

Storm Drainage Structure Schedule

Structure Name	Structure Details
#54 PR. 5' STORM MANHOLE	PR. RIM 779.70 PR. 12" E. INV. 775.20 PR. 30" NE. INV. 766.20 PR. 30" S. INV. 766.10
#54a PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 779.50 PR. 12" W. INV. 775.50
#54A PR. 30" STORM STUB W/ CAPPED END	PR. RIM 769.35 PR. 30" SW. INV. 766.40
#58 PR. 6' STORM MANHOLE	PR. RIM 779.90 PR. 12" SE. INV. 775.60 PR. 30" N. INV. 765.85 PR. 21" E. INV. 767.05 PR. 36" W. INV. 765.45
#58a PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 779.75 PR. 12" NE. INV. 775.80 PR. 12" NW. INV. 775.80
#58b PR. 2' STORM INLET	PR. RIM 779.95 PR. 12" SW. INV. 776.15
#59 PR. 6' STORM MANHOLE	PR. RIM 779.90 PR. 36" E. INV. 765.10 PR. 12" S. INV. 775.20 PR. 12" E. INV. 775.20 PR. 36" W. INV. 765.00
#59a PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 779.50 PR. 12" N. INV. 775.50 PR. 12" W. INV. 775.50
#59b PR. 2' STORM INLET	PR. RIM 779.40 PR. 12" S. INV. 775.70
#60 PR. 6' STORM MANHOLE	PR. RIM 779.30 PR. 12" E. INV. 774.50 PR. 36" E. INV. 764.45 PR. 36" W. INV. 764.35
#60a PR. 2' STORM INLET	PR. RIM 778.70 PR. 12" S. INV. 774.90
#60b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.90 PR. 12" N. INV. 774.70 PR. 12" W. INV. 774.70

LEGEND

EXISTING SAN/COMB SEWER
EXISTING WATER MAIN
EXISTING STORM SEWER
EXISTING BURIED CABLES
EXISTING GAS MAIN
OVERHEAD LINES
EX PAVERS
PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
PR. 4" CONC. SIDEWALK
PR. FULL-DEPTH ASPH. (4" MIN. ON 6" 21AA)
PR. BITUMINOUS CAPESEAL
(RECORD) CURB STOP LOCATION (APPROX.)
LANDSCAPE BED
EX. SOIL BORING
PUBLIC PHONE
WELL
PUMP
SIGN
POST/BOLLARD
PARKING METER
MAIL BOX
ROCK/BOULDER
SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
GROUND ELEVATION
SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
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The City of Birmingham
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151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
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of Section 25,
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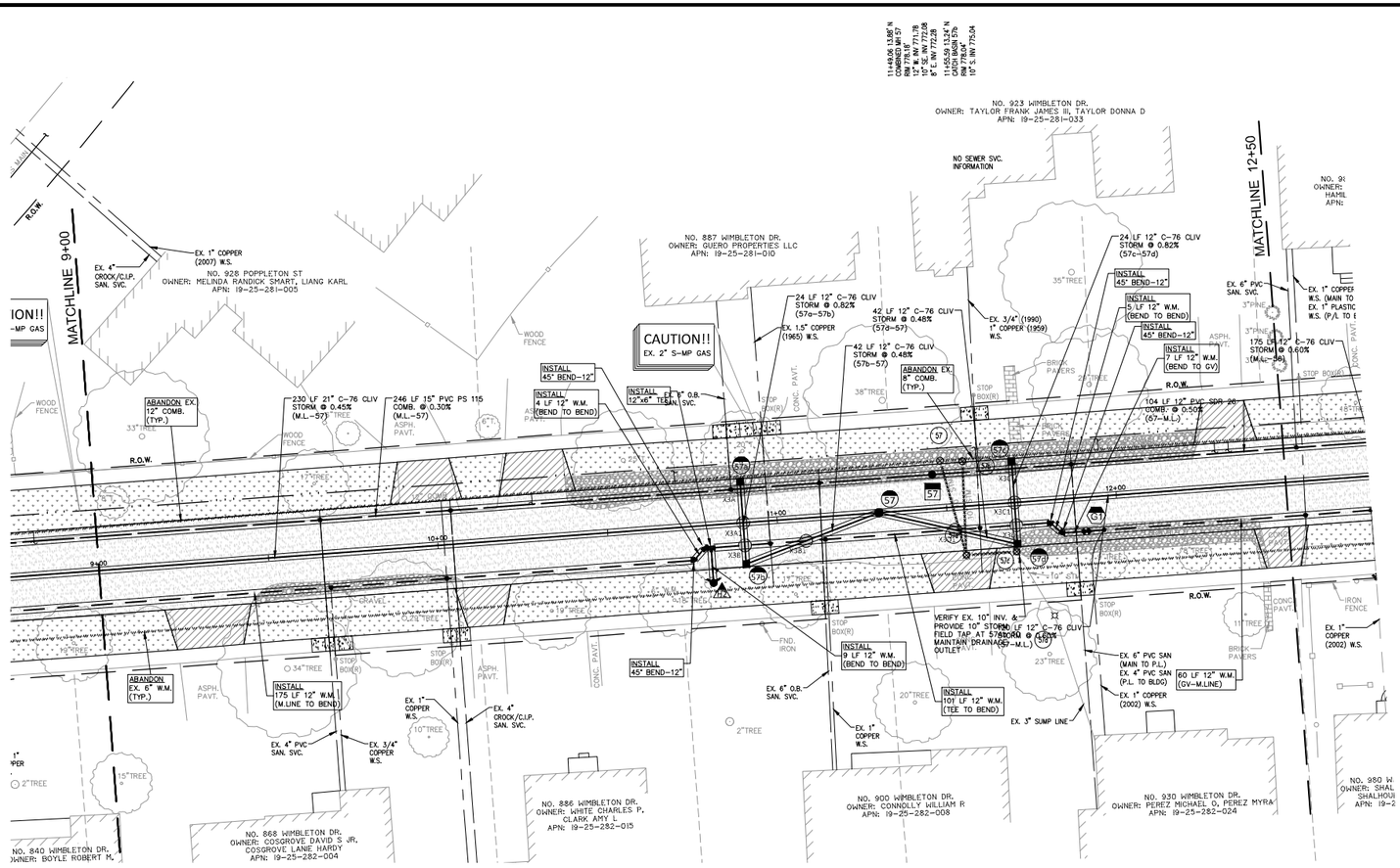
SHEET
Utility Plan Wimbleton
Drive Sta. 4+25 to 9+00

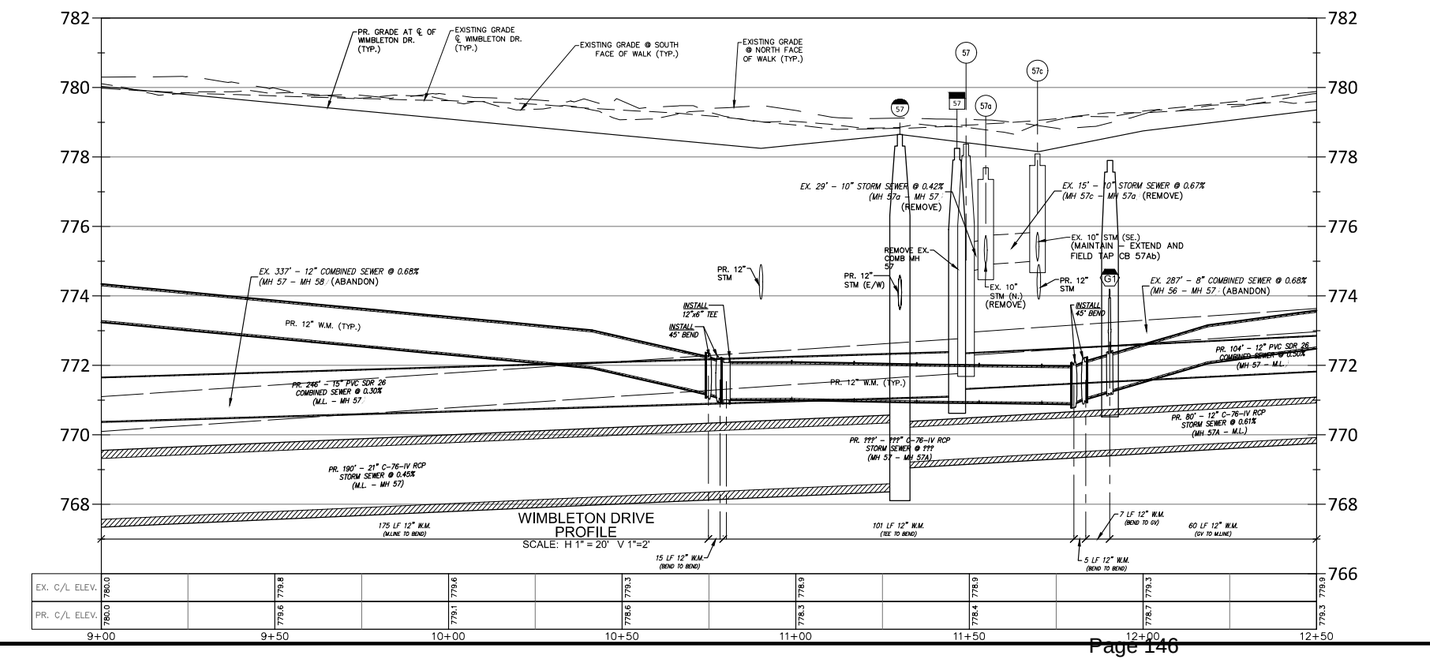
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O979
SHEET NO. C02

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UTILITY CROSSING SCHEDULE

X3A PR. 12" STM B/P 773.82
PR. 15" COMB T/P 772.20

X3A1 PR. 12" STM B/P 773.73
PR. 21" STM T/P 770.02

X3B PR. 12" STM B/P 773.59
PR. 12" WM T/P 772.09

X3B1 PR. 12" STM B/P 773.68
PR. 12" WM T/P 773.04

X3C PR. 12" STM B/P 773.80
PR. 12" COMB T/P 772.44

X3C1 PR. 12" STM B/P 773.73
PR. 12" STM T/P 770.50

X3D PR. 12" STM B/P 773.68
PR. 12" WM T/P 772.04

X3D1 PR. 12" STM B/P 773.54
PR. 12" WM T/P 772.04

EX. SEWER STRUCTURE SCHEDULE

57 REMOVE
11+49.06 13.86' N
COMBINED MH 57
RIM 778.18'
12" W. INV 771.78
10" SE. INV 772.08
8" E. INV 772.28

EX. STORM STRUCTURE SCHEDULE

57a REMOVE
11+54.74 14.38' S
C.B. BEHIVE 57a
RIM 777.69'
10" N. INV 772.19 (REMOVE)
10" E. INV 772.39 (REMOVE)
10" NW. INV 772.39 (REMOVE)

57c REMOVE
11+69.61 14.46' S
C.B. BEHIVE 57c
RIM 778.09'
10" W. INV 774.49 (REMOVE)
10" SE. INV 774.49 (V.I.F., EXTEND & TAP 10" TO NEW CB 57Ab)

57b REMOVE
11+55.59 13.24' N
CATCH BASIN 57b
RIM 778.04'
10" S. INV 775.04 (REMOVE)

57d MAINTAIN
11+79.34 34.02' S
C.B. BEHIVE 57d
RIM 777.35'
10" NW. INV 775.05 (MAINTAIN)

WATER MAIN SCHEDULE

G1 PR. 12" GATE VALVE IN 5' DIA. WELL
PR. RIM 778.35
PR. T/PIPE 772.21

H2 PR. HYDRANT & ASSEMBLY
FG 778.45
PR. T/PIPE 772.95

Sanitary Structure Schedule	
Structure Name	Structure Details
#57 PR. 4' COMBINED MANHOLE	PR. RIM 778.25 PR. 15" W. INV. 771.12 PR. 12" E. INV. 771.32

Storm Drainage Structure Schedule	
Structure Name	Structure Details
#57 PR. 5' STORM MANHOLE	PR. RIM 778.65 PR. 12" E. INV. 773.60 PR. 12" W. INV. 773.60 PR. 12" E. INV. 769.20 PR. 21" W. INV. 768.60
#57a PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.00
#57b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.00 PR. 12" N. INV. 773.80 PR. 12" E. INV. 773.80
#57c PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.00
#57d PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 777.80 PR. 12" N. INV. 773.80 PR. 12" W. INV. 773.80

N E S W

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LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX. PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" HMA ON 8" 21AA)
- PR. BITUMINOUS CAPESEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

(RECORD) CURB STOP LOCATION (APPROX.)
LANDSCAPE BED
EX. SOIL BORING
PUBLIC PHONE
WELL
PUMP
SIGN
POST/BOLLARD
PARKING METER
MAIL BOX
ROCK/BOULDER
SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
×000.00 GROUND ELEVATION

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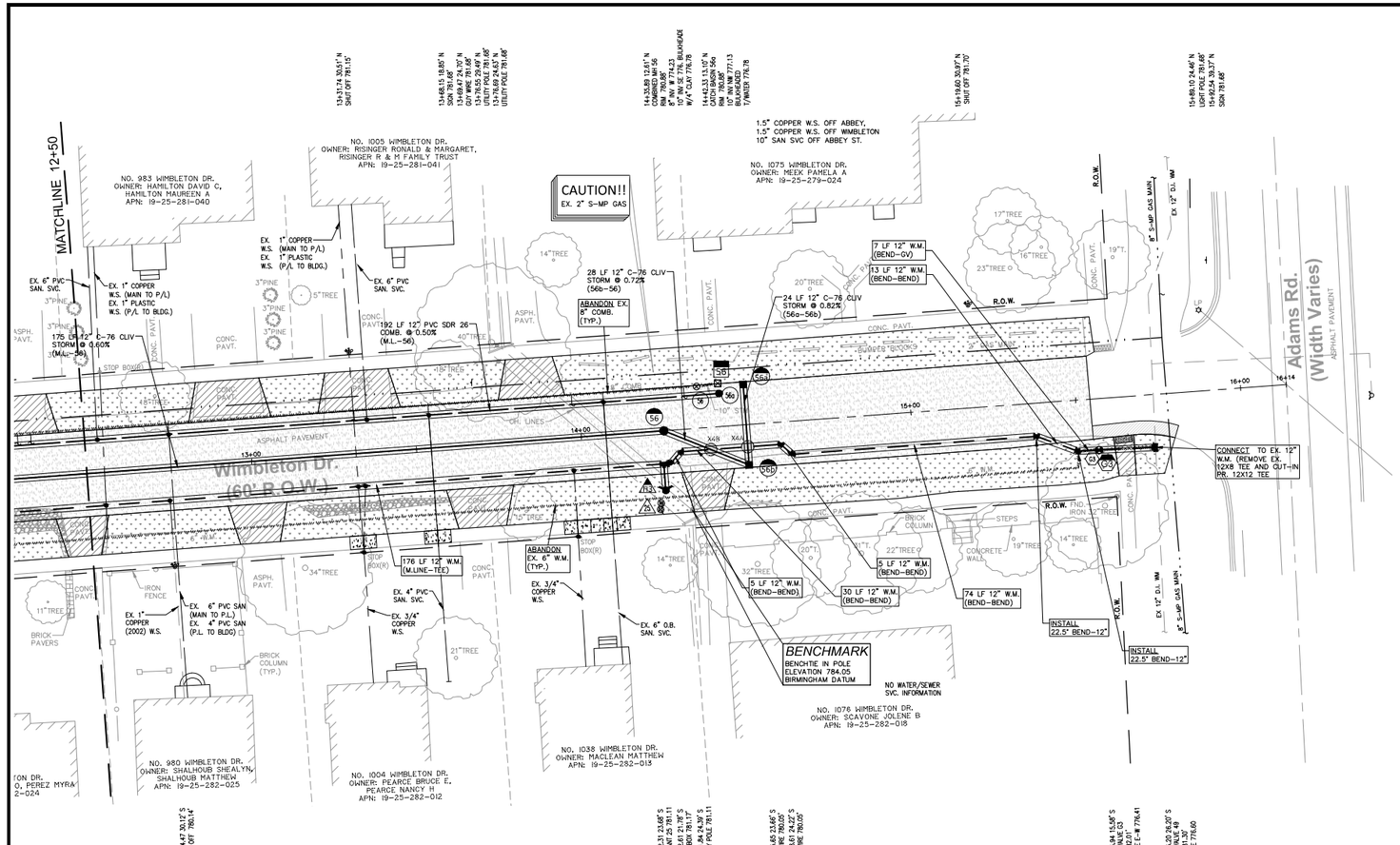
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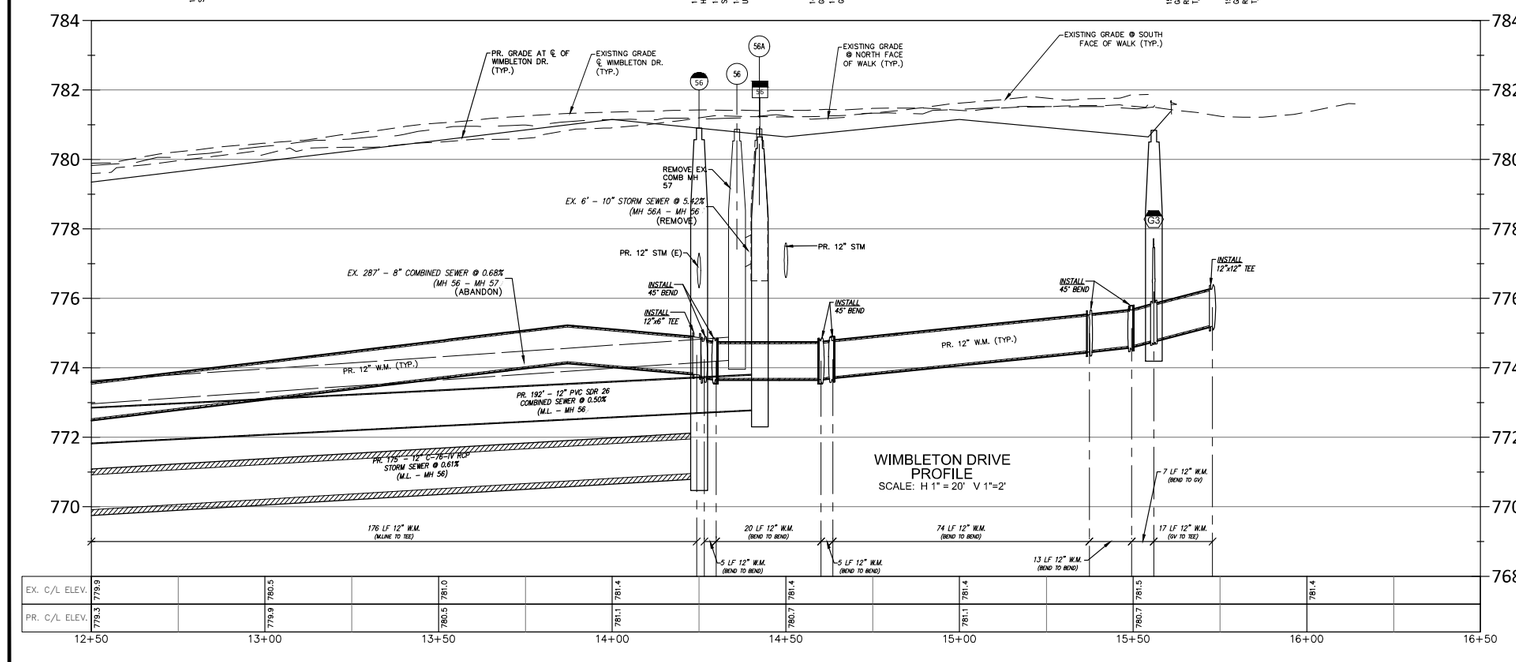
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O979
SHEET NO. C03

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UTILITY CROSSING SCHEDULE

X4A PR. 12" STM B/P 776.38
PR. 12" WM T/P 774.74

X4A PR. 12" STM B/P 776.24
PR. 12" WM T/P 774.74

EX. SEWER STRUCTURE SCHEDULE

56 REMOVE
14+35.89 12.61' N
COMBINED MH 56
RIM 780.88'
8" INV. W 774.23
10" INV SE 776. BULKHEADED
W/4" CLAY 776.78

EX. STORM STRUCTURE SCHEDULE

56a REMOVE
14+42.33 13.15' N
CATCH BASIN 56a
RIM 780.88'
10" INV NW 777.13
BULKHEADED
T/WATER 776.78

WATER MAIN SCHEDULE

G3 RETROFIT 12" GATE VALVE IN EXISTING WELL
15+05.94 15.58' S
GATE VALVE G3
RIM 782.01'
T/PIPE E-W 776.41
(REMOVE EX. 8" VALVE AND D.I. WATER MAIN PIPE)
PR. RIM 782.00
PR. T/PIPE 776.40

A12 PR. HYDRANT & ASSEMBLY
FG 780.75
PR. T/PIPE 775.25

A12 REMOVE
14+22.31 23.68' S
HYDRANT 25 781.11'

Sanitary Structure Schedule

Structure Name	Structure Details
#56 PR. 4' COMBINED MANHOLE	PR. RIM 780.65 PR. 12" W. INV. 772.80

Storm Drainage Structure Schedule

Structure Name	Structure Details
#56 PR. 4' STORM MANHOLE	PR. RIM 780.90 PR. 12" E. INV. 776.30 PR. 12" W. INV. 770.97
#56a PR. 2' STORM INLET	PR. RIM 780.50 PR. 12" S. INV. 776.70
#56b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 780.50 PR. 12" N. INV. 776.50 PR. 12" W. INV. 776.50

N W E S

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LEGEND

- SWR. SVC. (PER VIDEO INSP.)
- MANHOLE
- COMB
- CLEAN-OUT
- CATCH BASIN
- GW
- HYDRANT
- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- GAS VALVE
- OVERHEAD LINES
- UTILITY POLE
- LIGHT POLE
- STRAIN POLE
- GUY WIRE
- (RECORD) CURB STOP LOCATION (APPROX.)
- EX. PAVERS
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- WELL
- PR. 4" CONC. SIDEWALK
- PUMP
- SIGN
- PR. FULL-DEPTH ASPH. (4" HMA ON 6" 21AA)
- POST/BOLLARD
- PARKING METER
- PR. BITUMINOUS CAPESEAL
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION

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LICENSED PROFESSIONAL ENGINEER

PROJECT
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Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

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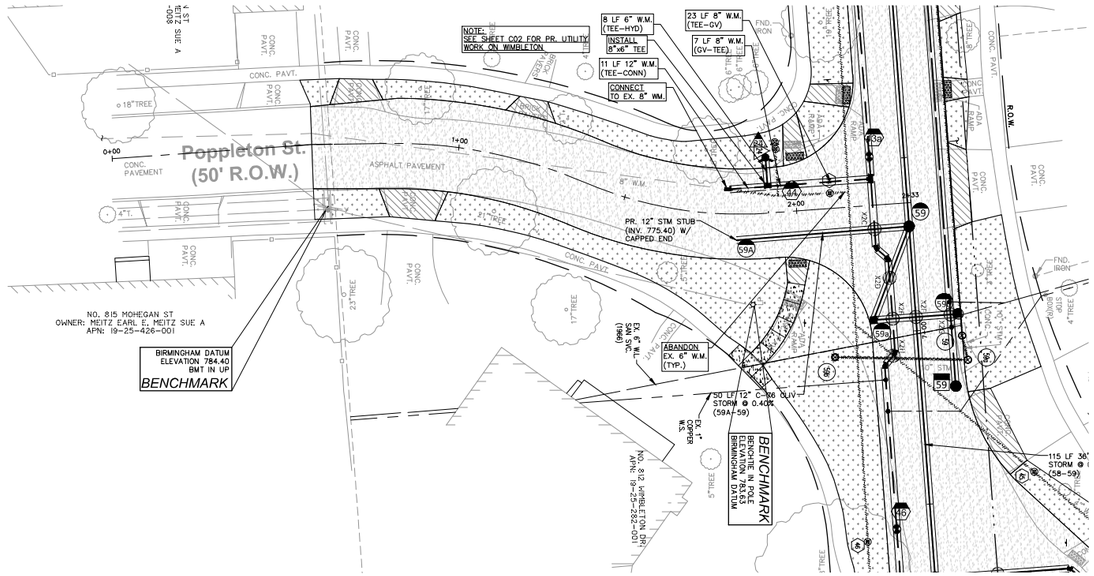
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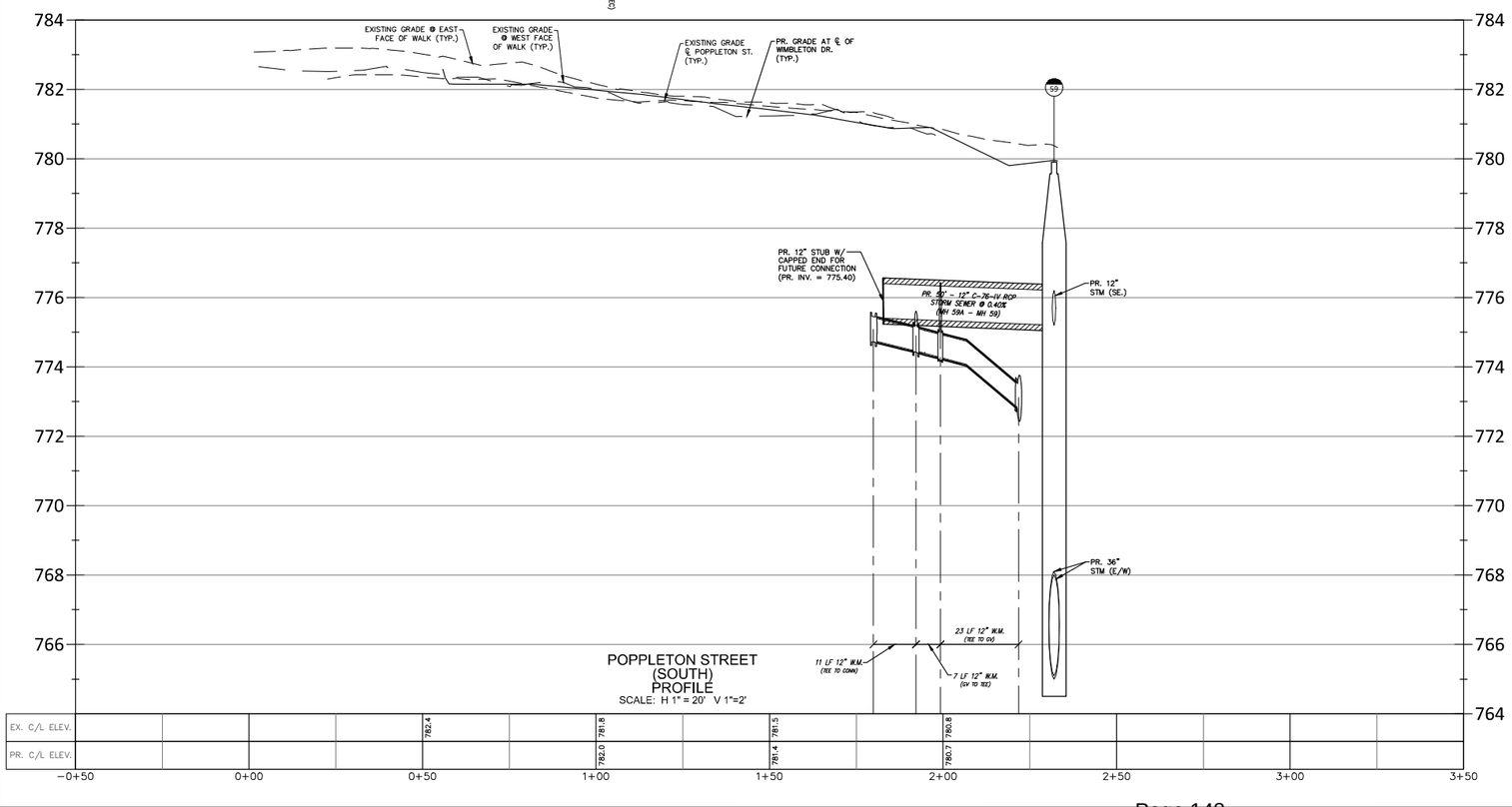
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O979
SHEET NO. C04

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POPPLETON STREET (SOUTH) PROFILE
SCALE: H 1" = 20' V 1"=2'

UTILITY CROSSING SCHEDULE

01 EX. 8" WM B/P 745.03
PR. 15" STM T/P 743.48
VERTICAL CLEARANCE: 1.55'

WATER MAIN SCHEDULE

44 PR. 8" GATE VALVE IN 5' DIA. WELL
PR. RIM 780.70
PR. T/PIPE 774.92

24 PR. HYDRANT & ASSEMBLY
FG 780.0
PR. T/PIPE 775.30

Storm Drainage Structure Schedule

Structure Name	Structure Details
#59A PR. 12" STORM STUB W/ CAPPED END	PR. RIM 776.63 PR. 12" N. INV. 775.40

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- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" MIN. ON 6" 21AA)
- PR. BITUMINOUS CAPESEAL

(RECORD) CURB STOP LOCATION (APPROX.), LANDSCAPE BED, EX. SOIL BORING, PUBLIC PHONE, WELL, PUMP, SIGN, POST/BOLLARD, PARKING METER, MAIL BOX, ROCK/BOULDER, SPRINKLER VALVE BOX, SPRINKLER HEAD, FOUND PROPERTY MARKER, GROUND ELEVATION

SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SHEET
Utility Plan Poppleton St. (South) Sta. P.O.B. to P.O.E.

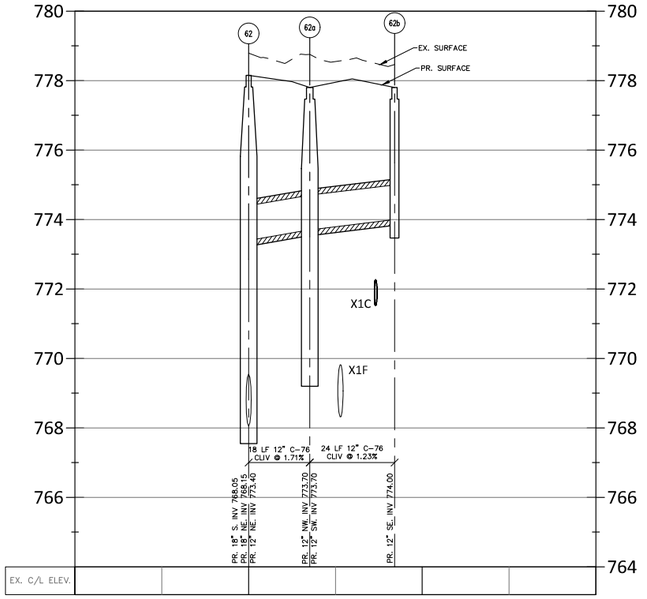
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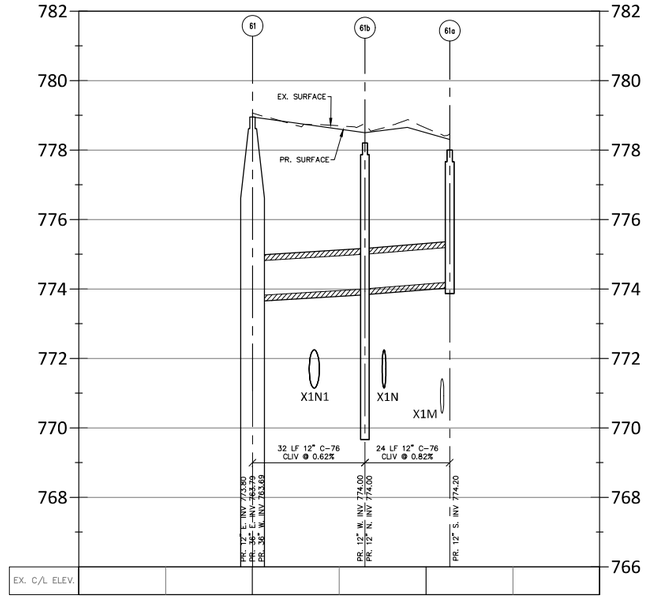
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

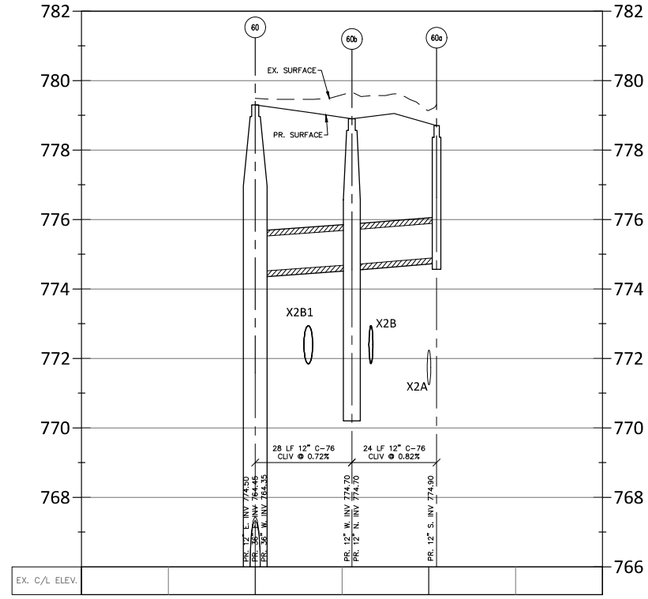
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

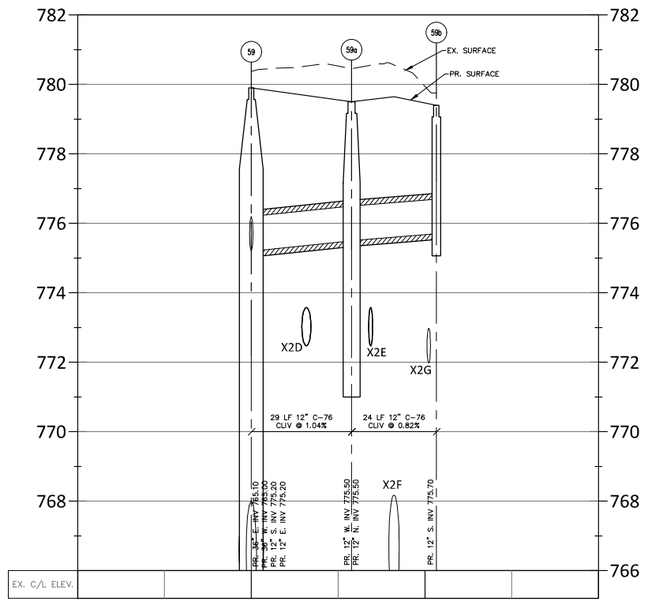
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SHEET NO. C05

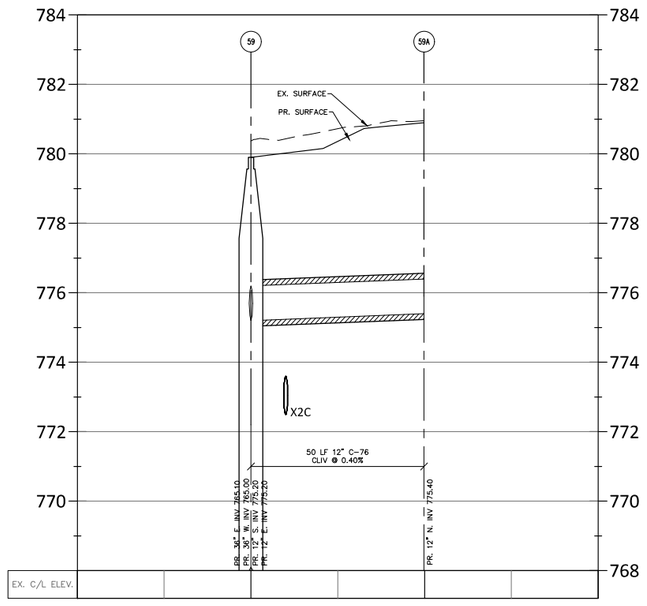
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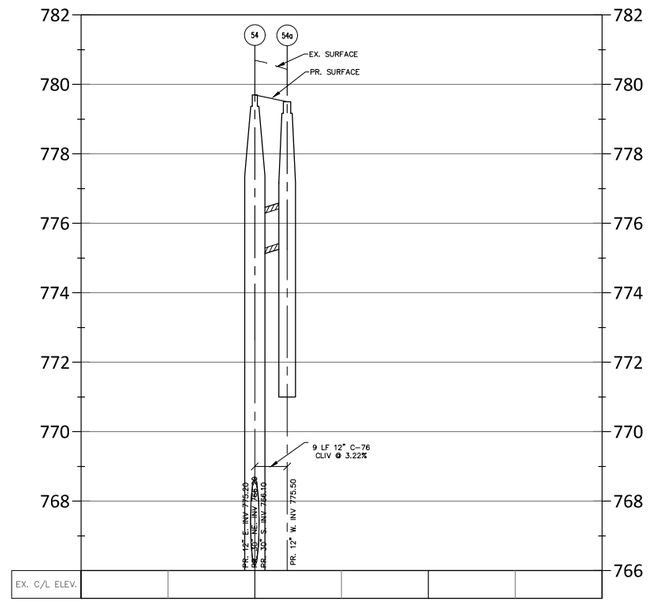












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SHEET
Sewer Profiles 1 of 3

811
Know what's **below**
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

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A. Panley

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

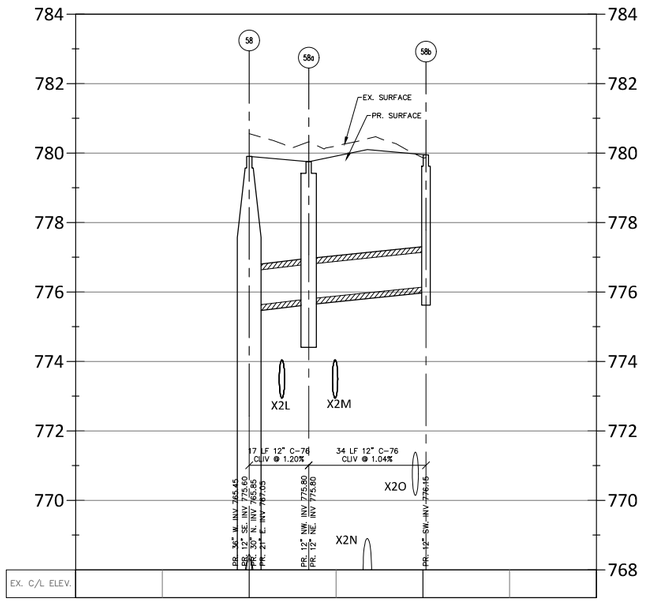
DATE:
January 5, 2026

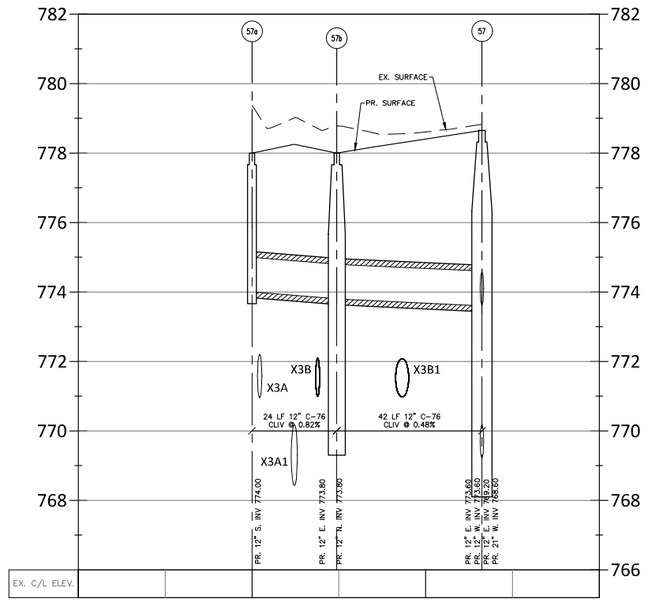
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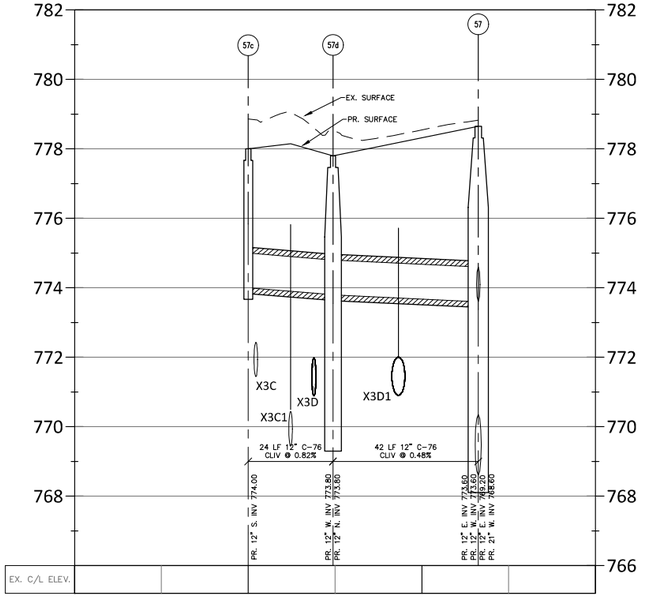
NFE JOB NO. **O979**

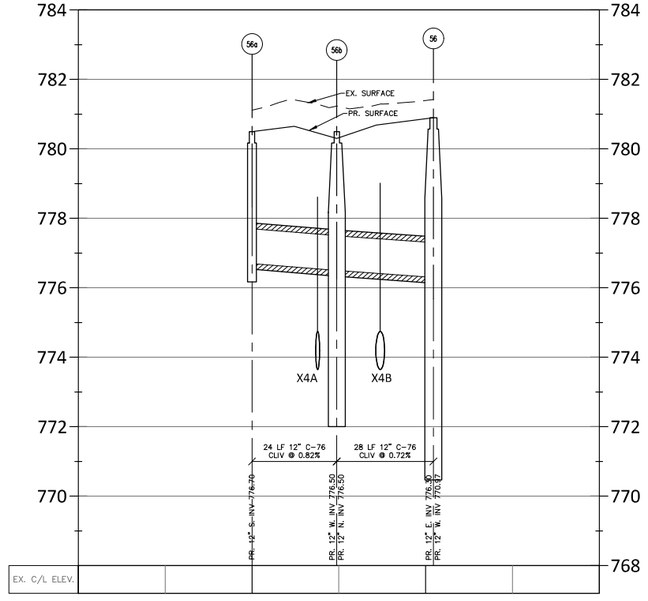
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LAND SURVEYORS
LAND PLANNERS

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PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Sewer Profiles 2 of 3

811
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

DATE:
January 5, 2026

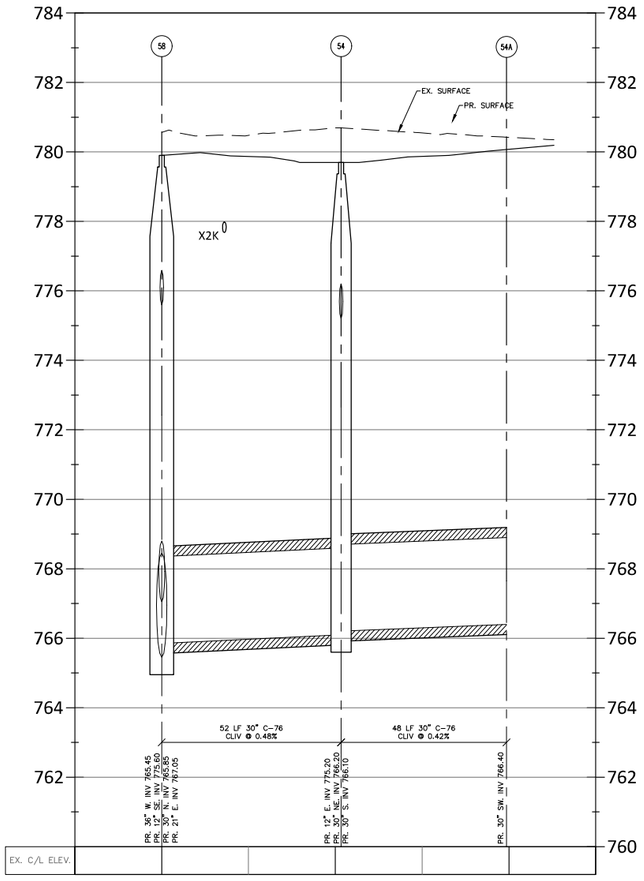
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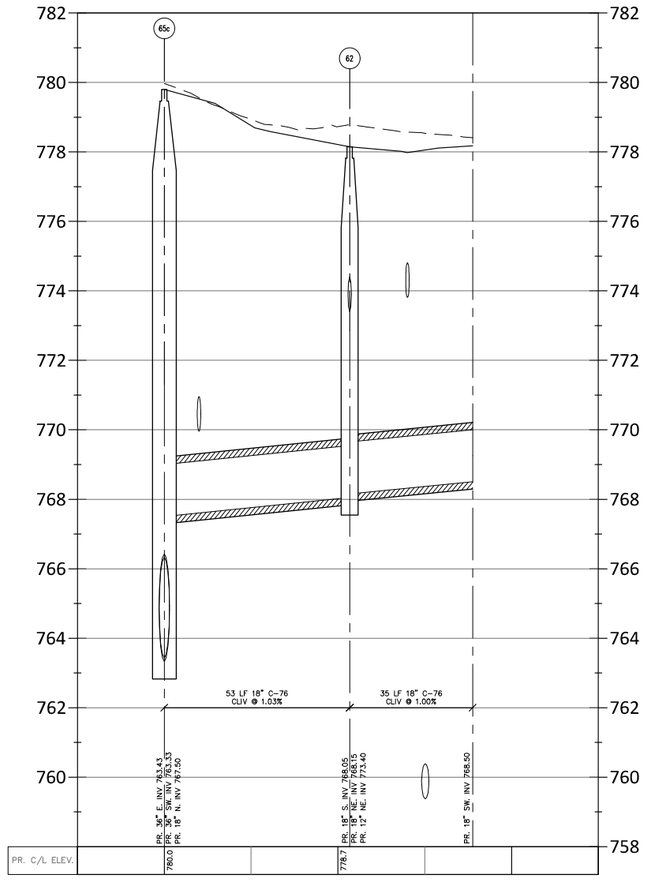
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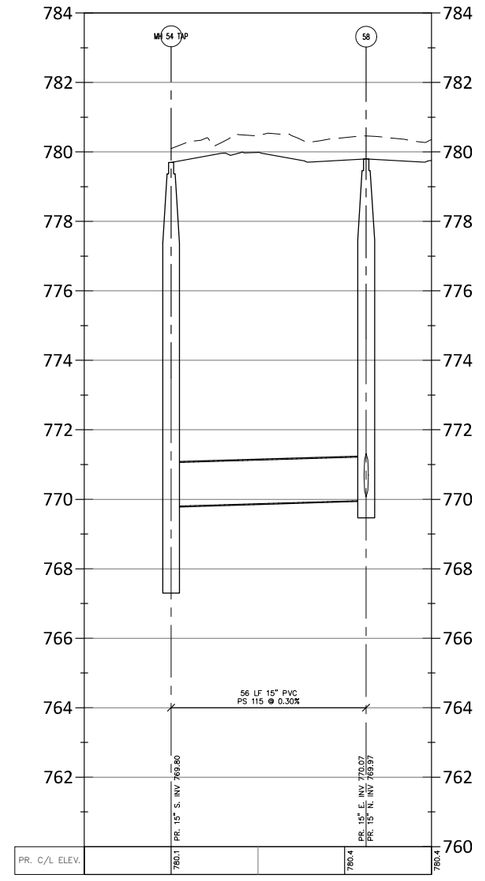
NFE JOB NO. **O979**

SHEET NO. **C07**

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PROJECT LOCATION
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of Section 25,
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City of Birmingham,
Oakland County, Michigan

SHEET
Sewer Profiles 3 of 3

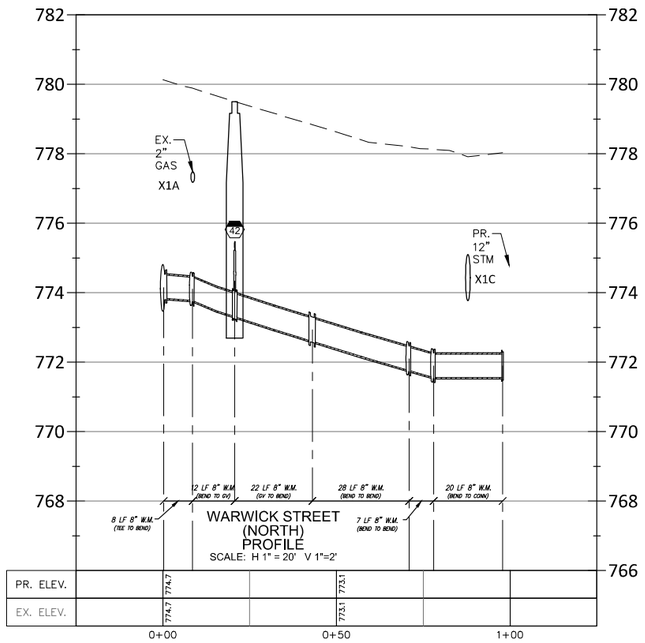
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

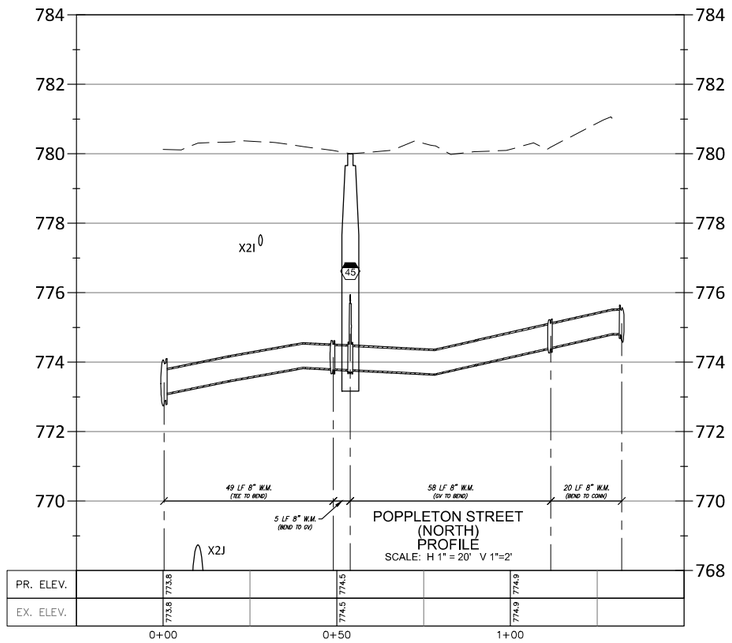
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C08

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Storm Sewer Profile
(-0+25.00 - 1+25.00)



Storm Sewer Profile
(-0+25.00 - 1+50.00)

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PROJECT

City of Birmingham
Wimbleton Drive Phase 2
Paving Project
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Birmingham, MI 48012

PROJECT LOCATION

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of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET

Supplemental Water Main Profiles

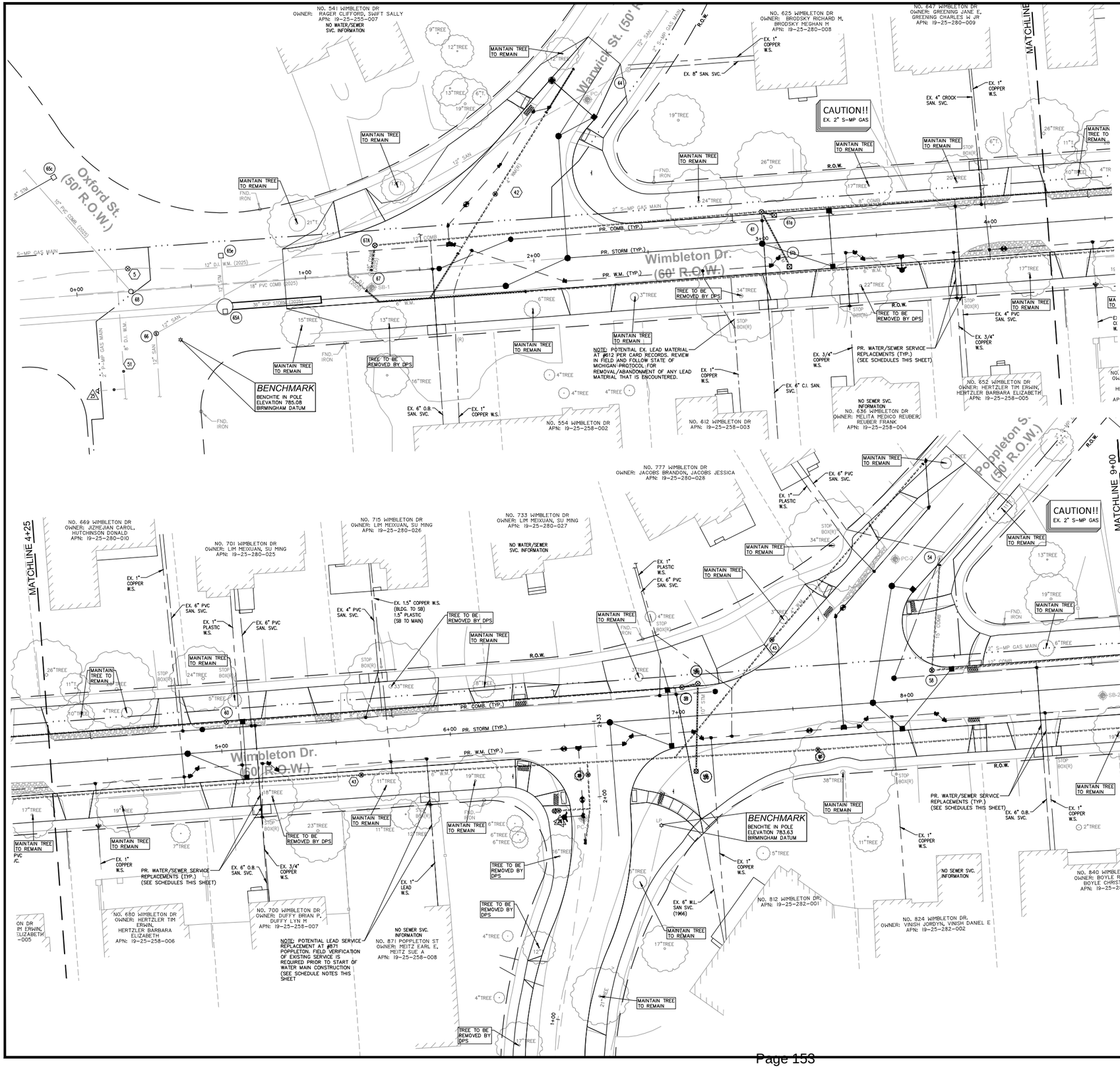
811
Know what's below
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C09

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Combined Sewer Service Schedule - Wimbleton Drive Sta. P.O.B. to 9+00

Existing SB961 to SB681

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
1+02	686 Oxford St.	12" Comb.	South	6"	Unknown	Active	Hot tap 6 dia. ring + sack 1	N/A
1+22	541 Wimbleton Dr	12" Comb.	North	6"	PVC	Active	Hot tap 6 dia. ring + sack 1	N/A
1+52	541 Wimbleton Dr	12" Comb.	North	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	50/0" (Estimated)
1+56	554 Wimbleton Dr	12" Comb.	South	6"	C.I.	Active	Tap to New Conn. Exist. Drain	8/0"
1+98	541 Wimbleton Dr	12" Comb.	North	6"	Unknown	Capped	No ic	N/A
1+85	554 Wimbleton Dr	12" Comb.	South	6"	Unknown	Capped	No ic	N/A
2+56	625 Wimbleton Dr	12" Comb.	North	6"	Unknown	Capped	No ic	N/A
2+70	612 Wimbleton Dr	12" Comb.	South	6"	Unknown	Capped	No ic	N/A
2+88	612 Wimbleton Dr	12" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)

Existing SB961 to MH60

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
3+01	632 Wimbleton Dr.	8" Comb.	South	6"	C.I.	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	40/0"
3+31	636 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)
3+85	652 Wimbleton Dr.	8" Comb.	South	4"	PVC	Active	Tap to New Conn. Sewer Main	40/0"
3+96	647 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No ic	N/A
3+98	647 Wimbleton Dr.	8" Comb.	North	4"	Crock	Active	Tap to New Conn. Sewer Main	20/0"
4+43	680 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	40/0" (Estimated)
4+54	699 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No ic	N/A
4+55	680 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Capped	No ic	N/A
4+85	680 Wimbleton Dr.	8" Comb.	North	6"	PVC	Active	Tap to New Conn. Sewer Main	5/0

Existing SB960 to MH59

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
5+13	701 Wimbleton Dr.	8" Comb.	South	6"	PVC	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	5/0"
5+32	700 Wimbleton Dr.	8" Comb.	South	6"	U.B.	Active	Tap to New Conn. Sewer Main	15/0"
5+73	700 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Capped	No ic	N/A
5+99	825 Poppleton St.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)
5+71	715 Wimbleton Dr.	8" Comb.	North	6"	PVC	Active	Tap to New Conn. Sewer Main	27/0
5+72	715 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No ic	N/A
5+75	871 Poppleton St.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	41/0" (Estimated)
6+16	733 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	21/0" (Estimated)
6+97	777 Wimbleton Dr.	8" Comb.	North	6"	PVC	Likely Active	Tap to New Conn. Sewer Main	16/0
6+98	852 Wimbleton Dr.	8" Comb.	South	6"	W.L.	Active	Tap to New Conn. Exist. Drain	6/0"

Existing MH58 to MH57

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+58	840 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	40/0
8+80	840 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	40/0" (Estimated)

Water Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+25

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
3+93	647 Wimbleton Dr.	1" Copper	0	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
1+65	554 Wimbleton Dr.	1" Copper	21/1"	1"	N
2+73	612 Wimbleton Dr.	1" Copper*	3/1"	1"	N
3+76	636 Wimbleton Dr.	3/4" Copper	23/1"	1"	Y
3+83	652 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y

*NOTE: Records indicate that portion of existing lead service is still active from ex. main to original stop box. There is a copper service from existing main to a new stop box that is reinstated as a copper service to building.

Water Service Schedule - Bird Avenue Sta. 4+25 to 9+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+83	668 Wimbleton Dr.	1" Copper	0	1"	N
5+08	701 Wimbleton Dr.	1" Plastic	0	1"	N
5+73	715 Wimbleton Dr.	1.5" Copper	0	1.5"	N
Unknown	733 Wimbleton Dr.	Unknown (Likely Lead Material)	0	1"	N
7+23	777 Wimbleton Dr.	Plastic	21/1"	1"	N
7+80	928 Poppleton St	1" Plastic	35/1"	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+84	680 Wimbleton Dr.	1" Copper	4/1"	1"	N
5+37	700 Wimbleton Dr.	3/4" Copper	24/1"	1"	Y
5+89	878 Poppleton St.	1" Lead**	20 (Public)/1" 45 (Pvt.)/1"	1"	Y
7+15	812 Wibleton Dr.	1" Copper	8/1"	1"	N
7+93	824 Wimbleton Dr.	1" Copper	12/1"	1"	N
8+60	840 Wimbleton Dr.	1" Copper	9/1"	1"	N

**NOTE: Records indicate that lead water services at #871 Poppleton St. likely exist between the ex. water main and the shut-off valve and possibly exists between the shut off valve and the house meter. In advance of any other construction, and incidental to other work for this contract, the Contractor shall perform limited excavation on both the sides of the shut-off valve near the ROW to confirm materials on each side, and shall be prepared to replace both "public" and "private" portions of the service line using applicable pay items for each. If required, replacement of the "private" portion of the service line between the ROW and house meter shall be paid using the following pay items: "New Water Service", 1", Private Property (Bored), PEX", and "Water Service Connection, 1", Connection at Meter, 871 Poppleton".

TREE PROTECTION NOTES

SEE TYPICAL TREE PROTECTION NOTES AND DETAILS ON SHEET C11. THE CONTRACTOR SHALL CONTACT CITY D.P.S. IN ADVANCE IF TREE TRIMMING IS REQUIRED PRIOR TO CONSTRUCTION TO AVOID DAMAGE TO EXISTING TREES THAT ARE PROPOSED TO REMAIN.

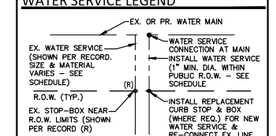
E.G.L.E. & O.C.W.R.C. SEWER PERMIT NOTES

ALL PROPOSED COMBINED SEWER MAINS REQUIRE AN APPROVED PART 41 PERMIT FROM MICHIGAN E.G.L.E. AND AN OAKLAND COUNTY SEWER INSPECTION PERMIT.

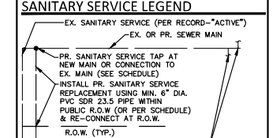
UTILITY NOTE

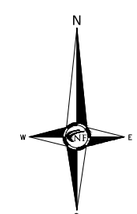
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

WATER SERVICE LEGEND



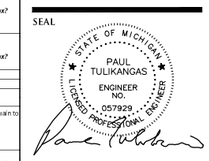
SANITARY SERVICE LEGEND





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151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼ of Section 25, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

SHEET
Utility Service Plan Sta. P.O.B. to 9+00

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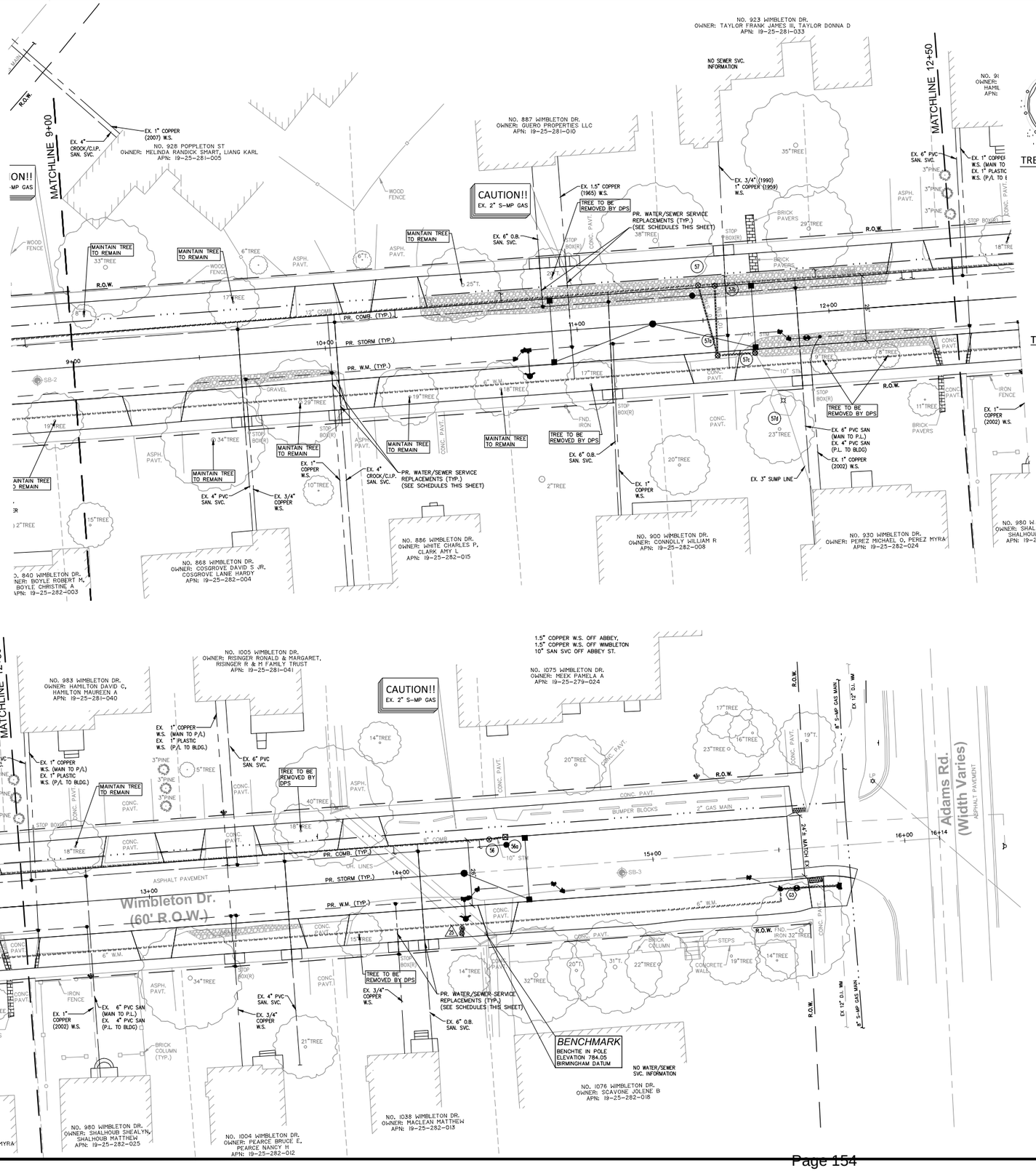
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'

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NFE JOB NO. O979
SHEET NO. C10

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GENERAL TREE PROTECTION NOTES

1. APPROVED TREE PROTECTION SHALL BE ERECTED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL THE IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
2. ALL UNDERSTORY VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE PRESERVED.
3. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN THE DRIP LINE.
4. WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
5. DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY TREE, SCHEDULED TO REMAIN.
6. ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
7. SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINES OF PROTECTED TREES.
8. TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
9. ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH RIGIDLY STAKED FENCING.
10. THE PARKING OF IDLE AND RUNNING EQUIPMENT SHALL BE PROHIBITED UNDER THE DRIP LINE OF PROTECTED TREES.
11. THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
12. ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
13. THE GRUBBING OF UNDERSTORY VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE CLEARED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MINIMALLY WITH A HYDRO-AXE.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT PER ORDINANCE GUIDELINES, FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
15. TREES TO BE REMOVED SHALL BE FIELD VERIFIED, EVALUATED AND FLAGGED FOR REMOVAL, BY THE LANDSCAPE ARCHITECT OR FORESTER, ONLY AS DIRECTED BY THE OWNER OR OWNERS REPRESENTATIVE.

Combined Sewer Service Schedule - Bird Avenue Sta. 9+00 to P.O.E.

Existing MH36 to MH37

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
9+96	868 Wimbleton Dr.	12" Comb.	South	4"	PVC	Active	Tap to Ex. Comb. Sewer Main	40/6"
10+04	886 Wimbleton Dr.	12" Comb.	South	4"	CROCK/C.I.P.	Likely Active	Tap to Ex. Comb. Sewer Main	40/6"
10+28	886 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	40/6" (Estimated)
10+70	887 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	20/6" (Estimated)
10+89	887 Wimbleton Dr.	12" Comb.	North	6"	O.B.	Active	Tap to Ex. Comb. Sewer Main	20/6"
11+13	900 Wimbleton Dr.	12" Comb.	South	6"	O.B.	Active	Tap to Ex. Comb. Sewer Main	41/6"

Existing MH37 to MH66

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
11+50	923 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	20/6" (Estimated)
11+90	930 Wimbleton Dr.	12" Comb.	South	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	41/6"
11+94	930 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
11+96	923 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Capped	None	N/A
12+30	930 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
12+34	930 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
12+53	981 Wimbleton Dr.	12" Comb.	North	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	5/6"
12+54	980 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
12+56	981 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Capped	None	N/A
12+60	980 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
12+75	980 Wimbleton Dr.	12" Comb.	South	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	0/6"
13+13	1004 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
13+15	1005 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Capped	None	N/A
13+32	1004 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
13+37	1005 Wimbleton Dr.	12" Comb.	North	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	5/6"
13+55	1004 Wimbleton Dr.	12" Comb.	South	4"	PVC	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6"
13+98	1038 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
14+07	1038 Wimbleton Dr.	12" Comb.	South	6"	O.B.	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6"
14+32	1076 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)

Water Service Schedule -Wimbleton Drive Sta. 9+00 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
10+97	887 Wimbleton Dr.	1.5" Copper	36/1.5"	1.5"	N
11+60	923 Wimbleton Dr.	3/4" Copper	83/1"	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
9+68	868 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y
10+02	886 Wimbleton Dr.	1" Copper	10/1"	1"	N
11+14	900 Wimbleton Dr.	1" Copper	13/1"	1"	N
11+95	930 Wimbleton Dr.	1" Copper	13/1"	1"	N

Water Service Schedule -Bird Avenue Sta. 12+50 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
12+56	983 Wimbleton Dr.	1" Copper	0	1"	N
8+45	1005 Wimbleton Dr.	1" Copper	0	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
12+75	980 Wimbleton Dr.	1" Copper	10/1"	1"	N
13+35	1004 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y
13+97	1038 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y
Unknown	1076 Wimbleton Dr.	Unknown (Likely low Material)	TBD (10/1")	1"	N

UTILITY NOTE

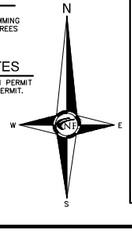
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

TREE PROTECTION NOTES

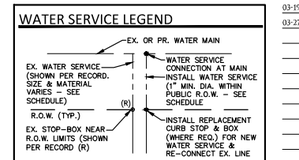
SEE TYPICAL TREE PROTECTION NOTES AND DETAILS ON THIS SHEET. THE CONTRACTOR SHALL CONTACT CITY D.P.S. IN ADVANCE IF TREE TRIMMING IS REQUIRED PRIOR TO CONSTRUCTION TO AVOID DAMAGE TO EXISTING TREES THAT ARE PROPOSED TO REMAIN.

E.G.L.E. & O.C.W.R.C. SEWER PERMIT NOTES

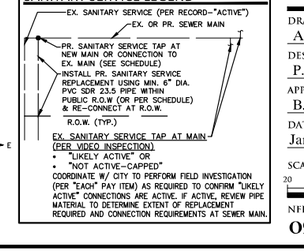
ALL PROPOSED COMBINED SEWER MAINS REQUIRE AN APPROVED PART 41 PERMIT FROM MICHIGAN E.G.L.E. AND AN OAKLAND COUNTY SEWER INSPECTION PERMIT.



WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT

City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT

BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION

Part of the N.E. ¼ of Section 25, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

SHEET

Utility Service Plan Sta. 9+00 to P.O.E.

811 Know what's below Call before you dig.

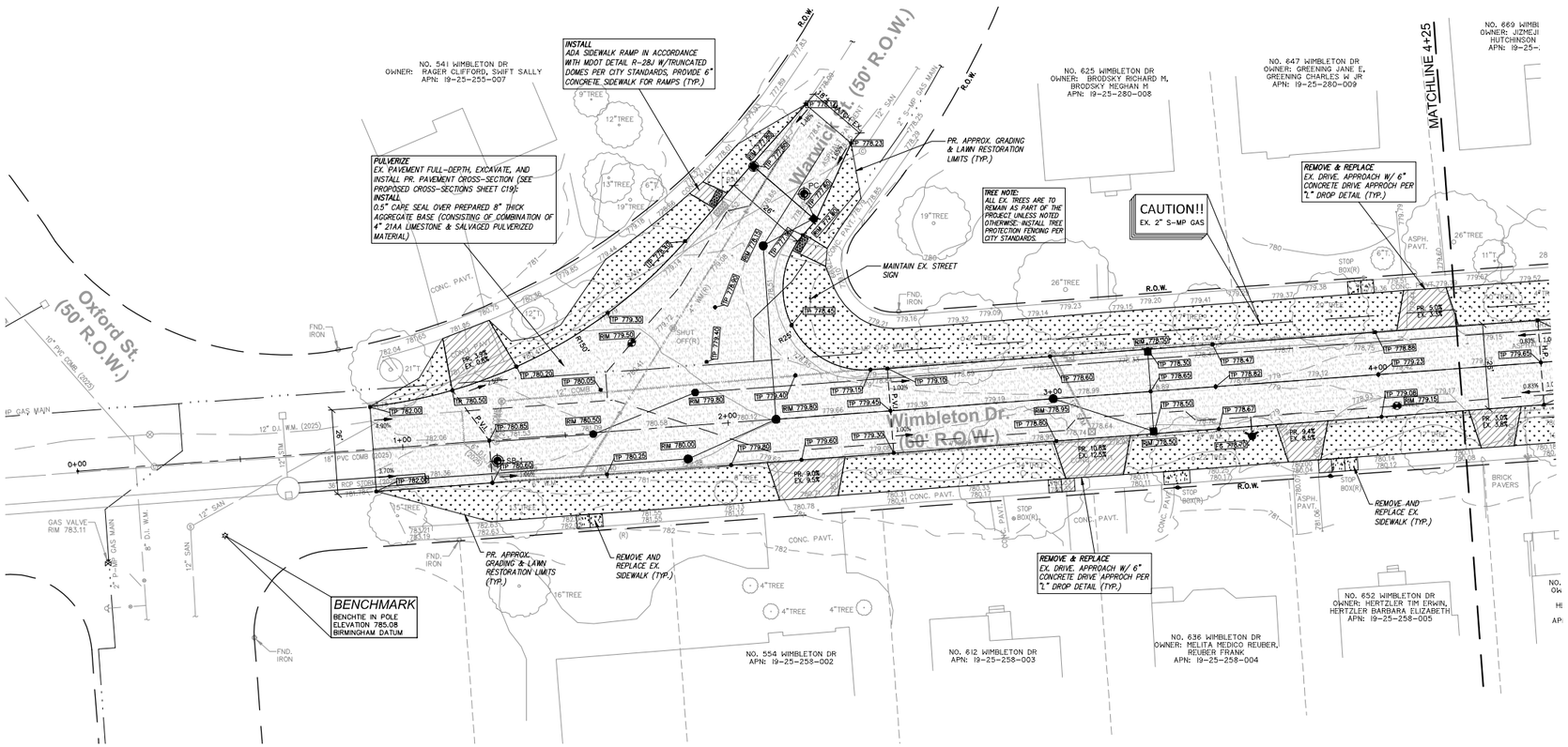
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03-19-26	BIDS
03-27-26	ADDENDUM 1

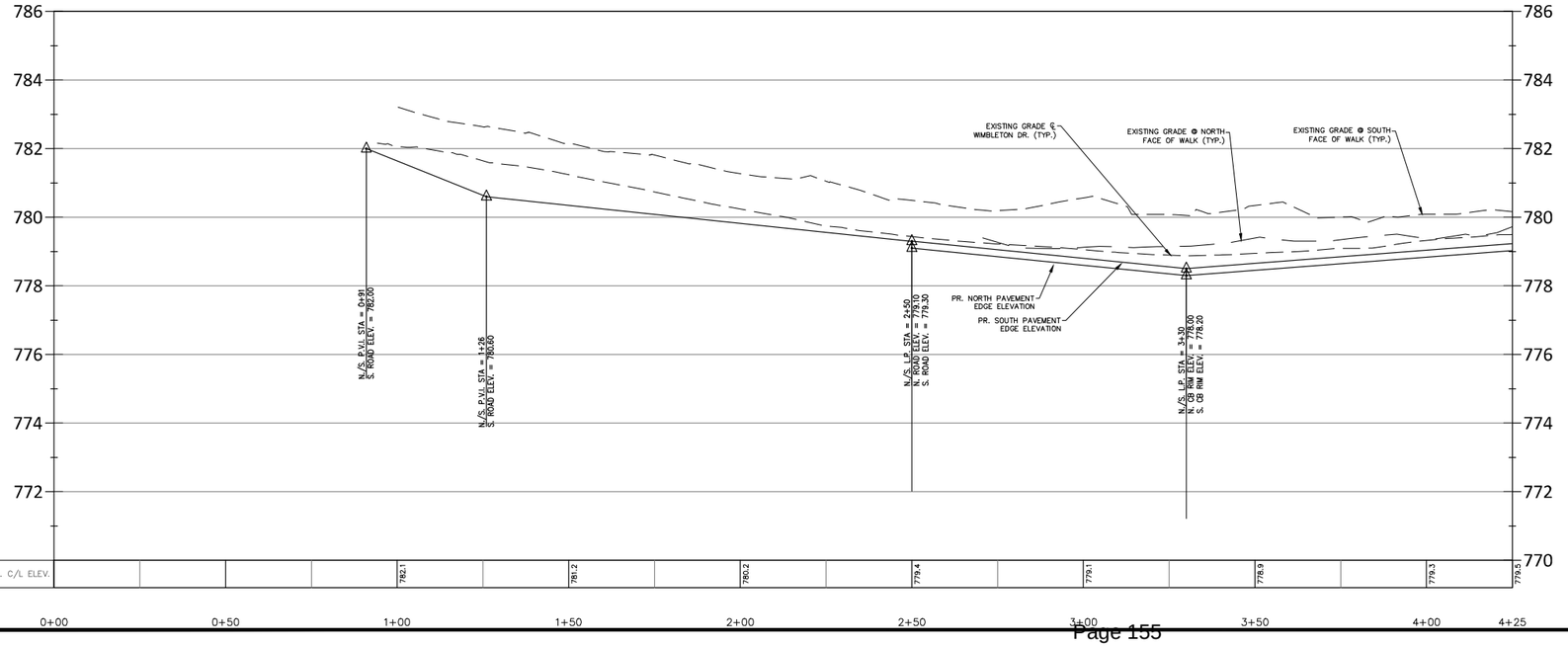
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'

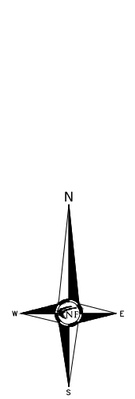
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NFE JOB NO. **O979**
SHEET NO. **C11**

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LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 8" 21AA)
- PR. BRAMBOUS OMPESAL
- PR. 18" NS. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- TC 600.00 PR. TOP OF CURB ELEVATION
- GU 600.00 PR. GUTTER ELEVATION
- TW 600.00 PR. TOP OF WALK ELEVATION
- TP 600.00 PR. TOP OF PVMT. ELEVATION
- FG 600.00 FINISH GRADE ELEVATION
- WT 600.00 WB 600.00 WALL TOP/BOTTOM ELEVATION

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Paving Project
Contract #6-26(W)

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PROJECT LOCATION

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City of Birmingham,
Oakland County, Michigan

SHEET

Paving and Grading Plan
Sta. P.O.B. to Sta. 4+25

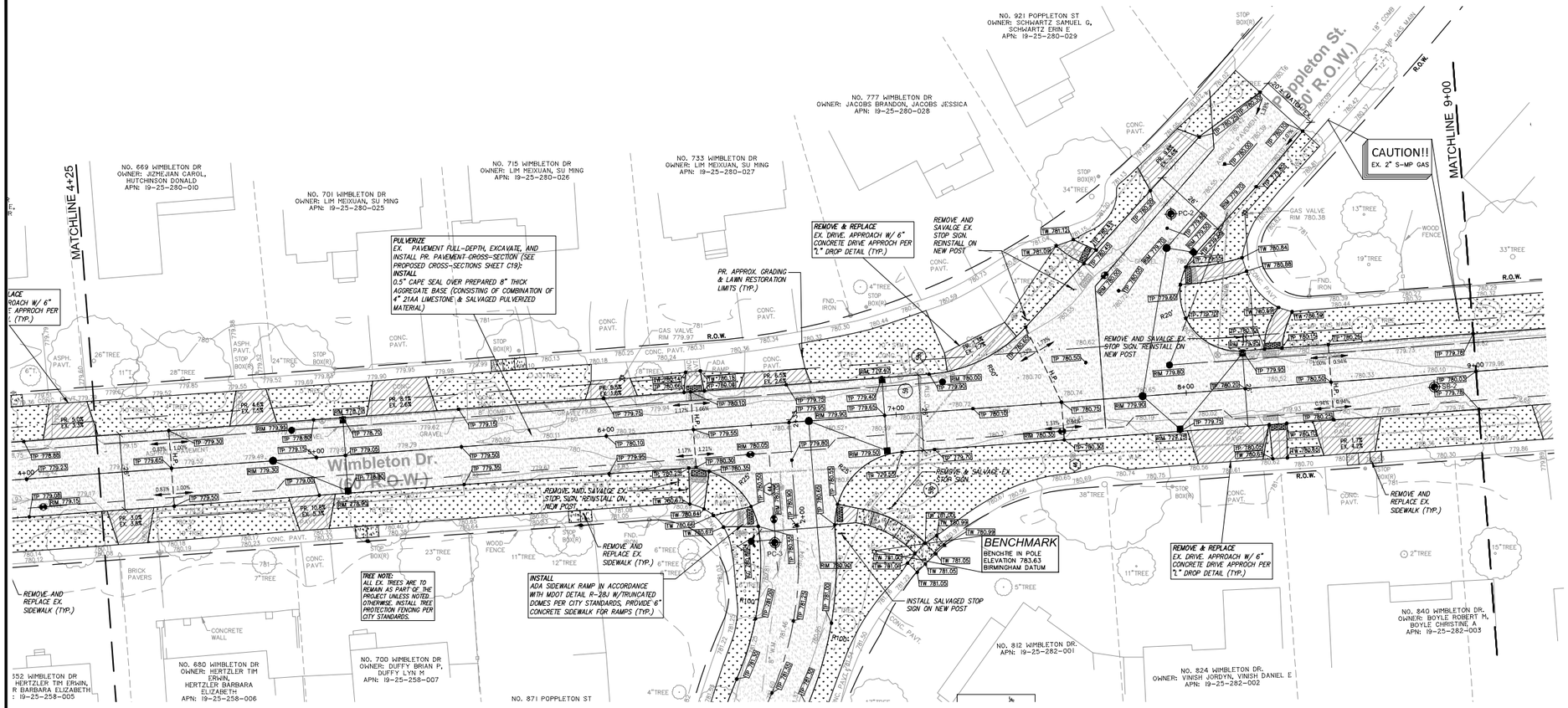
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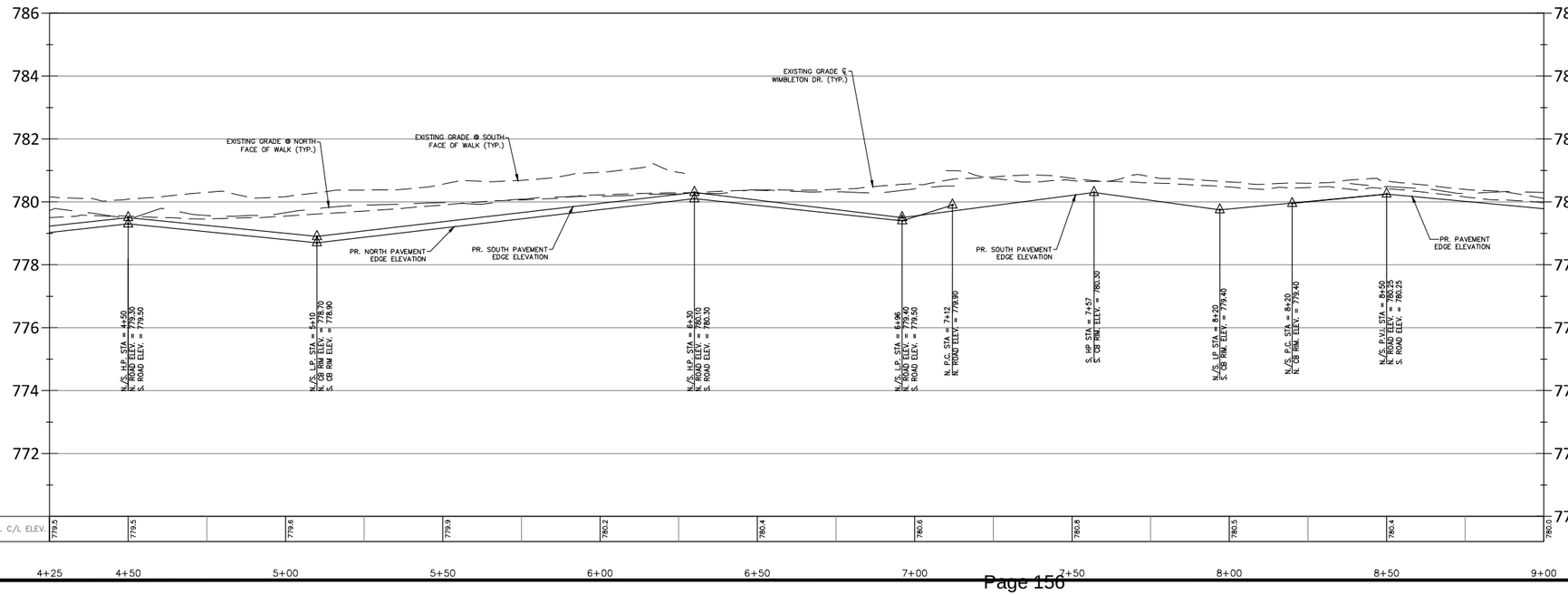
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03-27-26	ADDENDUM 1

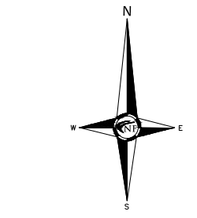
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C12

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LEGEND

- EXISTING SAN/COMB SEWER
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SEAL

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Paving Project
Contract #6-26(W)

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Birmingham, MI 48012

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City of Birmingham,
Oakland County, Michigan

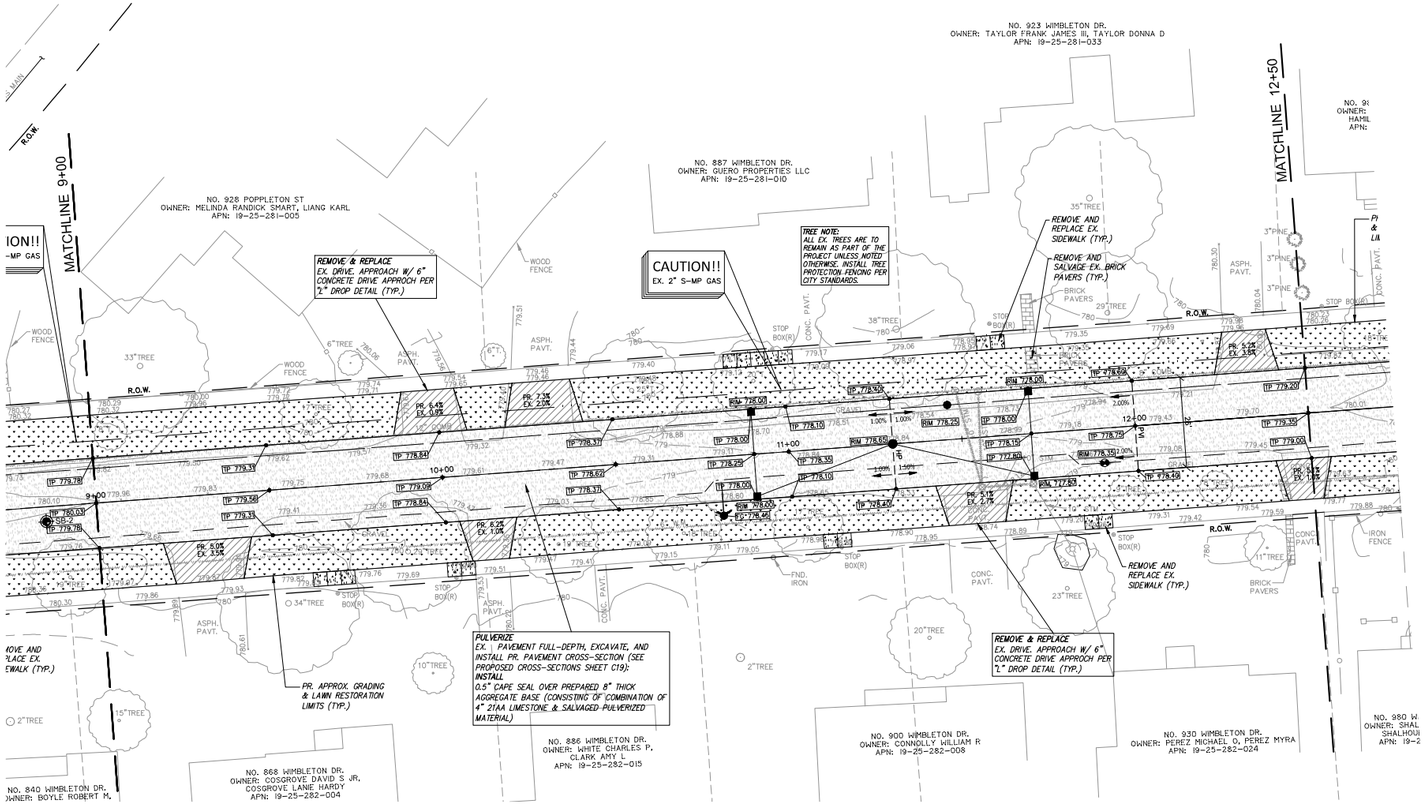
SHEET
Paving and Grading Plan
Sta. 4+25 to Sta. 9+00

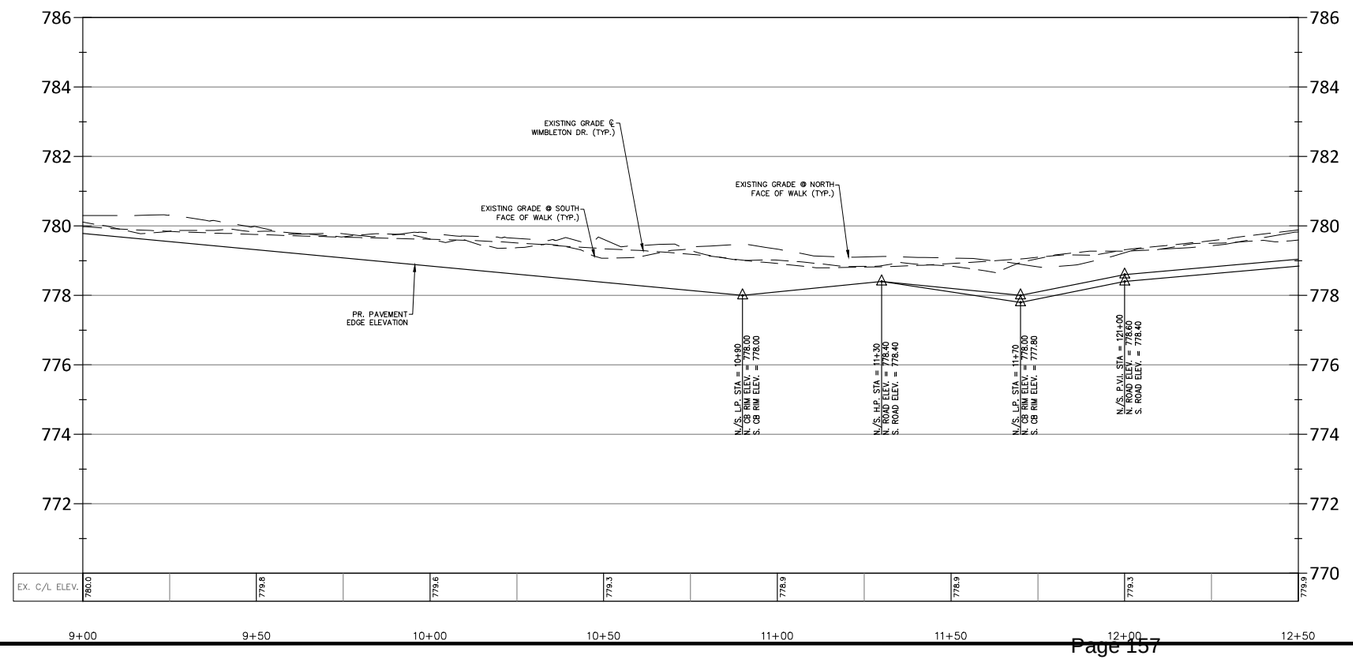
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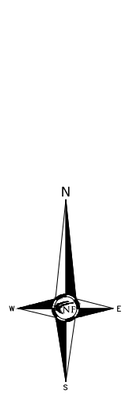
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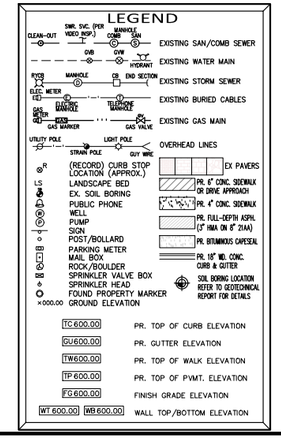
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C13









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City of Birmingham,
Oakland County, Michigan

SHEET
Paving and Grading Plan
Sta. 9+00 to Sta. 12+50

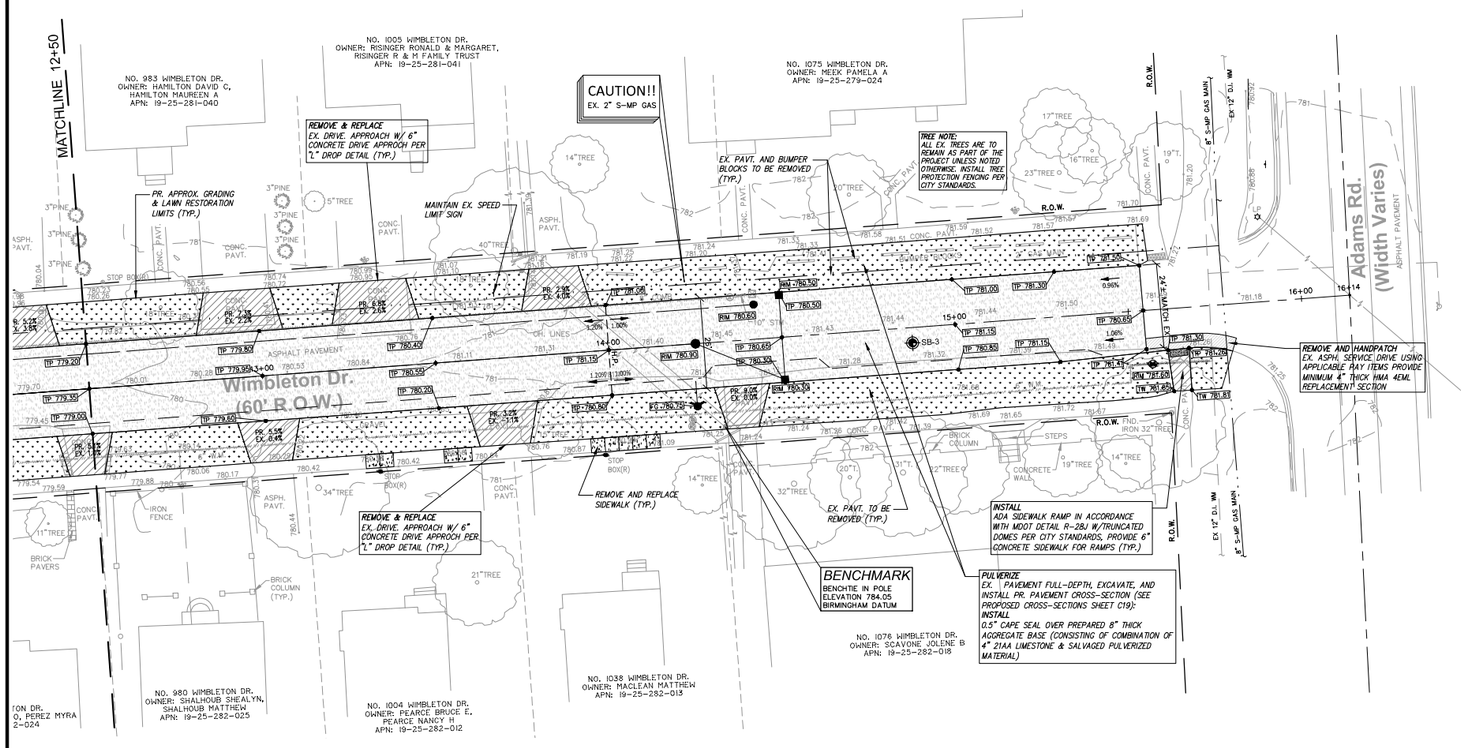
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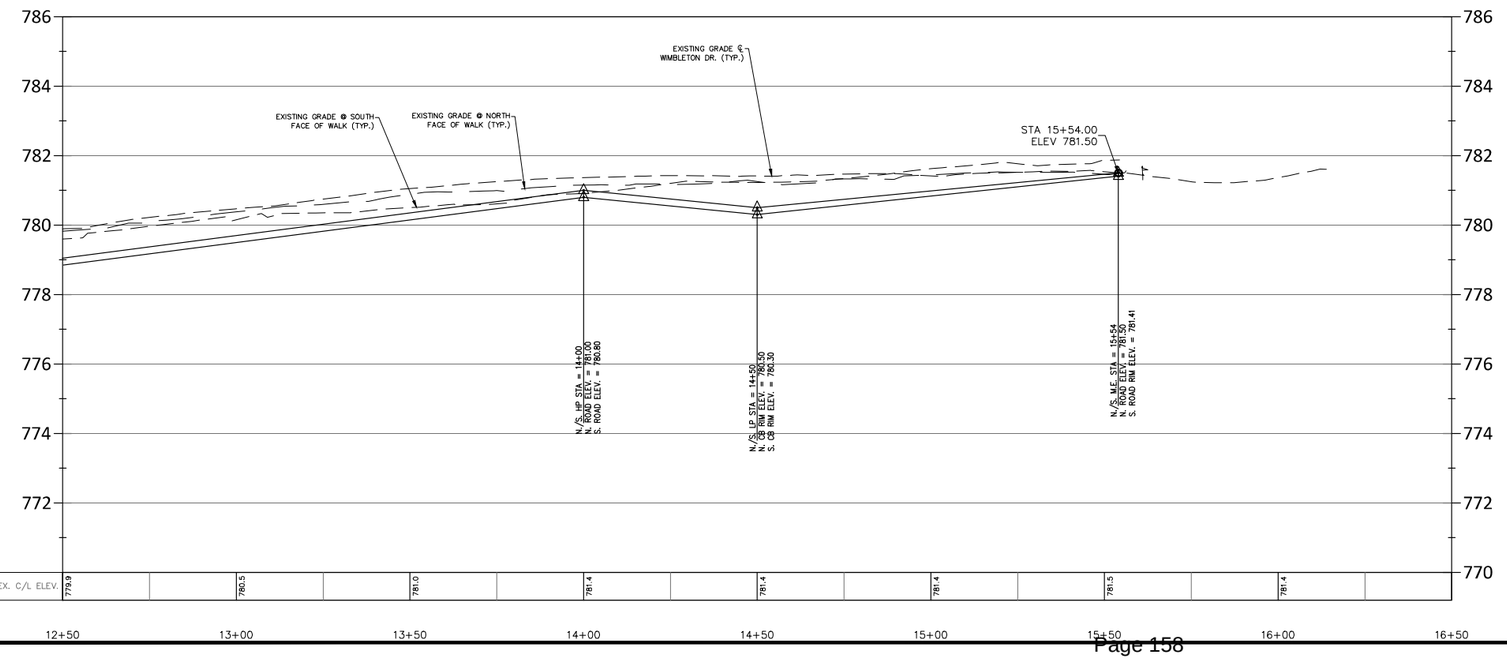
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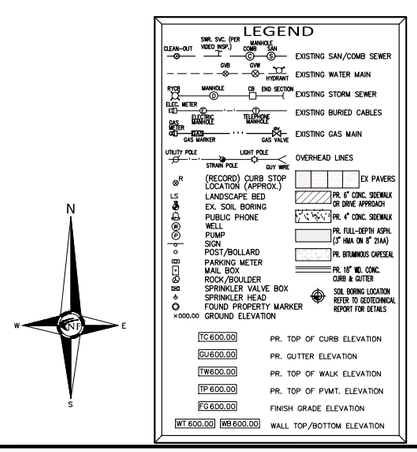
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SHEET NO. C14

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Sta. 12+50 to Sta. P.O.E.

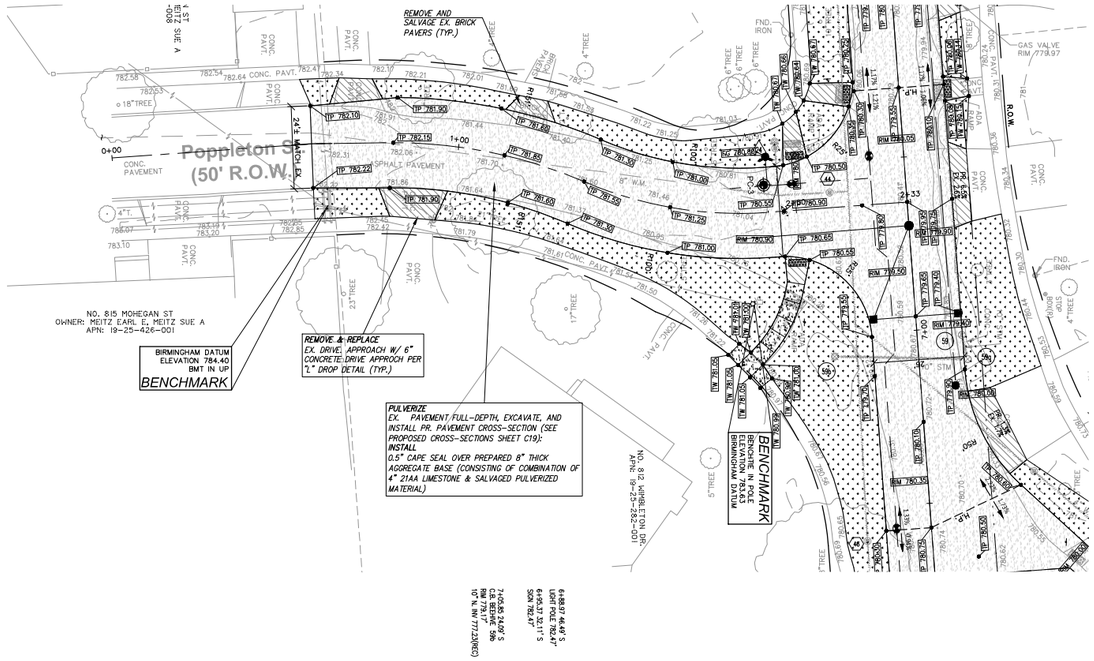
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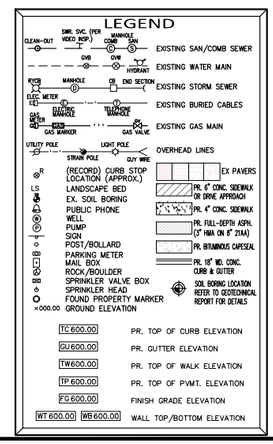
DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
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NFE JOB NO. O979
SHEET NO. C15

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SHEET
Paving and Grading Plan
Poppleton St. Sta P.O.B.
to P.O.E.

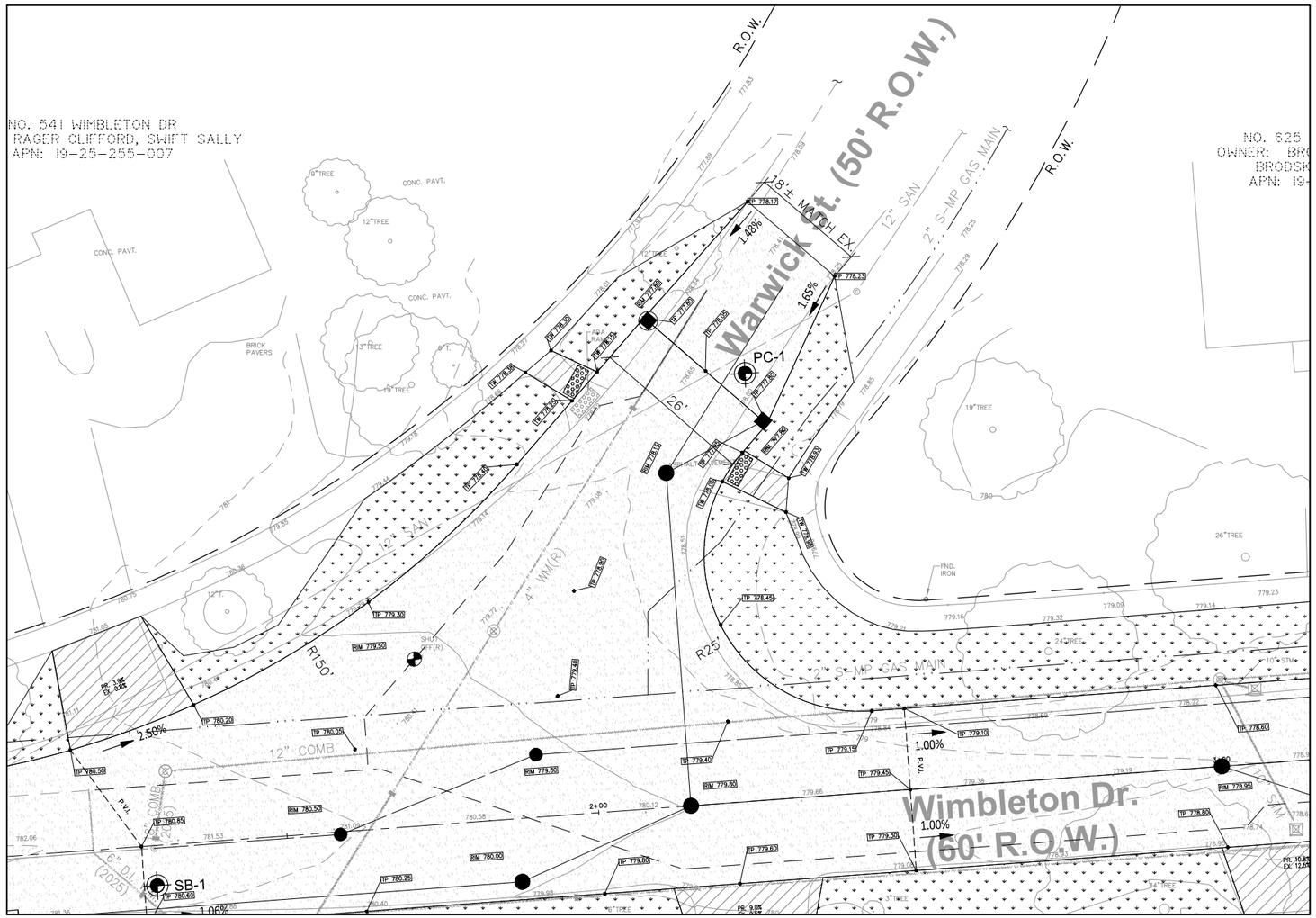
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P. Tulikangas
APPROVED BY:
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DATE:
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NFE JOB NO. O979
SHEET NO. C16

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WIMBLETON DRIVE AND WARWICK STREET INTERSECTION

ADA COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL OF ¼ INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

THE CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12.

WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').

DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING REQUIREMENTS:

LANDING SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

LANDINGS SHALL BE PROVIDED AT THE TOPS OF CURB RAMPS. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.

RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- x-000.00 GROUND ELEVATION
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 6" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- TC 600.00 PR. TOP OF CURB ELEVATION
- GU 600.00 PR. GUTTER ELEVATION
- TW 600.00 PR. TOP OF WALK ELEVATION
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- FG 600.00 FINISH GRADE ELEVATION
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PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

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A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
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Intersection Grading Detail - Wimbleton & Warwick

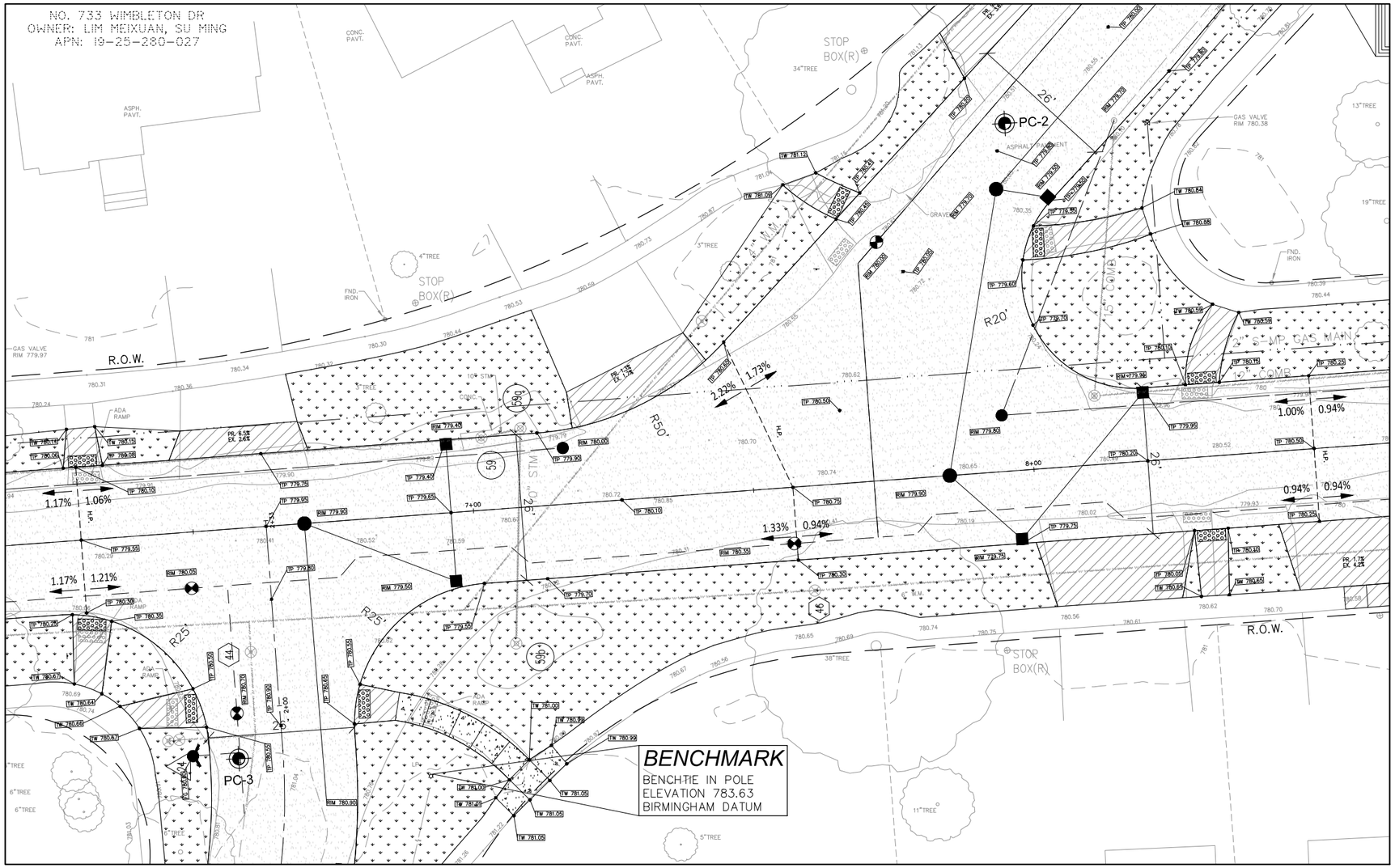
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'
10 5 0 5 10 20

NFE JOB NO. O979
SHEET NO. C17

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WIMBLETON DRIVE AND POPPLETON STREET INTERSECTION

ADA COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL OF ¼ INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

THE CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12.

WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

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- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
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- PR. BITUMINOUS OPESEAL
- PR. 18" WD. CONC. CURB & GUTTER
- (RECORD) CURB STOP LOCATION (APPROX.)
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LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

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A WALKABLE CITY
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151 Martin Street
Birmingham, MI 48012

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T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Intersection Grading Detail - Wimbleton & Poppleton

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03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

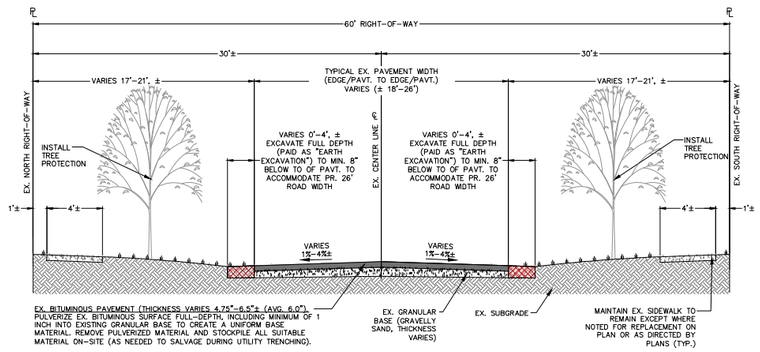
NFE JOB NO. O979
SHEET NO. C18

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NOTE:
PROVIDE 6" PERFORATED UNDERDRAIN AROUND STRUCTURE AT 2.5' BELOW RIM

UNDERDRAIN DETAIL

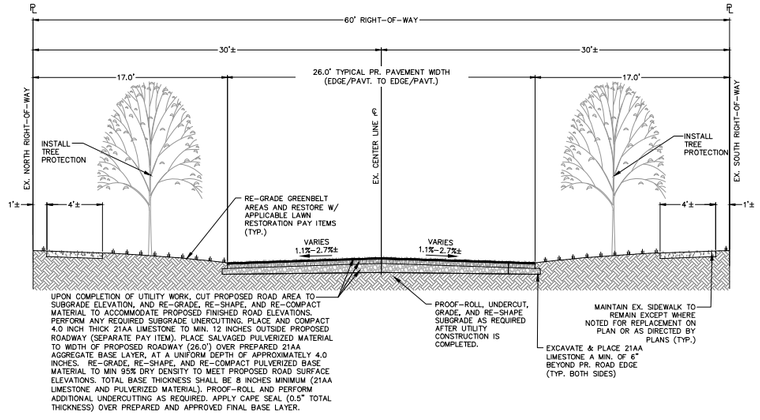
N.T.S.



EXISTING BITUMINOUS PAVEMENT SECTION

N.T.S.
WIMBLETON DRIVE
APPLIES TO: STA. P.O.B. TO STA. P.O.E

NOTE: REFER TO GEOTECHNICAL INVESTIGATION REPORT BY G2 CONSULTING GROUP, DATED 11/12/25, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



PROPOSED BITUMINOUS PAVEMENT SECTION

N.T.S.
WIMBLETON DRIVE
APPLIES TO: STA. P.O.B. TO STA. P.O.E

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LAND SURVEYORS
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Paving Project
Contract #6-26(W)

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Notes and Details

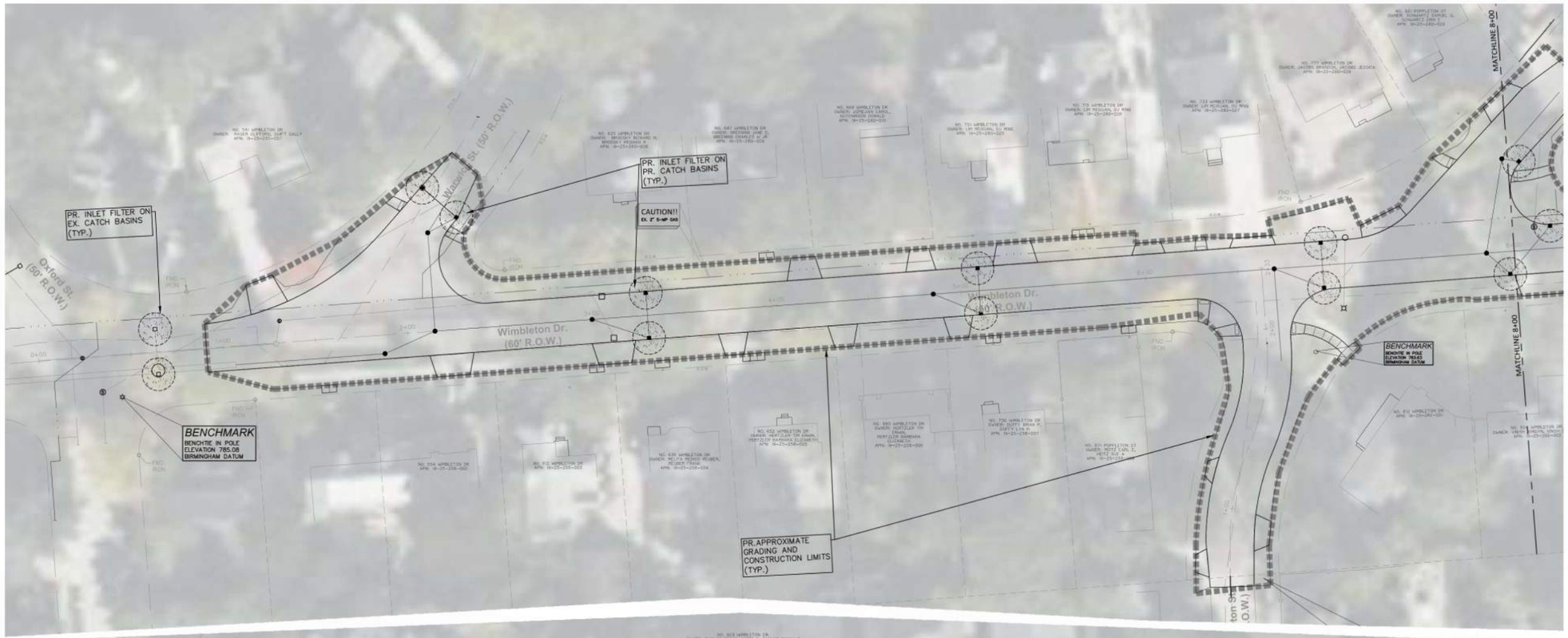
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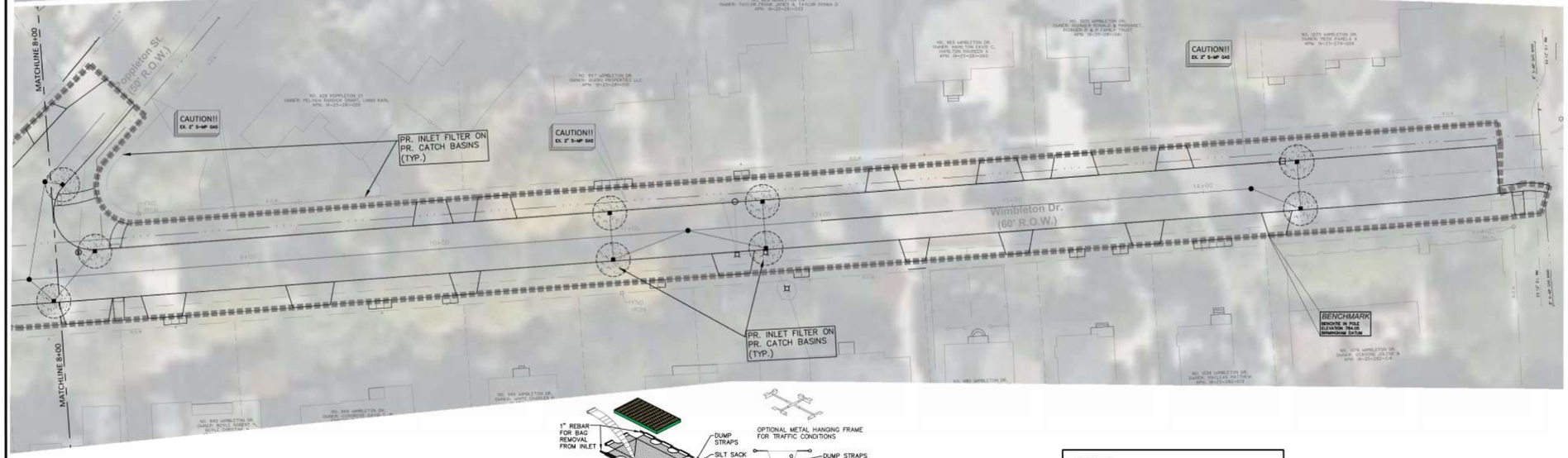
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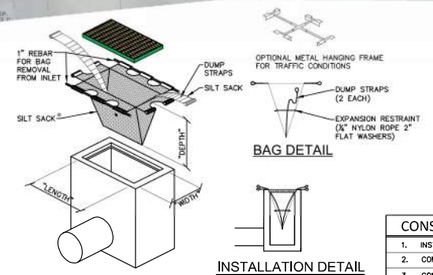
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: N.T.S.

NFE JOB NO. O979
SHEET NO. C19

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SILT SACK FILTER DETAIL

LEGEND

- INDICATES APPROXIMATE LIMITS OF EARTH DISTRUPTION
- INDICATES SILT SACK INLET FILTER INSTALLED AND MAINTAINED IN EXISTING CATCH BASIN (IN ACCORDANCE WITH CITY SPECIFICATIONS AND O.C.W.R.C. DETAILS)

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE UNDERGROUND CONSTRUCTION	2ND MONTH
3.	COMPLETE ROAD CONSTRUCTION	3RD MONTH
4.	COMPLETE LANDSCAPE RESTORATION	4TH MONTH
5.	REMOVE SOIL EROSION MEASURES	5TH MONTH

NOTES

A DISTANCE OF APPROXIMATELY 0.25 MI TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 2.1 ACRES.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 59 (URBAN LAND), 60B (URBAN LAN-MARTELLE COMPLEX, 0 TO 8 PERCENT SLOPES), 62B (URBAN LAND-SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES), AND ShbuoB (SHEBEON-URBAN LAND COMPLEX, 0 TO 4 PERCENT SLOPES) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

SOIL EROSION CONTROL NOTES

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

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DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 30'
30 15 0 15 30 45

NFE JOB NO. O979
SHEET NO. C20

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CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE & COMPLETE UNDERGROUND CONSTRUCTION	1ST MONTH
3.	COMPLETE ROUGH GRADING AND INSTALLATION OF STORM OUTFALL SETTLING POOL	2ND MONTH
4.	COMPLETE FINAL GRADING AND INSTALL GREENBELT RESTORATION MEASURES	2ND/3RD MONTH
5.	REMOVE SOIL EROSION MEASURES	4TH MONTH

STREET CLEANING SCHEDULE (MINIMUM REQUIREMENT)

TASKS	SUN	MON	TUE	WED	THU	FRI	SAT
SCRAPE STREETS	X	X	X	X	X	X	X
SWEEP STREETS				X			

SOIL EROSION CONTROL

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TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANY GAS SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MDOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.



LOCATION MAP
1" = 1,200'

NOTES

WORK IS PROPOSED WITHIN THE CITY OF BIRMINGHAM, INCLUDING THE WOODWARD AVENUE PUBLIC R.O.W. (MDOT JURISDICTION), AND WITHIN PRIVATE PARCEL #35980 WOODWARD AVENUE (P.I.D. 19-25-177-018) WITHIN BLOOMFIELD TOWNSHIP.

A DISTANCE OF APPROXIMATELY 0 FEET TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 4,125 S.F. (0.095 ACRES).

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 59 (URBAN LAND), 60B (URBAN LAN-MARTELLE COMPLEX, 0 TO 8 PERCENT SLOPES), 62B (URBAN LAND-SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES), AND 68 (CONOCHAH-FOX ASSOCIATION) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

REMOVAL LEGEND

- TREE OR MISC. REMOVAL
- REMOVE EX. GUARDRAIL AS INDICATED
- REMOVE EX. UTILITY AS INDICATED
- INDICATES AREAS OF CONCRETE PAVEMENT/ SIDEWALK TO BE REMOVED

SESC LEGEND

- INDICATES LIMITS OF SILT FABRIC FENCE - 36" HGT.
- INDICATES LIMITS OF SOIL DISRUPTION
- INDICATES SILT SACK OR EQUAL ON EXISTING. DRAINAGE STRUCTURE

LEGEND

- MANHOLE
- HYDRANT
- GATE VALVE
- MANHOLE
- CATCH BASIN
- UTILITY POLE
- GUY POLE
- GUY WIRE
- EXISTING SANITARY SEWER
- EXISTING SAN. CLEAN OUT
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN

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WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.W. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Wimbleton Drive Storm
Outfall Removal & SESC
Plan

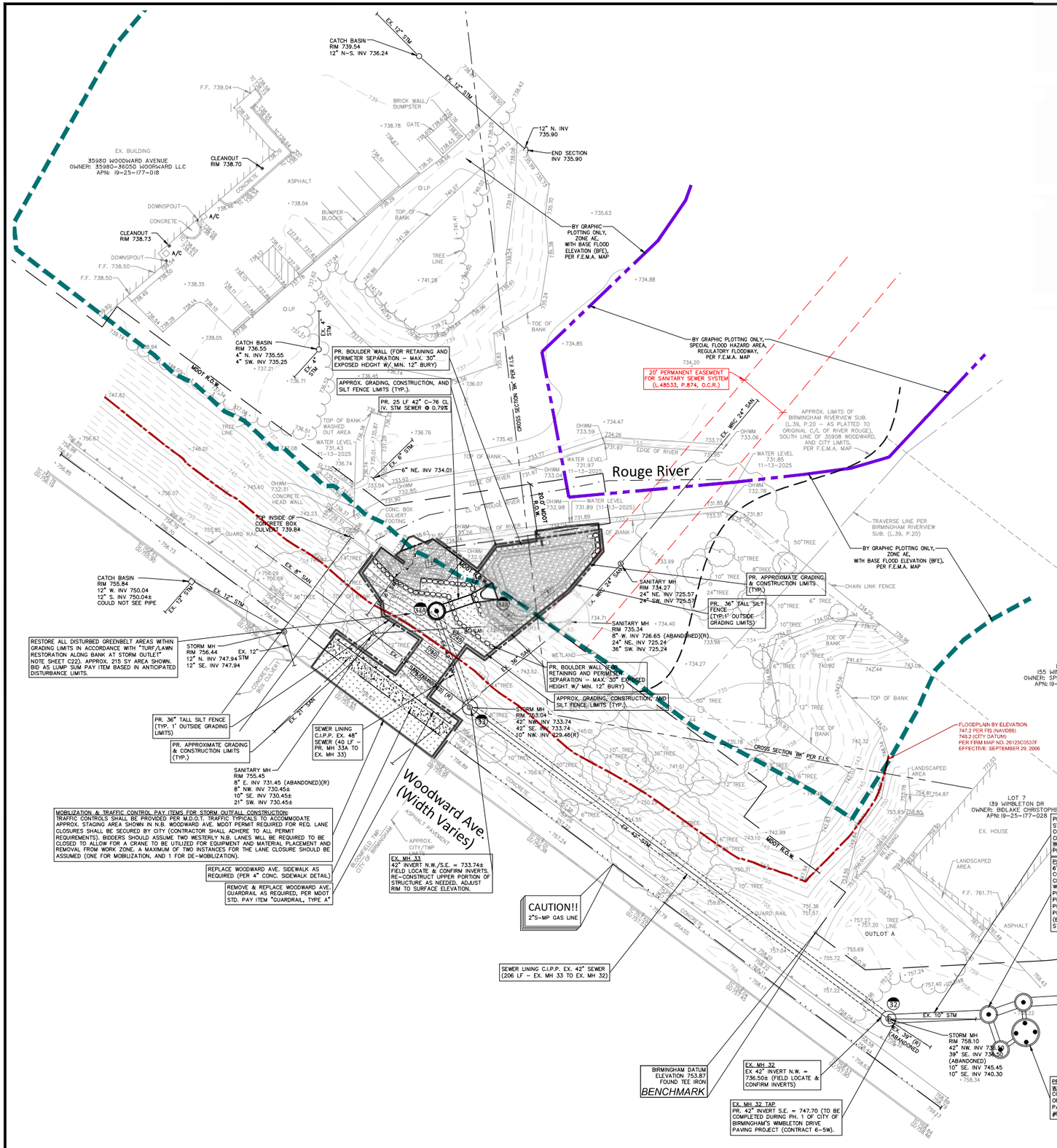
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C21

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LOCATION MAP
1" = 1,200'

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE HMA 4E ML;
SURFACE COURSE – MDOT BITUMINOUS MIXTURE HMA 5E ML;
BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

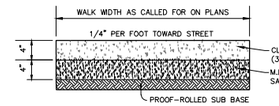
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



CONCRETE SIDEWALK SECTION
N.T.S.

Storm Drainage Structure Schedule

Structure Name	Structure Details
#33A PR. 6' DIA. STORM MH CONSTRUCT ONLINE OF EX. 42" STORM SEWER EX. 42" INV. N/S 733.66± (PER REC-FIELD VERIFY) (MAINTAIN AND C.I.P.P. LINE 42" SOUTH; REMOVE 42" NORTH)	PR. RIM 743.80 PR 42" E. INV. 733.60 EX 42" N. INV. 733.66 EX 42" S. INV. 733.66
#33B PR. 42" PRE-CAST END SECTION W/ BAR-SCREEN (PER DETAIL)	PR 42" W. INV. 733.40

PAVING / RESTORATION LEGEND

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED NATURAL STONE RIP-RAP
- PROPOSED TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET (PER NOTE SHT. C22)
- PROPOSED GUARDRAIL REPLACEMENT
- PROPOSED BOULDER RETAINING WALL

LEGEND

- MANHOLE
- HYDRANT
- GATE VALVE
- MANHOLE CATCH BASIN
- UTILITY POLE GUY POLE
- GUY WIRE
- C.O. CLEAN OUT
- INLET C.B. MANHOLE
- TC 600.00 — PROPOSED TOP OF CURB ELEVATION
- GU 600.00 — PROPOSED GUTTER ELEVATION
- TW 600.00 — PROPOSED TOP OF WALK ELEVATION
- TP 600.00 — PROPOSED TOP OF PVMT. ELEVATION
- FG 600.00 — PROPOSED FINISH GRADE ELEVATION
- WT 600.00 | WB 600.00 — PROPOSED WALL TOP/BOTTOM ELEVATION
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- PROPOSED SANITARY SEWER
- PROPOSED WATER MAIN
- PROPOSED STORM SEWER
- PROPOSED LIGHT POLE

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Wimbleton Drive Storm
Outfall Utility Plan

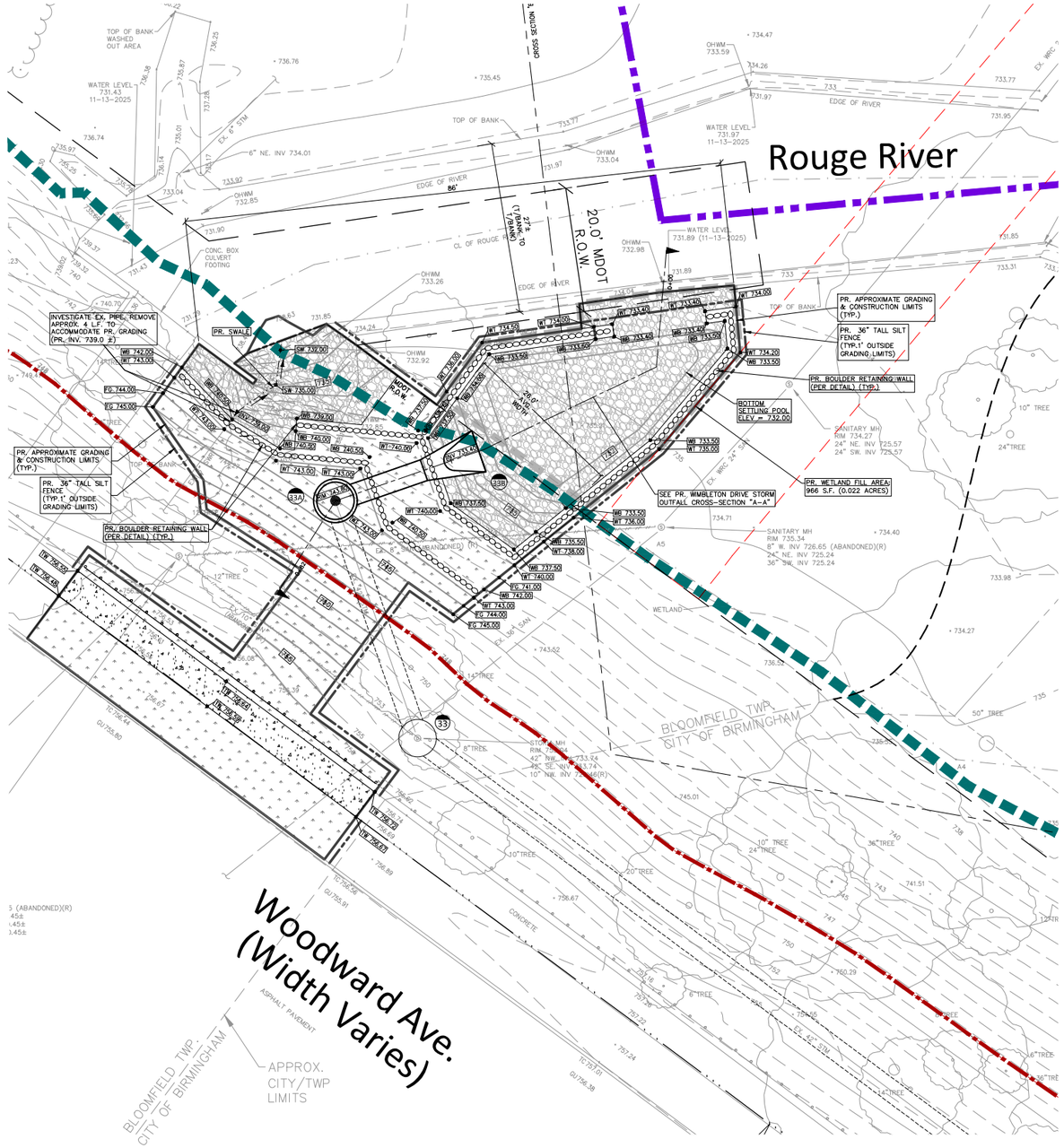
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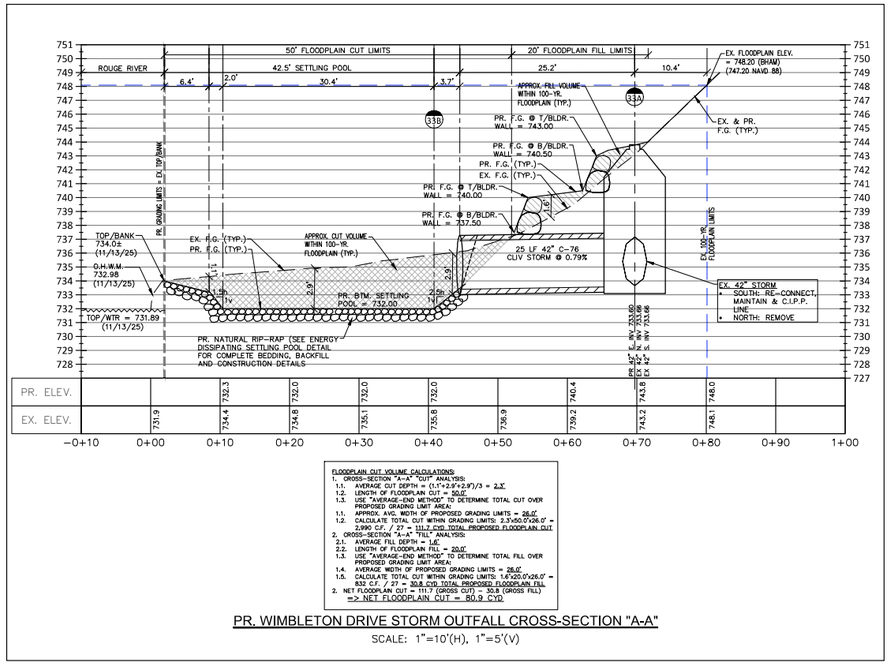
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C22

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PR. WIMBLETON DRIVE STORM OUTFALL CROSS-SECTION "A-A"

SCALE: 1"=10'(H), 1"=5'(V)

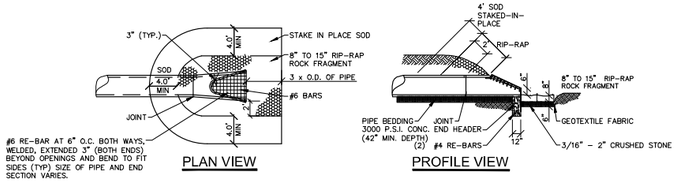
FLOODPLAIN CUT VOLUME CALCULATIONS

1. CROSS-SECTION "A-A" "CUT" ANALYSIS:
   - 1.1. AVERAGE CUT DEPTH = (1.1'+2.0'+2.9')/3 = 2.3'
   - 1.2. LENGTH OF FLOODPLAIN CUT = 50.0'
   - 1.3. USE "AVERAGE-END METHOD" TO DETERMINE TOTAL CUT OVER PROPOSED GRADING LIMIT AREA:
     - 1.1. APPROX. AVG. WIDTH OF PROPOSED GRADING LIMITS = 26.0'
     - 1.2. CALCULATE TOTAL CUT WITHIN GRADING LIMITS: 2.3'x50.0'x26.0' = 2,990 C.F. / 27 = 111.7 CYD TOTAL PROPOSED FLOODPLAIN CUT
2. CROSS-SECTION "A-A" "FILL" ANALYSIS:
   - 2.1. AVERAGE FILL DEPTH = 1.4'
   - 2.2. LENGTH OF FLOODPLAIN FILL = 20.0'
   - 1.3. USE "AVERAGE-END METHOD" TO DETERMINE TOTAL FILL OVER PROPOSED GRADING LIMIT AREA:
     - 1.4. AVERAGE WIDTH OF PROPOSED GRADING LIMITS = 26.0'
     - 1.5. CALCULATE TOTAL CUT WITHIN GRADING LIMITS: 1.4'x25.0'x26.0' = 832 C.F. / 27 = 30.8 CYD TOTAL PROPOSED FLOODPLAIN FILL
2. NET FLOODPLAIN CUT = 111.7 (GROSS CUT) – 30.8 (GROSS FILL) => NET FLOODPLAIN CUT = 80.9 CYD

TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET

ALL DISTURBED AREAS SHALL BE RESTORED USING A MINIMUM OF 4" TOPSOIL, SEED, PERMANENT TURF REINFORCEMENT MAT (VMAX SC250 BY NORTH AMERICAN GREEN, OR EQUAL) AND/OR MULCH BLANKET. TURF REINFORCEMENT MAT SYSTEM SHALL BE INSTALLED SPECIFIC TO AREAS SUSCEPTIBLE TO STREAMBANK EROSION, ON STEEPER SLOPES, AND AREAS ADJACENT TO WATER. ALL OTHER AREAS SHALL RECEIVE MULCH BLANKET STABILIZATION IN ACCORDANCE WITH WRC SPECIFICATIONS (STRAW OR COCONUT BLANKET) AND CAPABLE OF MAINTAINING SOIL STABILITY WHILE PROMOTING FAST AND SUSTAINABLE VEGETATIVE GROWTH. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION SPECIFICATIONS, AND UNDER THE OBSERVATION OF AN ON-SITE GEOTECHNICAL ENGINEER.

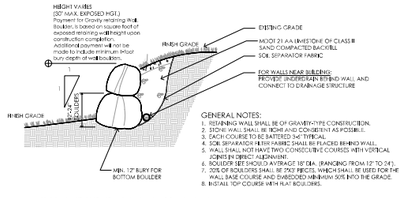
SEED MIX SHALL BE A SEDGE BANK GHETTO SEED MIX CAPABLE OF SUSTAINED GROWTH IN ALL AREAS, INCLUDING AREAS SUSCEPTIBLE TO CHEMICAL TREATMENT OF PHRAGMITES AND PERMANENT WATER LEVELS. PROVIDE CUT SHEETS OF PROPOSED SEED MIXES TO ENGINEER FOR REVIEW.



END SECTION AND BAR SCREEN DETAIL

N.T.S.

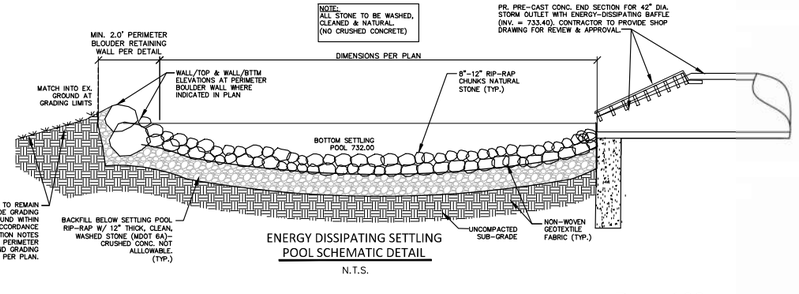




GENERAL NOTES:
1. RETAINING WALL SHALL BE OF GRAVITY-TYPE CONSTRUCTION.
2. STONE WALL SHALL BE TIGHT AND CONSISTENT AS POSSIBLE.
3. EACH COURSE TO BE BATTERED 3/4" TYPICAL.
4. SOIL SEPARATOR FILTER FABRIC SHALL BE PLACED BEHIND WALL.
5. WALL SHALL NOT HAVE TWO CONSECUTIVE COURSES WITH VERTICAL JOINTS IN DIRECT ALIGNMENT.
6. BOULDER SIZE SHOULD AVERAGE 18" DIA. (RANGING FROM 12" TO 24").
7. 20% OF BOULDERS SHALL BE 2'X2' PIECES, WHICH SHALL BE USED FOR THE WALL BASE COURSE AND EMBEDDED MINIMUM 50% INTO THE GRADE.
8. INSTALL TOP COURSE WITH FLAT BOULDERS.

BOULDER RETAINING WALL

NTS



ENERGY DISSIPATING SETTLING POOL SCHEMATIC DETAIL

N.T.S.

Storm Drainage Structure Schedule

Structure Name	Structure Details
#33A PR. 6' DIA. STORM MH CONSTRUCT ONLINE OF EX. 42" STORM SEWER EX. 42" INV. N/S 733.66± (PER REC-FIELD VERIFY) (MAINTAIN AND C.I.P.P. LINE 42" SOUTH; REMOVE 42" NORTH)	PR. RIM 743.80 PR 42" E. INV. 733.60 EX 42" N. INV. 733.66 EX 42" S. INV. 733.66
#33B PR. 42" PRE-CAST END SECTION W/ BAR-SCREEN (PER DETAIL)	PR 42" W. INV. 733.40

PAVING / RESTORATION LEGEND

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED NATURAL STONE RIP-RAP
- PROPOSED TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET (PER NOTE SHT. C22)
- PROPOSED GUARDRAIL REPLACEMENT
- PROPOSED BOULDER RETAINING WALL

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- HYDRANT, GATE VALVE — SAN. CLEAN OUT
- MANHOLE, CATCH BASIN — EXISTING WATERMAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- UTILITY POLE, GUY POLE, GUY WIRE — EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O. MANHOLE — PR. SANITARY SEWER
- HYDRANT, GATE VALVE — PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE
- TC 600.00 — PR. TOP OF CURB ELEVATION
- GU 600.00 — PR. GUTTER ELEVATION
- TW 600.00 — PR. TOP OF WALK ELEVATION
- TP 600.00 — PR. TOP OF PVMT. ELEVATION
- FG 600.00 — FINISH GRADE ELEVATION
- WT 600.00, WB 600.00 — WALL TOP/BOTTOM ELEVATION

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Contract #6-26(W)

CLIENT

BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION

Part of the N.E. ¼ of Section 25, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

SHEET

Wimbleton Drive Storm Outfall Grading Plan & Details

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

NFE JOB NO. O979
SHEET NO. C23

\\500-2000 Files\\0000-FILES\0979\Office\Construction Documents\0979_ENG-Storm Outfall.dwg, 3/27/2026 3:23 PM

WIMBLETON CLOSED
NO ACCESS FROM WOODWARD
SEEK ALTERNATE ROUTE

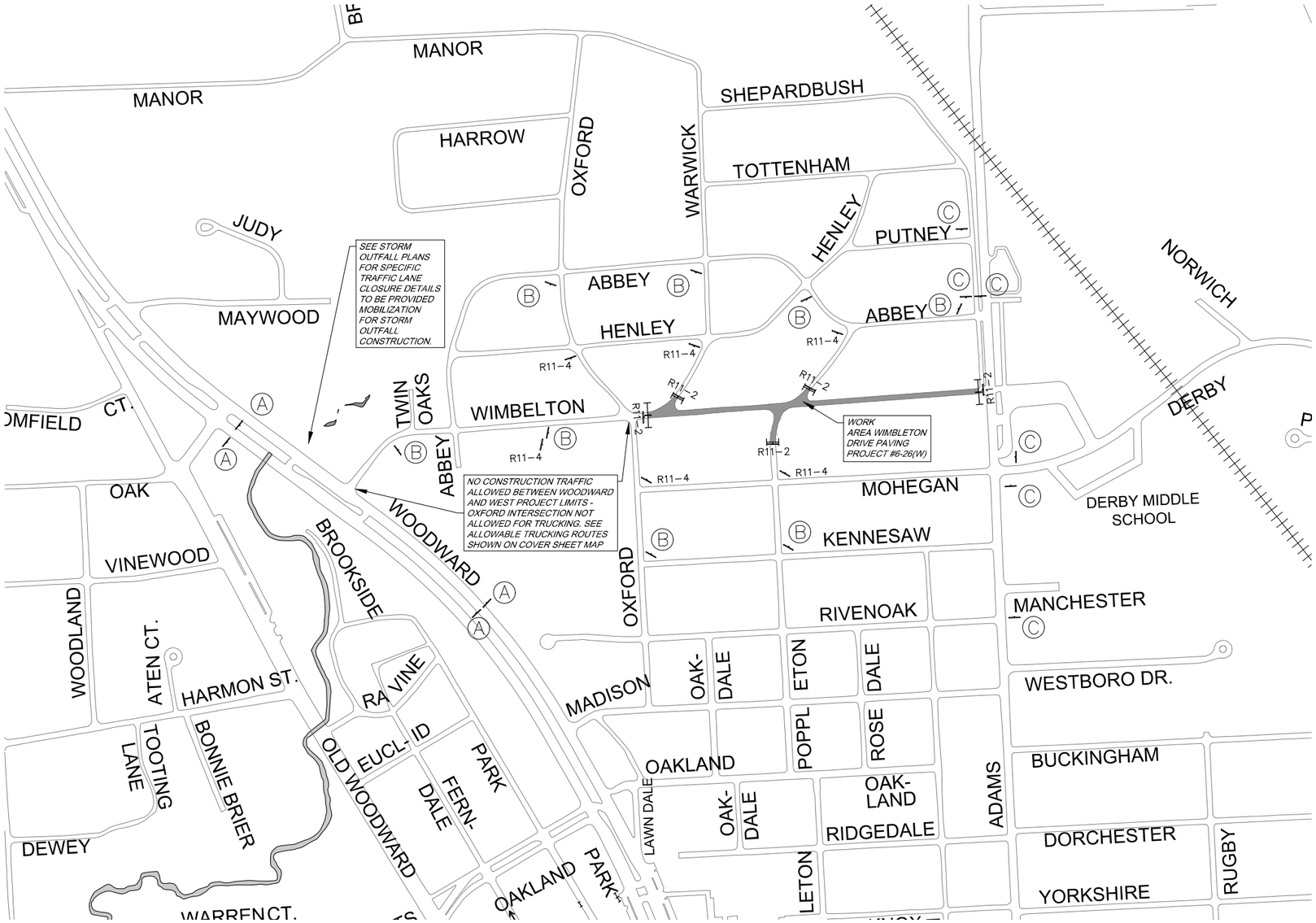
36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED WARWICK TO
ADAMS - SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED
NO ACCESS FROM ADAMS
SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND



ADVANCED WARNING SIGNAGE PLAN: WIMBLETON DRIVE PHASE 2 PROJECT

SYMBOL KEY

- TYPE III BARRICADES
- ADVANCED WARNING SIGN

SPECIAL ADVANCED WARNING SIGN QUANTITIES

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	WIMBLETON CLOSED - NO ACCESS FROM WOODWARD - SEEK ALTERNATE ROUTE	36"x72"	4
SIGN "B"	WIMBLETON CLOSED WARWICK TO ADAMS - SEEK ALTERNATE ROUTE	36"x72"	8
SIGN "C"	WIMBLETON CLOSED - NO ACCESS FROM ADAMS - SEEK ALTERNATE ROUTE	36"x72"	6

OTHER ADVANCED WARNING SIGN QUANTITIES AS SHOWN

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
R11-2	ROAD CLOSED	60"x30"	5
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	6

NOTES

1. TRAFFIC CONTROL IS A LUMP SUM CONTRACT PAY ITEM, AND SHALL INCLUDE ALL TRAFFIC CONTROL DEVICES, SIGNS, AND MANPOWER LABOR AS REQUIRED TO ADEQUATELY AND SAFELY MAINTAIN TRAFFIC CONTROLS THROUGHOUT THE DURATION OF THE PROJECT. THE DIAGRAM, SIGN DETAILS, AND QUANTITIES PROVIDED HEREIN ARE FOR GENERAL GUIDANCE AND NOT INTENDED TO BE ALL INCLUSIVE OF TRAFFIC CONTROLS WHICH WILL BE REQUIRED TO BE PROVIDED BY THE CONTRACTOR FOR THE ENTIRE PROJECT.
2. PLACE TRAFFIC CONTROL DEVICES AS SPECIFIED, OR AS OTHERWISE DIRECTED BY THE CITY OF BIRMINGHAM, INCLUDING ADVANCE WARNING SIGNS AND BARRICADES NOT SPECIFIED ON THIS DIAGRAM. CONTRACTOR/INSPECTOR MUST ACCOMPANY SIGN SUBCONTRACTOR DURING PLACEMENT OF SIGNS THROUGHOUT VARIOUS TRAFFIC CONTROL CHANGES.
3. ALL SIGNS AND BARRICADING SHALL BE IN ACCORDANCE WITH CURRENT M.M.U.T.C.D. AND M.D.O.T. SPECIFICATIONS AND TRAFFIC TYPICALS, INCLUDING PLACEMENT OF ADDITIONAL REQUIRED SIGNS/BARRICADES NOT DEPICTED ON THESE PLANS TO CONTROL TRAFFIC, LANE CLOSURES, SHIFTS, ETC.
4. ADVANCE WARNING SIGNS AND BARRICADES SHALL REMAIN IN PLACE UNTIL THE NEW ROAD (OR A PORTION THEREOF) IS READY TO BE OPENED FOR TRAFFIC AS DETERMINED BY THE CITY.
5. MAINTAIN SIDEWALKS AND INSTALL & MAINTAIN FENCING & SIGNAGE AS NEEDED TO ENSURE PEDESTRIAN SAFETY. UTILIZE MAINTENANCE AGGREGATE AS REQUIRED.
6. ERECT, REMOVE, AND/OR MAINTAIN ALL ADVANCE WARNING/DETOUR SIGNAGE AS DIRECTED BY THE CITY.
7. TYPE III BARRICADES (LIGHTED) SHALL BE PLACED FOR ALL LANE CLOSURES, AND SHALL INCLUDE A R11-2 OR R11-4 SIGN ON EACH TYPE III BARRICADE WHERE NOTED.
8. ALL SIDEWALK CLOSURES WITHIN CITY LIMITS SHALL HAVE TYPE III BARRICADES AND INCLUDE A SIDEWALK CLOSED SIGN. IF SIDEWALK CLOSURES ARE REQUIRED WITHIN M.D.O.T. RIGHT-OF WAY ON WOODWARD AVENUE (M-1), TYPE II BARRICADES SHALL BE USED.
9. LOCAL RESIDENT TRAFFIC (TWO-WAY) SHALL TYPICALLY BE MAINTAINED DURING CONSTRUCTION.
10. CONTRACTOR SHALL PROVIDE ADDITIONAL ADVANCED WARNING SIGNAGE TO INDICATE WHEN FULL-WIDTH CLOSURES WILL BE REQUIRED IN ISOLATED WORK AREAS.
11. CONTRACTOR SHALL PROVIDE FLAGGING CONTROL AS REQUIRED THROUGHOUT DURATION OF PROJECT TO MAINTAIN SAFETY FOR ALL ROADS OPENED TO TRAFFIC DURING CONSTRUCTION.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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46777 WOODWARD AVE.
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WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

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A WALKABLE CITY
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Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Advanced Warning
Signage (AWS) Traffic
Diagram

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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: N.T.S.

NFE JOB NO. O979
SHEET NO. C24

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BIRMINGHAM CONTRACT #6-26(W) - WIMBLETON DRIVE PHASE 2 PROJECT PAY ITEMS

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C01 Utility Plan	SHEET C02 Utility Plan	SHEET C03 Utility Plan	SHEET C04 Utility Plan	SHEET C05 Utility Plan	SHEET C10 Utility Service Plan	SHEET C11 Utility Service Plan	SHEET C12 P&G Plan	SHEET C13 P&G Plan	SHEET C14 P&G Plan	SHEET C15 P&G Plan	SHEET C16 P&G Plan	SHEET C20 SESC Plan	SHEET C21 Storm Outfall Removal-SESC	SHEET C22 Storm Outfall Utility Plan	SHEET C23 Storm Outfall Grading Plan	TOTAL QUANTITY
	DIVISION 1 - SEWER PAY ITEMS																		
1	15" Combined Sewer, PVC PS 115, Trench A	LF	64	161	246														471
2	12" Combined Sewer, PVC SDR 26, Trench A	LF	234	262	104	200													830
3	36" Storm Sewer, CI76, CL-IV, Trench A	LF	321	360															681
4	30" Storm Sewer, CI76, CL-IV, Trench A	LF		100															100
5	21" Storm Sewer, CI76, CL-IV, Trench A	LF		115	230														345
6	18" Storm Sewer, CI76, CL-IV, Trench A	LF	88																88
7	12" Storm Sewer, CI76, CL-IV, Trench A	LF	100	165	252	227	50												794
8	Sewer Service, 6" PVC SDR 23.5	LF						598	559										1,157
9	6" Perforated Pipe Underdrain (No sock)	LF	120	210	120														450
10	New 4'-0" Diameter Combined Manhole	EA	2	3	1														6
11	New 6'-0" Diameter Storm Manhole	EA	3	3															6
12	New 5'-0" Diameter Storm Manhole	EA		1	1														2
13	New 4'-0" Diameter Storm Manhole	EA	1			1													2
14	New 4'-0" Diameter Storm Catch Basin w/ 4' Sump & Sed. Trap	EA	2	4	2	1													9
15	New 2'-0" Diameter Storm Inlet	EA	2	3	2	1													8
16	Sewer Investigation, Laterals	EA						8	8										16
17	Sewer Senice Tap, 6"	EA						19	18										37
18	Sewer Tap, Combined, 15"	EA	1	1															2
19	Sewer Tap, Storm, 10"	EA			1														1
20	Sewer Stub w/ Capped End, Storm, 30"	EA		1															1
21	Sewer Stub w/ Capped End, Storm, 18"	EA	1																1
22	Sewer Stub w/ Capped End, Storm, 12"	EA					1												1
23	Reconstruct Manhole (if and where needed)	VF																	10
24	Remove & Replace Structure Cover (as directed by City)	EA	1	1															2
25	Remove Ex. Sewer Manhole	EA	2	3															5
26	Remove Ex. Drainage Structure	EA	2	2															4
27	Abandon Ex. 15" Combined Sewer	LF		45															45
28	Abandon Ex. 12" Combined Sewer	LF	290	166	250														706
29	Abandon Ex. 8" Combinad Sewer	LF		197	286														483
30	Remove Ex. 18" Combined Sewer	LF	10																10
31	Remove Ex. 10" Storm Sewer	LF	28	41	53	5													127
32	Bulkhead Structure, 18"	EA	1																1
33	Bulkhead Structure, 12" or Less	EA																	2
34	Bulkhead Pipe, Larger than 8"	EA																	10
35	CCTV Sewer Acceptance Inspection	LS																	1
	SUBTOTAL - DIVISION 1 - SEWER PAY ITEMS																		
	DIVISION 2 - WATER MAIN PAY ITEMS																		
36	Remove Hydrant	EA		1		1													2
37	Remove Gate Valve Well	EA																	1
38	Retrofit Ex. Gate Well w/ 12" Gate Valve	EA				1													1
39	12" Gate Valve & Well	EA	1	2	1	1													5
40	8" Gate Valve & Well	EA	1	1			1												3
41	Fire Hydrant Assembly, Complete	EA	1		1	1	1												4
42	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	314	483	352	327													1,476
43	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	98	132			42												272
44	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	6		10	8	8												32
45	12" Water Main Connection to Ex. 12" Water Main	EA	1			1													2
46	8" Water Main Connection to Ex. 4" Water Main	EA	1	1															2
47	New Water Service, 1", Trench A, Copper	LF						180	137										317
48	New Water Service, 1.5", Trench A, Copper	LF							36										36
49	New Water Service", 1", Private Property (Bored), PEX	LF						45											45
50	Water Senice Connection, 1.5"	EA						1	1										2
51	Water Senice Connection, 1"	EA						14	10										24
52	Water Senice Connection, 1", Connection at Meter, 871 Poppleton	EA						1											1
53	Install Curb Stop & Box, 1"	EA						4	3										7
54	Hydra-Stop, Insta-Valve 250, 6"	EA																	1
55	Hydra-Stop, Line-Stop, 6"	EA																	2
56	Hydra-Stop, Line-Stop, 4"	EA																	2
57	Abandon Existing Water Mains, Entire Project	LS																	1
	SUBTOTAL - DIVISION 2 - WATER MAIN PAY ITEMS																		
	DIVISION 3 - PAVING PAY ITEMS																		
58	Earth Excavation	CY								425	850	415	400						2,090
59	Subgrade Undercutting, 21AA Limestone	CY								40	80	40	40						200
60	Subgrade Undercutting, 1"x3" Limestone	CY								40	80	40	40						200
61	Subgrade Geogrid Fabric, Tensar Triax TX130S	SY																	1,250
62	Remove and Salvage Brick Pavers	SF										55		85	85				225
63	Removing Concrete Drive Approach	SY								60	170	45	100	25	25				425
64	Removing Asphalt Drive Approach	SY								65	35	120	40						260
65	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY								35	100	35	25						195
66	Pulverize, Remove, Stockpile, Replace, and Re-Shape Existing Bituminous Pavement	SY								1450	1900	1100	990	390	390				6,220
67	Aggregate Base, MDOT 21AA Limestone, 4"	SY								1450	2380	1050	920	415	415				6,630
68	Capeseal Surface	SY								1400	2300	1010	876	400	400				6,386
69	Bituminous Mixture No. 4EML (Handpatching)	TON											300						300
70	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	LF																	20
71	Concrete Drive Approach, 6" Thick on 6" 21AA Limestone	SY								135	205	165	140	35	35				715
72	Concrete Sidewalk, 6" (Includes Ramps)	SF								135	560		70						765
73	Concrete Sidewalk, 4"	SF								145	305	270	145						865
74	Handicap Ramp Truncated Domes	SF								20	80		10						110
75	Adjust Structure Cover	EA	1	1															2
76	Maintenance Aggregate for Entire Project	LS																	1
	SUBTOTAL - DIVISION 3 - PAVING PAY ITEMS																		
	DIVISION 4 - GENERAL PAY ITEMS																		
77	Mobilization (Max. 5% of Bid)	LS																	1
78	Traffic Maintenance & Control	LS																	1
79	Inspector Crew Days	DAYS																	
80	Water and Sewer Allowance	LS																	1
81	Audio Video Route Survey	LS																	1
82	Salvage Existing Signs	LS																	1
83	New Signs	SF																	80
84	Sign Post, U-Channel	LF																	240
85	Tree Protection, 3" Dia. Or Greater	EA																	55
86	Mulch, 3"	SY																	225
87	Topsoil, 3"	SY								780	1220	710	700	230					3,640
88	Sod, Class A	SY								780	1220	710	700	230					3,640
89	Inlet Filter, Silt Sack	EA																	25
	SUBTOTAL - DIVISION 4 - GENERAL PAY ITEMS																		
	DIVISION 5 - STORM OUTFALL PAY ITEMS																		
90	42" Storm Sewer, CI76, CL-IV, Trench A	LF															25		25
91	New 6'-0" Diameter Storm Manhole, Construct Online	EA															1		1
92	New 42" Dia. End Section w/ Bar Screen	EA															1		1
93	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	LF															246		246
94	Sewer Lining, Pre-Liner, 42" RIFI-CIPP	LF															246		246
95	Sewer Lining, 42" RIFI-CIPP	LF															246		246
96	Cut/Grind Protruding Sewer Leads, Any Material	EA															2		2
97	Cut/Grind Root Intrusion	EA															10		5
98	Cut/Grind Mineral Deposit	EA															10		5
99	Remove Ex. Tree	EA														8			8
100	Remove Ex. 42" Storm Headwall	EA														1			1
101	Remove Ex. 42" Storm Sewer	LF														31			31
102	Earth Excavation, Storm Outfall	CY																220	220
103	Remove & Replace Woodward Ave. Sidewalk	SF														300			300
104	Remove & Replace Woodward Ave. Guardrail	LF														60			60
105	Mobilization, Traffic Maintenance & Control, Storm Outfall	LS																	1
106	Inspector Crew Days, Storm Outfall	DAYS																	
107	Silt Fencing, 30" Height	LF														325			325
108	Lawn Restoration Along Bank at Storm Outlet	LS																	1
109	Gravity Retaining Wall, Boulder	FSF																	500
110	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per detail)	SY																	165
	SUBTOTAL - DIVISION 5 - STORM OUTFALL PAY ITEMS																		

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SEAL

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PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

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City of Birmingham,
Oakland County, Michigan

SHEET
Quantities

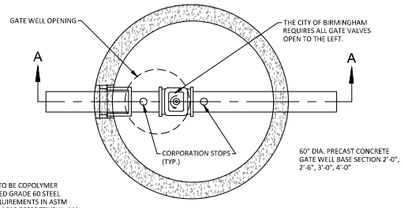
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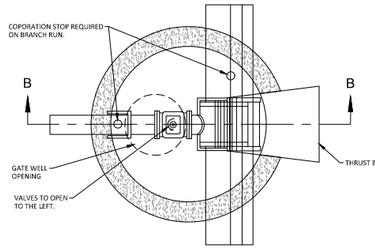
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NFE JOB NO. O979
SHEET NO. Q1

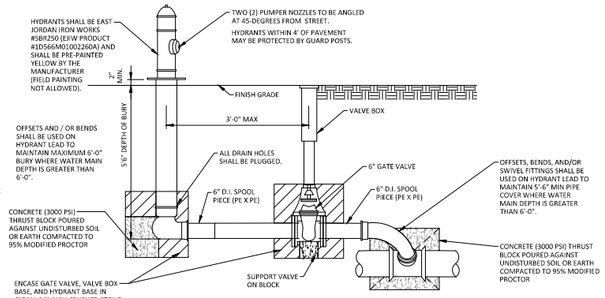
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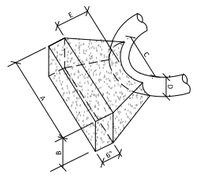
WATER MAIN GATE WELL (TYPICAL), PLAN



WATER MAIN TAPPING SLEEVE, VALVE & WELL (TYPICAL), PLAN

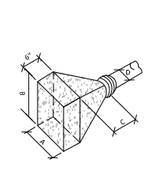


6" HYDRANT SIDE OUTLET



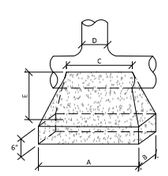
D	A	B	C	E MIN.
20"	8'	6.5'	3.5'	2.5'
16"	6'	4'	2.5'	2'
12"	4'	3'	2'	1.75'
10"	3'	3'	2'	1.75'
8"	3'	2'	2'	1.5'
6"	2'	1.5'	2'	1.25'

FOR 90° BENDS OR SMALLER



D	A	B	C MIN.
20"	7'	5'	2.5'
16"	4'-10"	4'-10"	2'
12"	4'-4"	3'	1'-9"
10"	3'	2'	1.5'
8"	2'-10"	2.5'	1.5'
6"	1.5'	2.5'	1.5'

FOR PLUGS

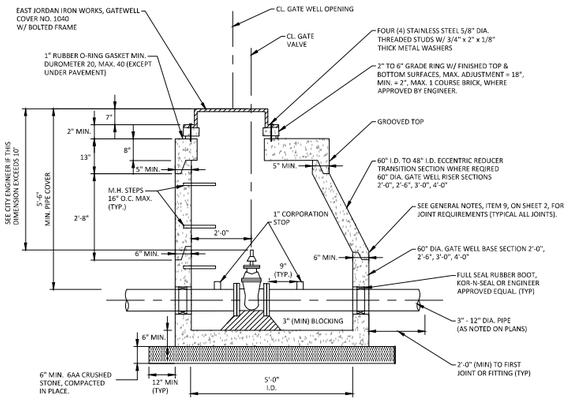


D	A	B	C	E MIN.
20"	6.5'	4.5'	3.5'	3'
16"	4'-8"	4'-8"	2.5'	2.75'
12"	4'	3'	2.5'	2.5'
10"	3'	2'	2'	2.25'
8"	2.5'	2'	2'	2.25'
6"	2'	2'	2'	2.25'

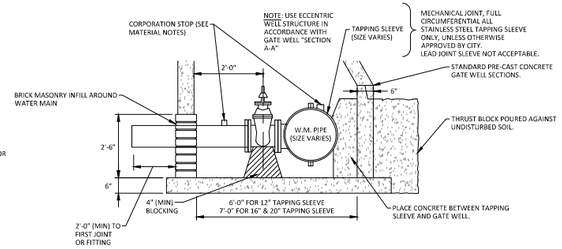
FOR TEES

NOTE:
3000 PSA CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.

THRUST BLOCK DETAILS

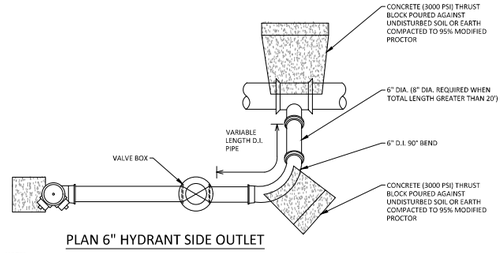


3" THRU 12" GATE WELL ("SECTION A-A")



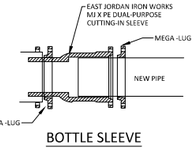
WATER MAIN TAPPING SLEEVE, VALVE & WELL ("SECTION B-B")

NOTES:
1. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP WITH BRONZE SADDLE, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
2. THE CITY OF BIRMINGHAM DOES NOT ALLOW SIZE ON SIZE TAPPING.

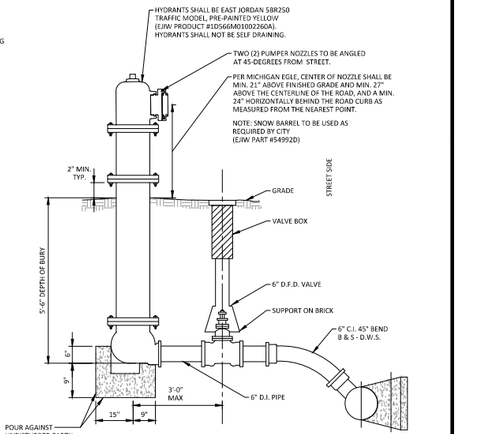


PLAN 6" HYDRANT SIDE OUTLET

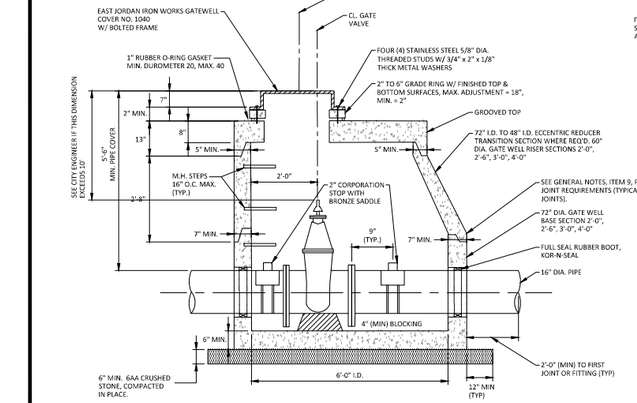
NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES.
2. ALL HYDRANTS, COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA-LUG).
3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS, AND ENDS.
4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR-BLUE.



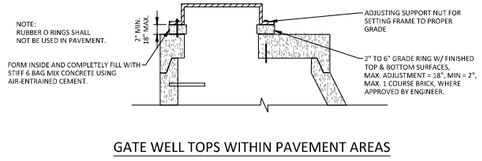
BOTTLE SLEEVE



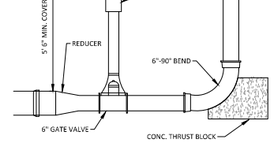
SECTION



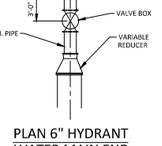
16" GATE WELL ("SECTION A-A")



GATE WELL TOPS WITHIN PAVEMENT AREAS



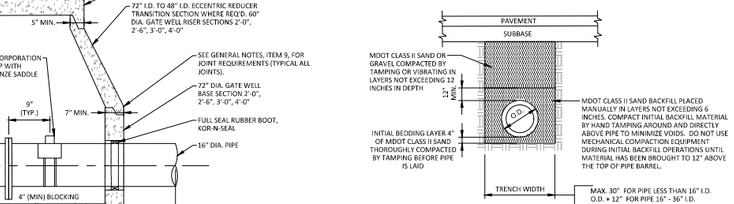
DEAD END BLOWOFF CONNECTION



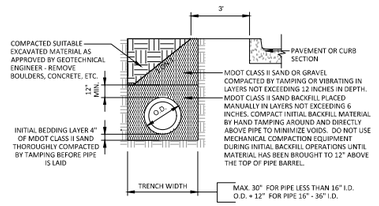
PLAN 6" HYDRANT WATER MAIN END

PLAN

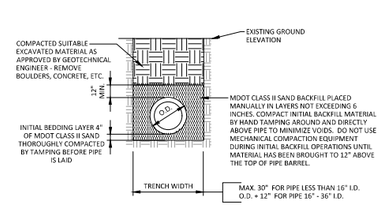
EJIW #5BR250 HYDRANT DETAIL



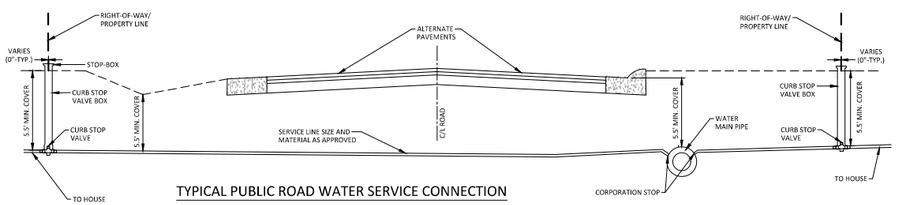
TRENCH DETAIL "A"
WATER MAIN UNDER PAVEMENT



TRENCH DETAIL "A"
WATER MAIN WITHIN INFLUENCE OF PAVEMENT

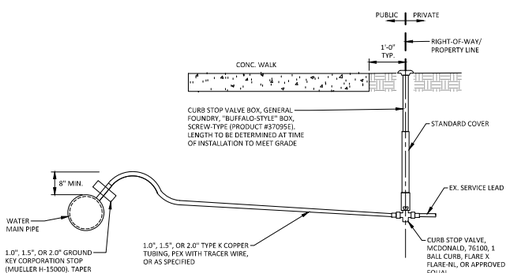


TRENCH DETAIL "B"
WATER MAIN OUTSIDE INFLUENCE OF PAVEMENT

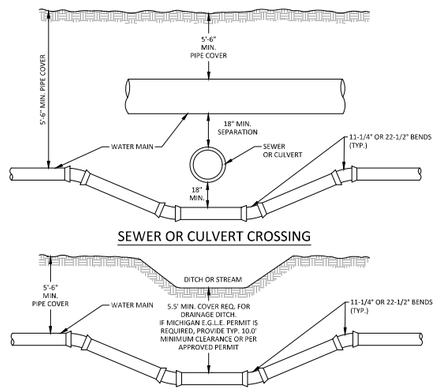


TYPICAL PUBLIC ROAD WATER SERVICE CONNECTION

NOTES:
1) WATER SERVICE CURB STOP SHALL BE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.), TYPICALLY DIRECTLY ON THE ON THE PROPERTY/ R.O.W. LINE.
2) FOR NEW RESIDENTIAL CONSTRUCTION, THE LATERAL LOCATION SHALL BE PER THE APPROVED PLAN.
3) FOR LATERAL LINE REPLACEMENT WITHIN THE PUBLIC R.O.W., THE LATERAL LOCATION WILL BE FIELD DETERMINED BASED ON THE CONNECTION LOCATION TO THE EXISTING SERVICE LINE AT THE R.O.W. LINE. THE ALIGNMENT OF THE SERVICE LINE MAY REQUIRE ADJUSTMENT TO AVOID TREES WITHIN THE R.O.W. TO THE MAXIMUM EXTENT PRACTICABLE, AS APPROVED BY THE CITY.
4) SERVICE TAP LOCATION AT THE WATER MAIN SHALL BE AT CLOCK POSITION 10:30 OR 1:30 UNLESS OTHERWISE NOTED PER APPROVED PLAN.



WATER SERVICE CONNECTION (TYPICAL)



SEWER OR CULVERT CROSSING

DITCH OR STREAM CROSSING

BIRMINGHAM
A WALKABLE CITY
City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Water Main Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	WM-1

WATER MAIN GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE: 1) CITY OF BIRMINGHAM ENGINEERING AND D.P.S DEPARTMENTS, 2) DESIGN ENGINEER, 3) OWNER / DEVELOPER, 4) OTHER PUBLIC AGENCIES HAVING JURISDICTION, AND 6) FRANCHISE UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER.
3. CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
4. CONTRACTOR SHALL COORDINATE ALL REQUIRED WATER MAIN SHUT-DOWNS WITH THE CITY OF BIRMINGHAM ENGINEERING AND D.P.S. DEPARTMENTS TO ALLOW SUFFICIENT TIME IN ADVANCE OF CONSTRUCTION TO ALLOW FOR RESIDENT AND/OR PROPERTY OWNER NOTIFICATIONS, AND FOR THE CITY TO DEVELOP A SHUT-DOWN PROTOCOL. CONTRACTOR COORDINATION IS REQUIRED TO ASSIST THE CITY IN THE DEVELOPMENT OF THE SHUT-DOWN PROTOCOL TO ENSURE IT ALIGNS WITH THE CONTRACTOR'S PROPOSED MEANS AND METHODS. ANY EXERCISING OF EXISTING VALVES THAT ARE REQUIRED TO PERFORM THE SHUT-DOWN SHALL BE COMPLETED BY THE CITY D.P.S. DEPARTMENT WITH A MINIMUM OF 24-HOUR ADVANCED NOTICE.
5. ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
6. ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
7. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, DRIVEWAYS, AND/OR SIDEWALKS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY).
8. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
9. WHERE WATER MAINS MUST DIP TO PASS OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED.
10. ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AND SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATIONS FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
11. CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON THE DETAIL SHEET (FOR EXAMPLE, PROVIDE 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS OR HER EXPENSE.
12. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF BIRMINGHAM, THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), AND THE DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH.
13. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM (AS INDICATED IN PLANS AND SPECIFICATIONS) IS APPROVED BY THE CITY OF BIRMINGHAM.
14. ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHALL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410.
15. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND OR GRAVEL TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

WATER MAIN MATERIALS NOTES

1. WATER SUPPLY SYSTEM PIPING (3-INCH OR LARGER) SHALL BE DUCTILE IRON UNLESS OTHERWISE APPROVED BY THE CITY OF BIRMINGHAM.
2. ALL FITTINGS AND MATERIALS TO BE LEAD FREE.
3. USE OF HDPE MAY BE ALLOWED IN SOME LIMITED CASES (AS APPROVED BY CITY.) TWO TRACER WIRES WILL BE REQUIRED. OCWRC STANDARDS AND DETAILS SHALL BE USED WHEN HDPE IS APPROVED FOR USE.
4. ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
5. DUCTILE IRON PIPE SHALL BE PRESSURE-CLASS CLASS 52 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER.
6. DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE CEMENT MORTAR LINED AND BITUMINOUS SEAL-COATED, IN ACCORDANCE WITH AWWA C104 (ANSI A21.4), LATEST REVISION.
7. JOINTS SHALL BE MECHANICAL OR PUSH-ON JOINTS FOR DUCTILE IRON WATER MAIN AND SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI AS21.11), LATEST REVISION.
8. FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
9. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED 350 PSI FOR PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
10. WHEN CONNECTING TO EXISTING WATER MAINS, OVERSIZED FITTINGS MAY BE REQUIRED TO MATCH THE OUTER DIAMETER OF THE OLDER WATER MAINS.
11. INSTALL BRASS WEDGES AT ALL PUSH-ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH DIAMETER AND LESS, AND FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
12. ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA CAAA LOW ALLOY STEEL COATED WITH COAL TAR AND POLY-WRAPPED WHEN SPECIFIED.
13. ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER-SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
14. TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE DOUBLE-CHECK VALVE BACKFLOW-PREVENTER WITH CURRENT CERTIFICATION.
15. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA STANDARD C105/A21.5-10. POLYETHYLENE MATERIAL SHALL BE TYPE 1, CLASS A, GRADE E-1, AND HAVE A MINIMUM THICKNESS OF 0.008" (8-MILS). FLOW RATE SHALL BE 0.4 MAXIMUM, TENSILE STRENGTH SHALL BE 1200 PSI MINIMUM, AND ELONGATION SHALL BE 300%.

HYDRANT REQUIREMENTS

1. ALL HYDRANTS SHALL BE EAST JORDAN IRON WORKS 5BR250 TRAFFIC MODEL , TWO-WAY WITH TWO (2) 4-1/2" PUMPER NOZZLE FITTINGS. STANDARD BARREL (EJIW PART NUMBER 54948D) OR SNOW BARREL (EJIW PART NUMBER 54992D) TO BE USED AS REQUIRED BY CITY. ALL HYDRANTS SHALL BE CITY OF BIRMINGHAM STANDARD, AS DETAILED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE. PER MANUFACTURER, "TRAFFIC-MODEL" HYDRANTS WITH WITH BREAKAWAY FLANGE SHALL BE INSTALLED WITH A 6" THICK CONCRETE COLLAR (2' WIDTH x 2' DEPTH), CENTERED AROUND THE FINISHED GRADE OF THE HYDRANT, WHERE HYDRANTS ARE INSTALLED IN SANDY SOILS OR CONNECTED TO PVC OR HDPE WATER MAINS.
2. HYDRANTS SHALL BE RATED FOR 250 PSI WORKING PRESSURE.
3. HYDRANTS SHALL HAVE A MINIMUM 5-1/4" VALVE OPENING.
4. THE OPERATING NUT SHALL BE A ONE-PIECE DESIGN, MANUFACTURED OF ASTM B-584 BRONZE. IT SHALL BE 1-1/8" PENTAGON - POINT TO FLAT IN SIZE/SHAPE.
5. THE DIRECTION OF OPENING SHALL BE LEFT. AN ARROW SHALL BE CAST ON THE TOP TO THE HYDRANT TO INDICATE THE OPENING DIRECTION.
6. HYDRANTS SHALL HAVE A DEPTH OF BURY OF 5'6", UNLESS OTHERWISE NOTED.
7. ALL HYDRANTS SHALL BE PAINTED YELLOW ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF YELLOW PAINT AS FURNISHED FROM THE MANUFACTURER (FIELD PAINTING NOT ALLOWED). HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT.
8. ALL FIRE HYDRANT JOINTS SHALL BE TOTALLY RESTRAINED BY THE USE OF MEG-A-LUGS OR OTHER APPROVED RESTRAINED JOINT. THRUST BLOCKS ARE ALSO REQUIRED.
9. ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

VALVE AND SLEEVE NOTES

1. GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES, SHALL BE RESILIENT SEAT WEDGE TYPE WITH MECHANICAL JOINTS AND NON-RISING STEM.
2. ALL GATE VALVES SHALL BE FURNISHED AND INSTALLED SUCH THAT THEY OPEN WHEN TURNED "LEFT" OR COUNTER-CLOCKWISE.
3. ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED.
4. ALL GATE WELL COVERS SHALL BE CITY OF BIRMINGHAM STANDARD AS DETAILED.
5. ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH AN EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY AN EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
6. BUTTERFLY VALVES MAY BE USED FOR VALVES GREATER THAN 16-INCH DIAMETER AND SHALL BE MODEL 2F11 AS MANUFACTURED BY HENRY PRATT COMPANY OR APPROVED EQUAL.
7. TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EAST JORDAN IRON WORKS WITH RESILIENT SEATED GATE VALVES AS APPROVED BY THE CITY OF BIRMINGHAM.
8. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL.

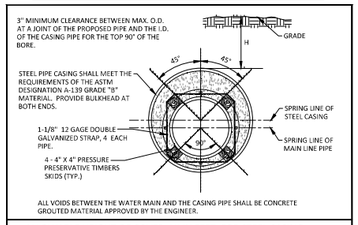
WATER SERVICE (DOMESTIC SUPPLY AND FIRE SUPPRESSION NOTES

14. FOR DOMESTIC SUPPLY AND FIRE SUPPRESSION BUILDING WATER SERVICES: A SINGLE TAP IS ALLOWED ON THE WATER MAIN, WHICH SHALL SPLIT INTO SEPARATE DOMESTIC AND FIRE SUPPRESSION LINES OUTSIDE OF THE BUILDING, SHALL BE USED UNLESS OTHERWISE APPROVED BY CITY.
16. VALVES TO BE INSTALLED ON EACH INDIVIDUAL LEAD ON THE EXTERIOR OF THE BUILDING.
17. EASEMENTS FOR WATER MAIN LEADS REQUIRED UP TO THE EXTERIOR SHUT OFF VALVE.
18. CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000. ALL STOPS SHALL BE CONSTRUCTED OF HEAVY-DUTY BRASS COMPONENTS MEETING THE REQUIREMENT OF ASTM B62. ALL STOPS SHALL HAVE AN AWAA TAPER THREADED INLET WITH COPPER FLARE STRAIGHT CONNECTION OUTLET. CORPORATION STOPS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C800.
19. CURB STOP VALVES SHALL BE MCDONALD, TYPE 76100, 1 BALL CURB, FLARE x FLARE-NL. TYPICAL RESIDENTIAL CURB STOP VALVE BOXES SHALL BE BY GENERAL FOUNDRY, BUFFALO STYLE BOX, SCREW-TYPE (PRODUCT #37095E). WHERE CURB STOP VALVES WILL BE LOCATED WITHIN PAVEMENT, A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX SHALL BE FURNISHED AND INSTALLED TO PROVIDE A RIM ELEVATION FLUSH WITH THE SURROUNDING PAVEMENT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

ACCEPTANCE OF NEW WATER MAINS

1. PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
   - 1.1) PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH CITY OF BIRMINGHAM AND OAKLAND CUNTY REQUIREMENTS
   - 1.2) ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE CITY OF BIRMINGHAM,
   - 1.3) THE CITY OF BIRMINGHAM MUST BE PROVIDED WITH THE BILL OF SALE.
   - 1.4) ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE CITY OF BIRMINGHAM.
   - 1.5) THE CITY OF BIRMINGHAM MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF BIRMINGHAM FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN, AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
3. THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE CITY OF BIRMINGHAM AND OAKLAND COUNTY.
4. THE WATER MAIN SHALL PASS A TEST OF 150 PSI FOR A TWO (2) HOUR PERIOD. WATER LOSS SHALL NOT EXCEED A RATE OF 11.65 U.S. GALLONS PER INCH DIAMETER, PER MILE OF WATERLINE IN TWENTY-FOUR (24) HOURS.
5. WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3 1/2 INCH DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I., OR HIGHER.
6. PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTION TO THE EXISTING WATER SUPPLY SYSTEM.

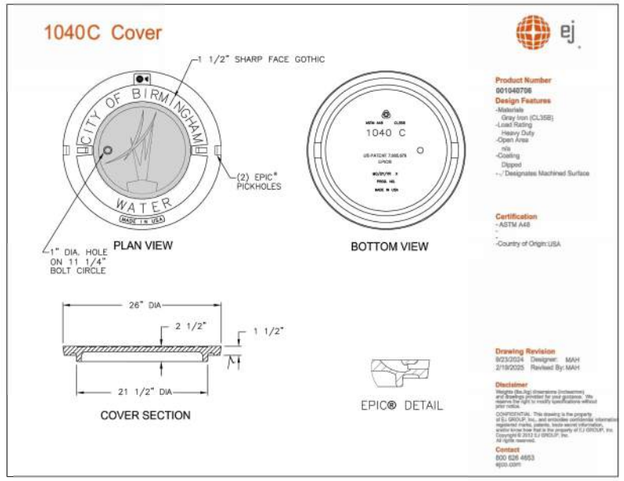
TYPICAL WATER MAIN TUNNEL CASING DETAIL



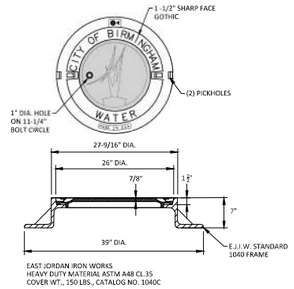
ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

WALL THICKNESS (IN.)		STEEL CASING OUTSIDE DIAMETER (IN.)									
FRACT.	DEC.	12	14	16	18	20	24	28	30	36	42
3/16	0.1875	39	30	24	21	19	17	16			
1/4	0.250	50	50	39	31	27	21	19	18	16	
5/16	0.3125			50	48	39	28	23	21	18	17
3/8	0.375				50	50	39	29	27	22	19
7/16	0.4375						50	39	34	26	21
1/2	0.500							50	44	31	25
9/16	0.5625								50	39	30
5/8	0.625									48	35

1. FOR 36" WATER MAIN PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.



CITY OF BIRMINGHAM - GATE WELL COVER
(FURNISH & INSTALL W/ STANDARD EJIW 1040 FRAME)



CITY OF BIRMINGHAM GATE WELL
COVER & STANDARD FRAME

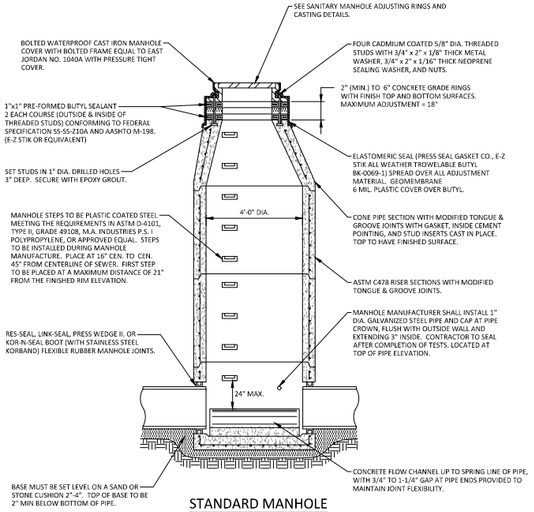
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

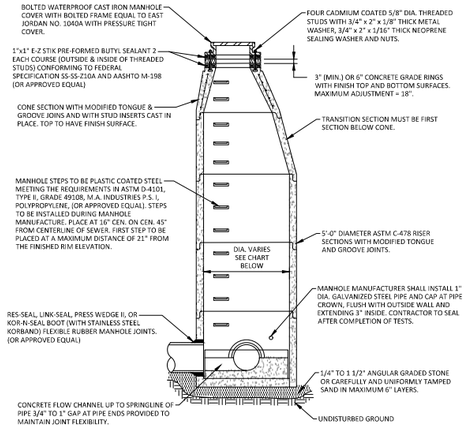
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STANDARD MANHOLE

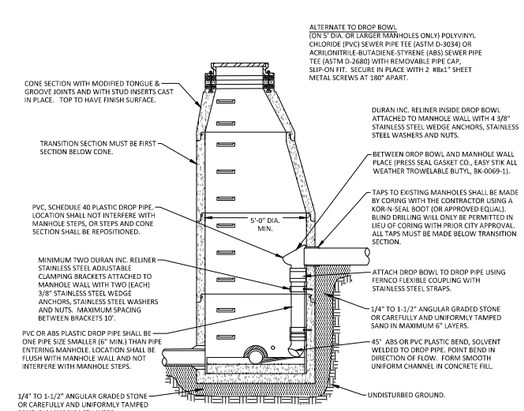
SEWER LESS THAN 20' DEEP -
PIPE DIAMETER 18 INCHES OR LESS



STANDARD OVERSIZED MANHOLE

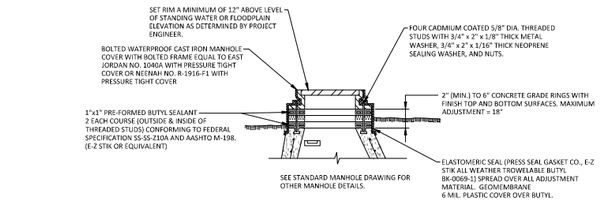
MANHOLE SIZING CHART

MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.	MAX. PIPE SIZE FOR RIGHT ANGLE INST.
5'	36"	24"
6'	42"	36"
7'	60"	42"

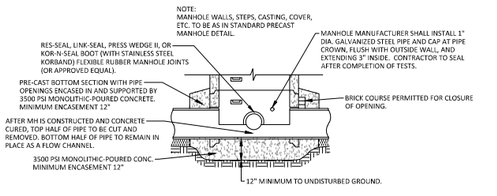


INTERIOR DROP CONNECTION

SEWER SIZE	DROP SIZE	MH SIZE
UP TO 10"	8"	5'
UP TO 18"	10"	5'

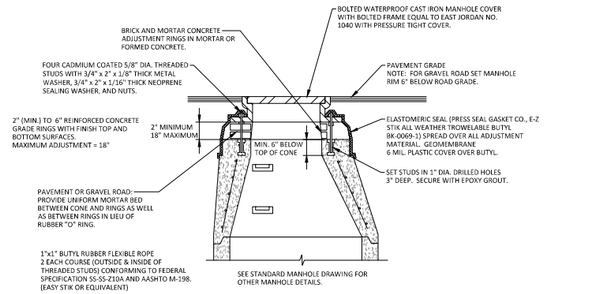


MANHOLE WITHIN FLOOD PRONE AREAS

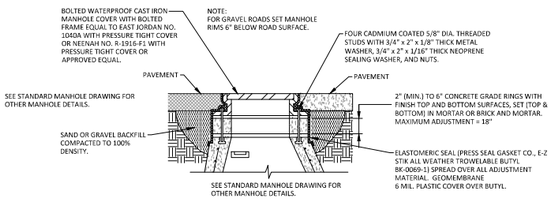


MANHOLE CONSTRUCTED OVER EXISTING SEWER

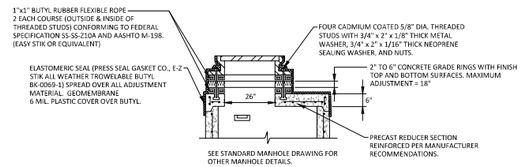
FOR LOCAL SANITARY SEWER EXTENSION CONNECTING
DIRECTLY OR INDIRECTLY TO OCWRC SYSTEMS



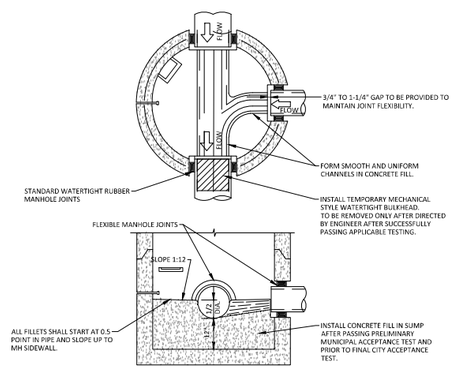
SANITARY MANHOLE ADJUSTING RINGS & CASTING DETAIL



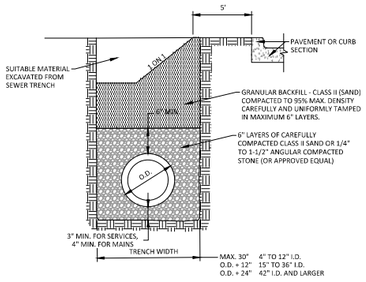
MANHOLE TOPS WITHIN PAVEMENT AREAS



FLAT TOP MANHOLE

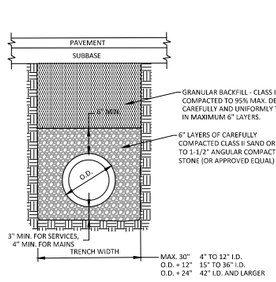


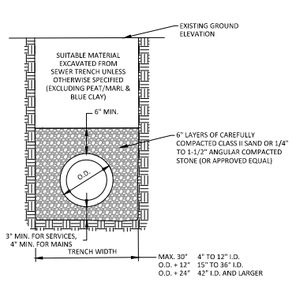
SUMP MANHOLE FOR TESTING, CLEANING AND DEWATERING



TRENCH DETAIL "A"

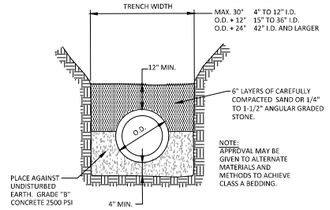
SEWER UNDER ROAD BED OR WITHIN
THE INFLUENCE OF ROAD BED





TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED



CONCRETE CRADLE

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Sanitary & Combined Sewer Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-1

SANITARY & COMBINED SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY & COMBINED SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.

2. AT ALL CONNECTIONS AND BEFORE START OF CONSTRUCTION, THE CONTRACTORS MUST OBTAIN THE REQUIRED CITY OF BIRMINGHAM, WRC SEWER INSPECTION, AND MICHIGAN E.G.L.E. PART 41 PERMITS. THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. FINAL ACCEPTANCE TESTS MUST BE WITNESSED BY CITY PERSONNEL AND MUST BE SCHEDULED IN ADVANCE.

3. NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (OCWRC) STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY THE CITY MAY BE USED FOR SANITARY & COMBINED SEWER CONSTRUCTION.

4. AT ALL CONNECTIONS TO AN EXISTING SEWER, OR EXTENSION THERETO, A WATERTIGHT BULKHEAD WITH A CAPPED ONE INCH DIAMETER PIPE TO PERMIT MEASURING INFILTRATION SHALL BE PROVIDED. A TEMPORARY 12-INCH DEEP SUMP SHALL ALSO BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL.

5. AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.

6. ALL SANITARY & COMBINED SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.

7. ALL SANITARY & COMBINED SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

8. ALL SANITARY & COMBINED SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.

9. SANITARY AND COMBINED SEWER MAIN PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):

   A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
   - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
   - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.

   B. POLYVINYL CHLORIDE PIPE (PVC):
   - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
   - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.)
   - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE) (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
   - PVC COMPOUNDS TO MEET ASTM D-1784.

10. SANITARY AND COMBINED MANHOLE STRUCTURE REQUIREMENTS:
   - ALL NEW MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS, PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - RES-SEAL, LINK-SEAL, PRESS WEDGE II, OR KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.

11. SANITARY SEWER LEAD CONNECTIONS TO TAP INTO MAINLINE, NOT TAP AT MANHOLE. PIPE SHALL BE POLYVINYL CHLORIDE PIPE (PVC) - ASTM D-2241, SDR 23.5, 6" DIAMETER. PVC COMPOUNDS TO MEET ASTM D-1784.

12. SANITARY LEADS ARE PRIVATE, UP TO THE CONNECTION POINT TO THE MAINLINE PUBLIC SEWER, INCLUDING THE CONNECTION.

13. ALL NEW MANHOLES SHALL HAVE CITY APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE- CAST MANHOLE CONE SECTIONS SHALL BE CITY APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS, AS INDICATED.

14. AT ALL CONNECTIONS TO MANHOLES, INTERIOR DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES.

15. TAPS TO EXISTING MANHOLES SHALL BE MADE BY CORING. THE CONTRACTOR SHALL PLACE A KOR-N-SEAL BOOT (OR APPROVED EQUAL) AFTER CORING IS COMPLETED. BLIND DRILLING WILL NOT BE PERMITTED IN LIEU OF CORING.

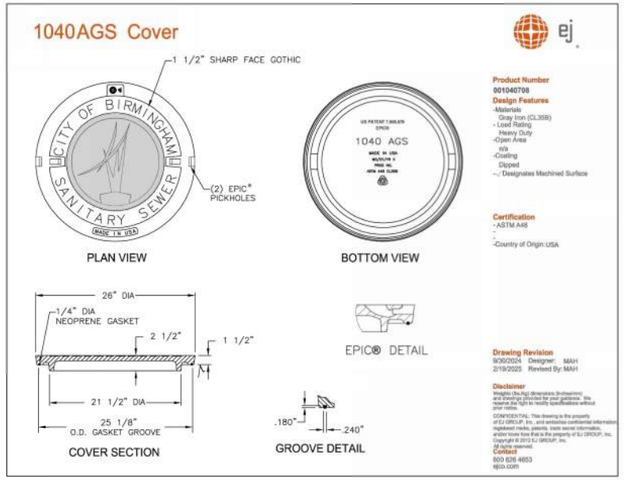
16. NEW MANHOLES CONSTRUCTED DIRECTLY ON CITY OR WRC SEWERS SHALL BE PROVIDED WITH APPROPRIATE LETTERED MANHOLE COVERS. NEW MANHOLES BUILT OVER AN EXISTING SANITARY SEWER SHALL HAVE MONOLITHIC POURED BOTTOMS.

17. NO GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.

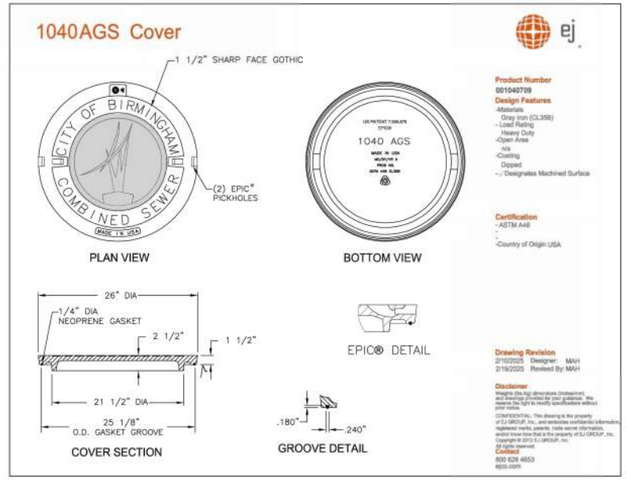
18. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.

19. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY OR COMBINED SEWER AND WATER MAIN.

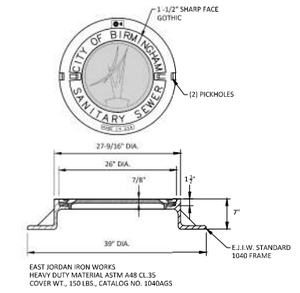
20. CLEANOUTS FOR SANITARY SEWER LEADS WITHIN PAVED SURFACE SHALL HAVE TRAFFIC RATED FRAME AND CASTING.



CITY OF BIRMINGHAM MANHOLE COVER - SANITARY SEWER

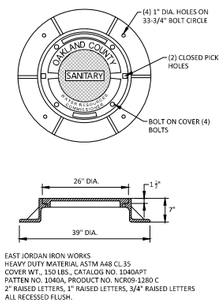


CITY OF BIRMINGHAM MANHOLE COVER - COMBINED SEWER



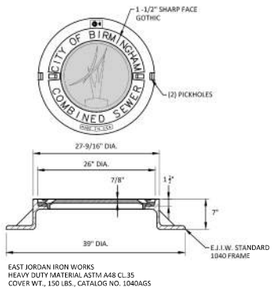
CITY OF BIRMINGHAM SANITARY SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



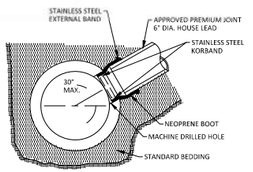
OAKLAND COUNTY WRC SANITARY SEWER MANHOLE COVER

TO BE USED ON COUNTRY DESIGNATED SANITARY SEWER INTERCEPTOR MANHOLES

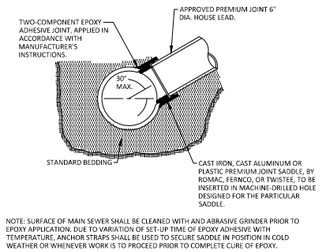


CITY OF BIRMINGHAM COMBINED SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

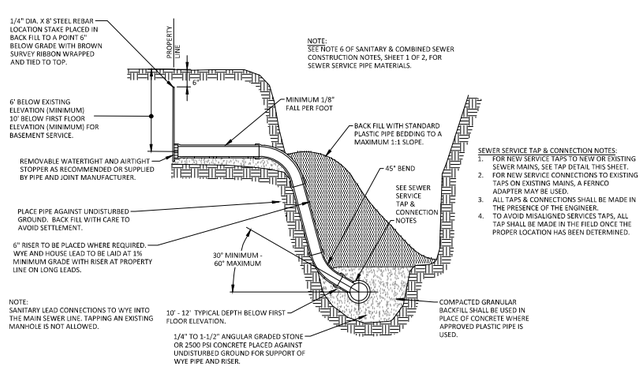


SEWER TAP USING KOR-N-TEE
(ALLOWABLE FOR SEWER MAINS 10" DIA. OR LARGER)

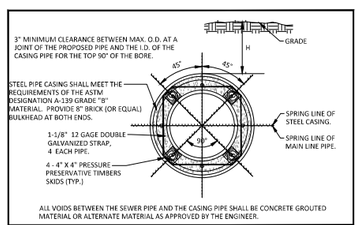


NOTE: SURFACE OF MAIN SEWER SHALL BE CLEANED WITH AND ABRASIVE GRINDER PRIOR TO EPOXY APPLICATION. DUE TO VARIATION OF SET-UP TIME OF EPOXY ADHESIVE WITH TEMPERATURE, ANCHOR STRAPS SHALL BE USED TO SECURE SADDLE IN POSITION IN COLD WEATHER OR WHENEVER WORK IS TO PROCEED PRIOR TO COMPLETE CURE OF EPOXY.

SEWER TAP USING TAPPING SADDLE
(ALLOWABLE FOR ALL SIZES OF MAIN SEWER PIPES)



TYPICAL HOUSE LEAD DETAIL



ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

FRACT.	DEC.	WALL THICKNESS (IN.)	STEEL CASING OUTSIDE DIAMETER (IN.)									
			12	14	16	18	20	24	28	30	36	42
3/16	0.1875		39	30	24	21	19	17	16			
1/4	0.250		50	50	39	31	27	21	19	18	16	
5/16	0.3125				50	48	39	28	23	21	18	17
3/8	0.375					50	50	39	29	27	22	19
7/16	0.4375							50	39	34	26	21
1/2	0.500								50	44	31	25
9/16	0.5625									50	39	30
5/8	0.625										48	35

NOTE:1. FOR 36" SEWER PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.

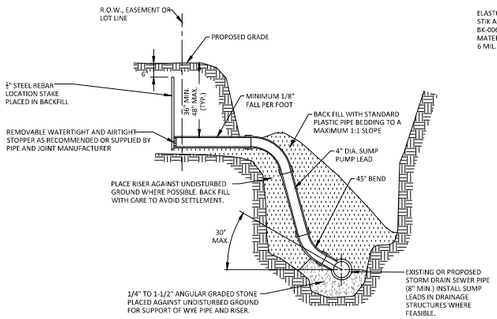
TYPICAL SEWER TUNNEL CASING DETAIL

BIRMINGHAM
A WALKABLE CITY

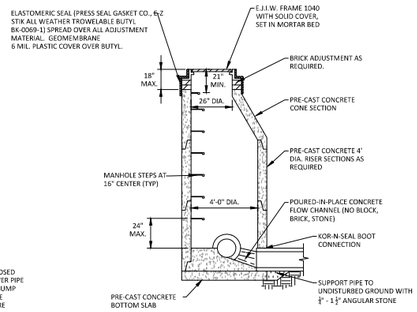
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Sanitary & Combined Sewer Standard Notes & Details 2 of 2

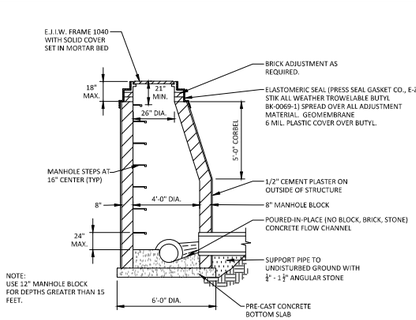
ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-2



HOUSE LEAD DETAIL FOR 4" DIA. PLASTIC SUMP PUMP LEADS



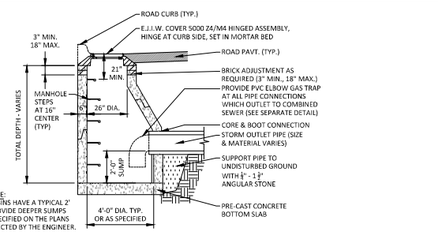
PRE-CAST MANHOLE



NOTE:
USE 12" MANHOLE BLOCK FOR DEPTHS GREATER THAN 15 FEET.

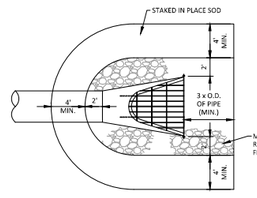
STANDARD MANHOLE DETAILS

BLOCK MANHOLE

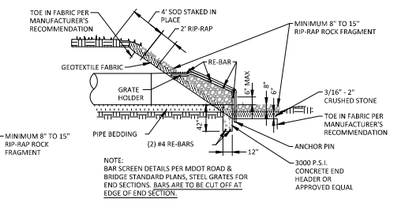


SUMP NOTE:
CATCH BASINS HAVE A TYPICAL 2' SUMP. PROVIDE DEEPER SUMPS WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PRE-CAST CATCH BASIN DETAIL (IN ROAD CURB LINE)

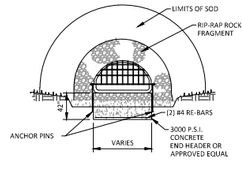


PLAN VIEW



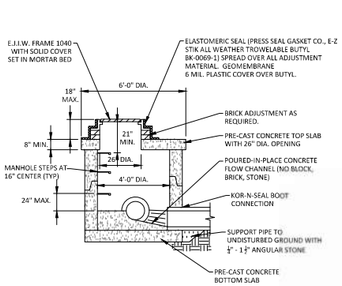
NOTE:
BAR SCREEN DETAILS PER MDOT ROAD & BRIDGE STANDARD PLANS. STEEL GRATES FOR END SECTIONS. BARS ARE TO BE CUT OFF AT EDGE OF END SECTION.

PROFILE VIEW

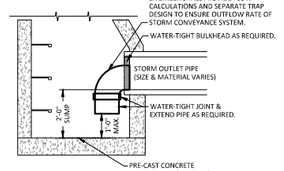


END VIEW

END SECTION AND BAR SCREEN DETAIL

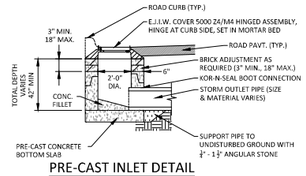


PRE-CAST LOW HEAD MANHOLE DETAIL

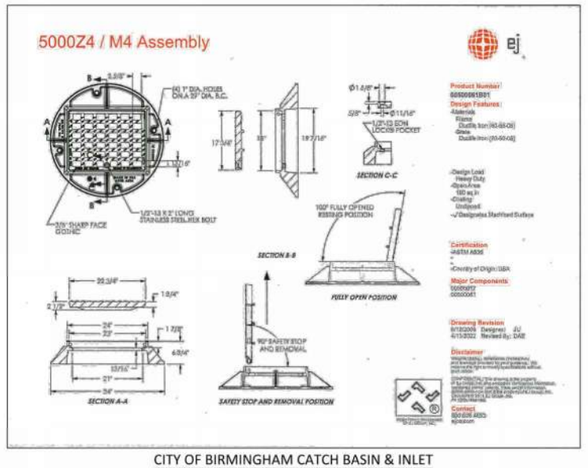


PVC ELBOW GAS TRAP

NOTE:
REQUIRED AT ALL STORM PIPE CONNECTIONS WHICH OUTLET TO COMBINED SEWER



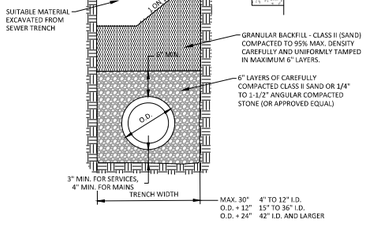
PRE-CAST INLET DETAIL (IN ROAD CURB LINE)



CITY OF BIRMINGHAM CATCH BASIN & INLET FRAME & COVER - STORM SEWER

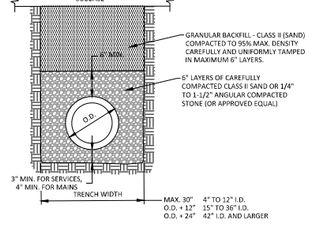
STORM DRAIN SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM. ALL STORM SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.
2. ALL STORM DRAIN SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.
3. ALL STORM DRAIN SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.
4. ALL STORM DRAIN SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.
5. STORM DRAIN SEWER DRAINAGE PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):
   - A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
     - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
     - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.
   - B. POLYVINYL CHLORIDE PIPE (PVC):
     - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
     - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.
     - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
     - PVC COMPOUNDS TO MEET ASTM D-1784
   - C. HIGH-DENSITY POLYETHYLENE PIPE (HDPE):
     - 4" OR 6" DIAMETER ALLOWABLE FOR PAVEMENT UNDERDRAIN APPLICATIONS.
     - SINGLE WALL, CORRUGATED , PERFORATED PIPE SUITABLE TO TRAFFIC LOADING APPLICATIONS.
     - PIPE SHALL MEET AASHTO M252, TYPE C OR CP
     - JOINTS SHALL MEET SOIL-TIGHT REQUIREMENTS PER AASHTO M252 OR M294
   - D. CORRUGATED STEEL PIPE REQUIREMENTS (CSP) (ONLY ALLOWED FOR USE IN SMALL DIAMETER (15" DIA. OF LESS) DRAINAGE CULVERTS):
     - CORRUGATED STEEL PIPE SHALL BE PROVIDED CORRESPONDING TO THE DIAMETER OR ARCH SHAPE (RISE AND SPAN) AS SPECIFIED ON THE PLANS.
     - ALL CORRUGATED STEEL PIPE SHALL BE GALVANIZED AND COATED WITH BITUMINOUS ASPHALT TO RETARD CORROSION. AS AN ALTERNATE TO THIS REQUIREMENT, AN ALUMINIZED STEEL PIPE, OR APPROVED EQUAL, MAY BE SUBSTITUTED.
     - ALL CORRUGATED STEEL PIPE SHALL BE JOINED TOGETHER WITH A WATERTIGHT CIRCUMFERENTIALLY CORRUGATED STEEL COUPLING BAND FURNISHED WITH TWO (2) RUBBER GASKETS.
     - CORRUGATED STEEL PIPE SHALL HAVE WELDED SEAMS WITH HELICAL CORRUGATIONS. EACH END OF THE HELICAL CORRUGATED PIPE SHALL BE RE-ROLLED TO AN ANNULAR CONFIGURATION TO ACCOMMODATE THE WATERTIGHT COUPLING BAND DESCRIBED HEREIN. RIVETED OR LOCK SEAM PIPE IS UNACCEPTABLE.
6. STORM MANHOLE, CATCH BASIN, AND INLET STRUCTURE NOTES AND REQUIREMENTS:
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE, CATCH BASIN, OR INLET STRUCTURE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS AT ALL PIPE CONNECTIONS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.
7. ALL END SECTIONS 18" AND LARGER SHALL BE PROVIDED WITH A GALVANIZED BAR SCREEN.
8. STANDARD RIP-RAP SHALL BE 8"-15" FRAGMENTED NATURAL ROCK. HEAVY RIP-RAP SHALL BE 16"-24" FRAGMENTED NATURAL ROCK. (NO BROKEN CONCRETE SHALL BE ALLOWED)
9. SUMP PUMP LEAD REQUIREMENTS:
   - SUMP PUMP LEADS CONNECTED TO A MANHOLE SHALL BE CORED AND BOOTED.
   - SUMP PUMP MAINS AND LEADS SHALL BE SDR 23.5, SCHEDULE 40, NON PERFORATED, SOLID WALL, ABS TRUSS, PVC TRUSS, ADS N-12 WT, OR APPROVED EQUAL, WITH PREMIUM JOINTS.
   - ENDS OF ALL 4" SUMP PUMP LEADS SHALL BE TEMPORARILY CAPPED AND THEIR LOCATION STAKED, WITNESSED AND RECORDED.
   - ALL SUMP PUMP LEADS TO BE TAKEN TO THE PROPERTY LINE, EASEMENT LINE OR AS INDICATED ON THE PLAN.
   - SUMP PUMP MAINS MUST HAVE A CLEANOUT WITH A MINIMUM INSIDE DIAMETER OF 24", CONSTRUCTED AT CHANGES OF ALIGNMENT, ENDS OF SUMP PUMP MAINS OR AS INDICATED ON THE PLAN.



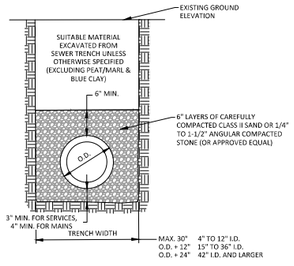
TRENCH DETAIL "A"

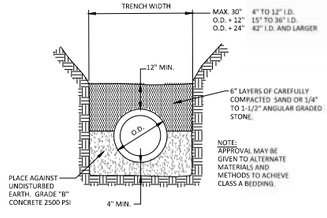
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED



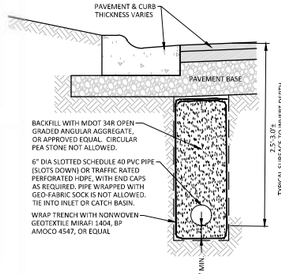
TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED





CONCRETE CRADLE



6" PERFORATED UNDERDRAIN TRENCH DETAIL

PIPE SCHEDULE

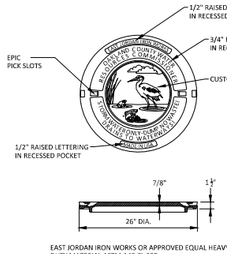
WITHIN 1 ON 1 ZONE OF INFLUENCE OF ROADWAY MEASURED FROM BACK OF CURB.	< 3' COVER 3' - 10' COVER > 10' COVER	C76 - CL V C76 - CL IV C76 - CL V OR APPROVED EQUAL
OUTSIDE ZONE OF INFLUENCE OR ROADWAY, IN REAR YARD OR GREENBELT.	SMOOTH LINED CORRUGATED HDPE, CPVC A 2000, C-76 CL IV OR V, SCH. 40 PVC, SDR 23.5, SDR 26, CSP, OR APPROVED EQUAL	
DRIVE CULVERTS	C-76 CL IV OR CORRUGATED METAL PIPE (CMP)	

NOTES:
1. ALL PIPE TO BE INSTALLED PER MANUFACTURER RECOMMENDED STANDARDS AND AS SHOWN ON PLANS.
2. ALL PIPE SHALL BE FURNISHED WITH PREMIUM JOINTS.

TYPICAL M.H. GRATES

APPLICATION	GRATE ID NUMBER
CURB AND GUTTER	EJIW 5000 Z4/M4 HINGED (SEE DETAIL THIS SHEET)
PAVEMENT	EJIW 1040-M1
GREEN BELT	EJIW 1040-N
DITCH	EJIW 6508 EJIW 6517

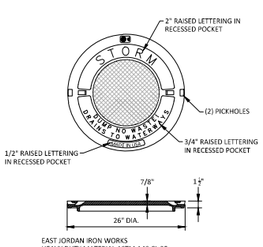
OR APPROVED EQUAL



EAST JORDAN IRON WORKS OR APPROVED EQUAL HEAVY DUTY MATERIAL ASTM A48 CL 35B CATALOG NO. 1040A PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD. 2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS ALL IN RECESSED POCKET.

OAKLAND COUNTY WRC STORM SEWER MANHOLE COVER

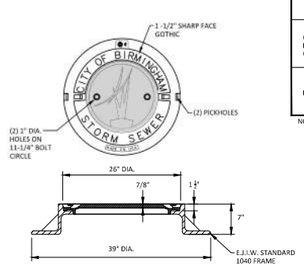
TO BE USED ONLY FOR MANHOLES ON DESIGNATED COUNTRY DRAINS



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL 35
COVER WT., 150 LBS., CATALOG NO. 1040A
2" HIGH RAISED LETTERS, 3/4" WIDE RAISED LETTERS
ALL RECESSED FLUSH.

PRIVATE STORM SEWER MANHOLE COVER

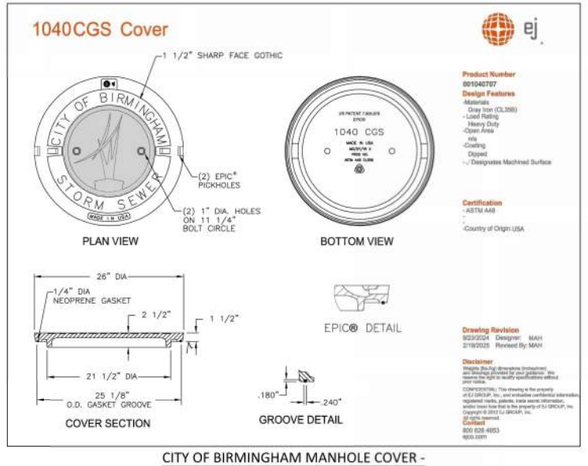
TO BE USED ON ALL STORM SEWER MANHOLES OTHER THAN COUNTY OR CITY DESIGNATED DRAINS.



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL 35
COVER WT., 150 LBS., CATALOG NO. 1040CGS

CITY OF BIRMINGHAM STORM SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



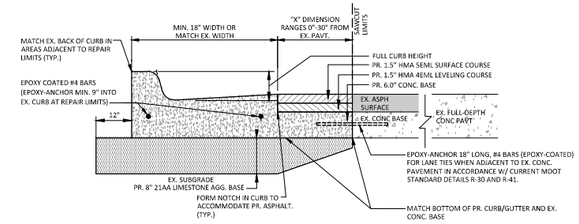
CITY OF BIRMINGHAM MANHOLE COVER - STORM SEWER

BIRMINGHAM
A WALKABLE CITY

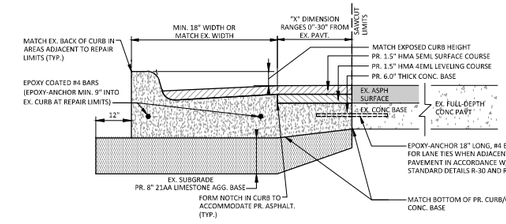
City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Storm Drain Sewer Standard Notes & Details 1 of 1

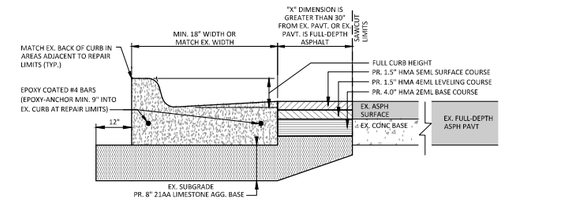
ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SD-1



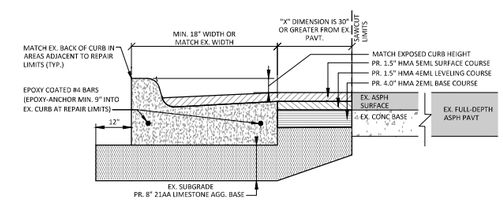
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



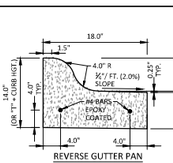
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



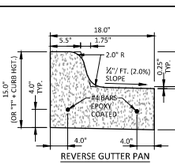
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



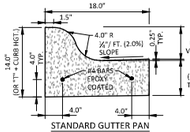
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



REVERSE GUTTER PAN

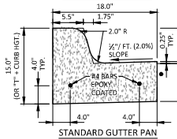


REVERSE GUTTER PAN



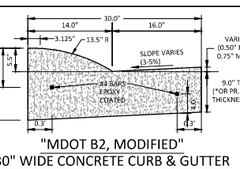
STANDARD GUTTER PAN

"BIRMINGHAM ROLL"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

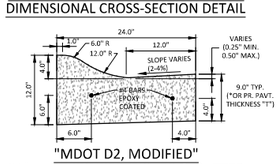


STANDARD GUTTER PAN

"MDOT F2, MODIFIED"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



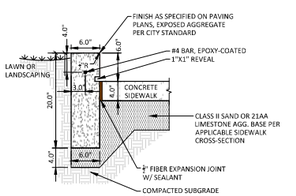
"MDOT B2, MODIFIED"
30" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



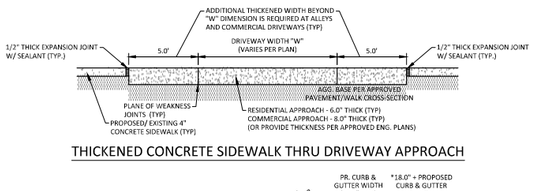
"MDOT D2, MODIFIED"
24" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

CONCRETE CURB & GUTTER NOTES

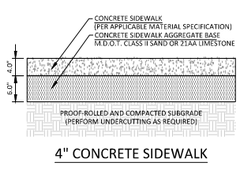
1. REFER TO M.D.O.T. STANDARD PLAN R-30 (CURRENT VERSION) FOR TYPICAL CURB AND GUTTER DETAILS, WHICH SHALL BE USED EXCEPT AS MODIFIED HEREIN, OR UPON DIRECTION BY THE ENGINEER.
2. PER M.D.O.T. STANDARD PLAN R-30, EPOXY-COATED #4 LANE TIES SHALL BE INSTALLED WHEN CONCRETE CURB & GUTTER IS INSTALLED ADJACENT TO EXISTING OR PROPOSED FULL-DEPTH CONCRETE PAVEMENT. LANE TIES MAY BE OMITTED WHEN CURB IS FORMED INTEGRAL TO A CONCRETE PAVEMENT CROSS-SECTION.
3. ALL CONCRETE CURB & GUTTER INSTALLED WITHIN M.D.O.T.- OR ROAD COMMISSION FOR OAKLAND COUNTY (R.C.O.C.) PUBLIC RIGHT-OF-WAYS SHALL ADHERE TO STANDARDS AND SPECIFICATIONS OF APPROVED PERMITS REQUIRED TO COMPLETE THE WORK'S THE GOVERNING AGENCIES.
4. ALL PROPOSED CONCRETE CURB & GUTTER SHALL PROVIDE THE TYPICAL CURB HEIGHTS FOR EACH TYPE OF CURB AS SHOWN IN THE DIMENSIONAL CROSS-SECTION DETAILS, EXCEPT AT LOCATIONS WHERE CURB & GUTTER IS REQUIRED TO MATCH EXISTING OR WHERE ALTERNATE CURB HEIGHTS ARE SPECIFIED ON THE PLANS.
5. PREPARE THE EXISTING AGGREGATE SUBBASE LAYER BELOW CURB AND GUTTER BY CONDITIONING, GRADING, AND/OR RE-SHAPING THE SUBBASE, AND FURNISHING, PLACING, AND COMPACTING SUPPLEMENTAL THICK 21AA AGGREGATE BASE TO ACHIEVE PROPOSED PLAN GRADE. ALL NECESSARY PREPARATION WORK SHALL BE INCLUDED IN APPLICABLE PAY ITEMS FOR CONCRETE CURB & GUTTER.
6. PER THE DIMENSIONAL CROSS-SECTION DETAILS, THE PROPOSED PAVEMENT THICKNESS,"T" IS EQUAL TO THE THICKNESS OF PROPOSED FULL-DEPTH CONCRETE PAVEMENT ADJACENT TO THE CURB & GUTTER, POURED SEPARATELY OR INTEGRAL. THE PROPOSED SLOPE WITHIN THE GUTTER PAN IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.
7. TYPICAL USE OF THE VARIOUS TYPES OF CONCRETE CURB AND GUTTER ARE AS FOLLOWS (OR IN ACCORDANCE WITH THE APPROVED PLANS OR PER DIRECTION BY THE ENGINEER):
   - 7.A. "BIRMINGHAM ROLL" DETAIL: LOCAL RESIDENTIAL STREETS
   - 7.B. "MDOT F2, MODIFIED" DETAIL: RESIDENTIAL, COMMERICAL & INDUSTRIAL COLLECTOR STREETS
   - 7.C. "MDOT D2, MODIFIED" DETAIL: MOUNTABLE CURB APPLICATIONS
   - 7.D. "MDOT B2, MODIFIED" DETAIL: DRIVEWAY OR ROADWAY MEDIANS



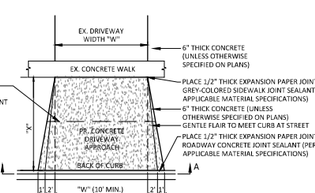
EXPOSED AGGREGATE LANDSCAPE PLANTER CURB



THICKENED CONCRETE SIDEWALK THRU DRIVEWAY APPROACH



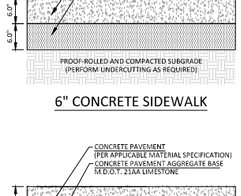
4" CONCRETE SIDEWALK



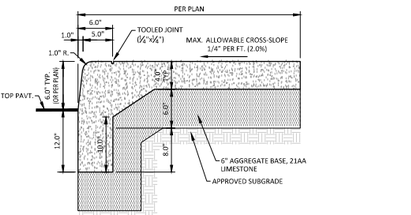
CONCRETE DRIVEWAY APPROACH - DETAIL 'L'



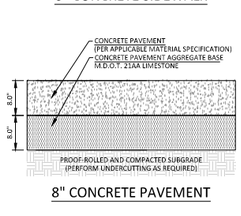
MDOT DRIVEWAY OPENING DETAIL 'M'



6" CONCRETE SIDEWALK



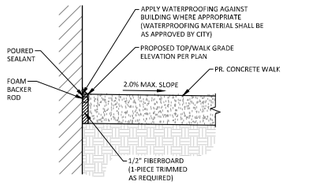
MONOLITHIC CURB AND WALK



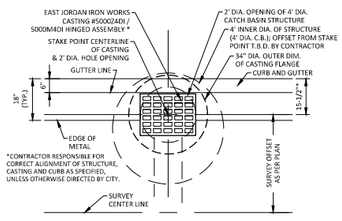
8" CONCRETE PAVEMENT

GENERAL PAVEMENT REMOVAL & CONSTRUCTION NOTES

1. PAVEMENTS SHALL BE OF THE TYPE, THICKNESS, AND CROSS-SECTIONS AS INDICATED HEREIN OR AS PROPOSED ON THE APPROVED ENGINEERING PLANS.
2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT WHERE MODIFIED OR SUPPLEMENTED HEREIN, OR ON THE APPROVED ENGINEERING PLANS.
3. ALL PAVING CONSTRUCTION OCCURRING WITHIN THE CITY OF BIRMINGHAM PUBLIC RIGHT-OF-WAY (R.O.W.) REQUIRES THAT THE DEVELOPER OR CONTRACTOR NOTIFY THE CITY ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE, SO THAT THE CITY MAY PROVIDE INSPECTION IF REQUIRED.
4. CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
5. FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.
6. ALL PAVEMENTS CALLED FOR FULL-DEPTH REMOVAL AND REPLACEMENT SHALL BE SAWCUT FULL-DEPTH THROUGH THE PAVEMENT SECTION PRIOR TO REMOVAL.
7. BRICK PAVER WALKS OR DRIVEWAYS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.) SHALL BE REMOVED AS DIRECTED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER IN ADVANCE TO DETERMINE WHETHER THE REMOVED BRICK PAVER MATERIALS SHALL BE SALVAGED AND RETURNED TO THE OWNER OR DISPOSED OF.
8. IN ANY LOCATIONS WHERE ADJACENT PAVEMENTS ARE DAMAGED BEYOND THE PLANNED REMOVAL LIMITS, THE CONTRACTOR SHALL REPLACE THE PAVEMENTS "IN KIND" TO MATCH EXISTING MATERIAL(S), THICKNESS, UNDERLYING AGGREGATE BASE MATERIAL, AND OVERALL PAVEMENT CROSS-SECTION, AT NO ADDITIONAL COST TO THE CITY OR OWNER.
9. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, AND UPON REVIEW AND APPROVAL BY THE CITY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE. CONTRACTORS SHALL COORDINATE WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (DPS) IN ADVANCE OF CUTTING TREE ROOTS TO DETERMINE IF DPS REQUIRES PERSONNEL TO BE ON SITE TO WITNESS THE TREE CUTTING WORK.
10. SOILS, ROCKS, OR OTHER MISCELLANEOUS DEBRIS WHICH ARE REQUIRED TO BE REMOVED TO COMPLETE THE PROPOSED CONSTRUCTION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, AND LEGALLY DISPOSED OF, UNLESS DIRECTED OTHERWISE FROM THE CITY.
11. PAVEMENT SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
12. EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS (INCLUDED IN PAVING WORK).
13. ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
14. FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



EXPANSION JOINT DETAIL AT BUILDING



CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

AMERICANS WITH DISABILITIES ACT (A.D.A.) SIDEWALK, RAMP & LANDING COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

1. THE RUNNING SLOPE OF CONSTRUCTED WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5.0%).
2. THE CROSS-SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48 (2.0%).
3. CHANGES IN LEVEL OF 1/4 INCH (0.02 FEET) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.
4. SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

5. CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.
7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 (2.0%).
8. THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12 (8.3%).
9. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 (10.0%).
10. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.
11. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20 (5.0%). THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.
12. CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL
13. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
14. WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').
15. DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.
16. SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.
17. DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.
18. DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.
19. RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING / TURNING SPACE REQUIREMENTS:

20. LANDINGS SHALL BE REQUIRED AT TOP OF CURB RAMPS AND TOP AND BOTTOM OF CURB RAMPS AND OTHER SIDEWALK RAMPS (SIDEWALKS WITH LONGITUDINAL SLOPE OF 5.0% OR GREATER).
21. LANDINGS SHALL BE PROVIDED WITH SLOPES NOT STEEPER THAN 1:48 (2.0%) IN ALL DIRECTIONS.
22. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.
23. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING AREA WITH DIMENSIONS OF 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.
24. TURNING SPACES, SUCH AS KEY FLAGS WHERE TWO SEPARATE SIDEWALK DIRECTIONAL ALIGNMENTS INTERSECT, SHALL MEET THE SAME REQUIREMENTS AS LANDINGS AS DEFINED ABOVE.

PAVEMENT MATERIAL SPECIFICATIONS

AGGREGATE BASE:

1. ROAD PAVEMENTS, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS
   - 1.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 8.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
2. RESIDENTIAL DRIVEWAYS
   - 2.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
3. CONCRETE SIDEWALKS
   - 3.A. PROVIDE CRUSHED LIMESTONE (MDOT 21AA GRADATION) OR MDOT CLASS II SAND (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.

HOT MIX ASPHALT (H.M.A.) MIXTURES:

2. UNLESS OTHERWISE SPECIFIED ON THE APPROVED ENGINEERING PLANS, THE FOLLOWING HOT MIX ASPHALT (H.M.A.) MIXTURES SHALL BE USED FOR NEW ASPHALT PAVEMENT CONSTRUCTION AND ASPHALT ROAD REPAIRS:
   - 2.A. SURFACE COURSE: MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.B. LEVELING COURSE: MDOT HMA MIXTURE NO. 4EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.C. BASE COURSE: MDOT HMA MIXTURE NO. 3EML (MAX. APPLICATION RATE OF 330 LB/SYD.)
3. ALL MIX DESIGNATIONS SHALL MEET APPLICABLE MINIMUM REQUIREMENTS PER MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
4. BINDER FROM RECYCLED ASPHALT PAVEMENT (RAP) MATERIALS SHALL BE LIMITED TO NOT MORE THAN 17 PERCENT OF THE TOTAL MIX BINDER CONTENT BY WEIGHT. FINAL BINDER FOR ALL MIXES SHALL MEET SPECIFICATION REQUIREMENTS FOR PERFORMANCE-GRADE PG64-28.
5. TACK/BOND COAT SHALL BE SS-1H WITH A MINIMUM APPLICATION RATE OF 0.10 GAL/SQUARE YARD.

STANDARD PORTLAND CEMENT CONCRETE (P.C.C.) MIXTURES:

1. CONCRETE PAVEMENT, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS:
   - 1.A. CONCRETE GRADE 3500HP PER MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
     - 1.A.A. ALL PCC MIXTURES REQUIRE:
       - 1.A.A.A. COARSE AGGREGATE MATERIAL MEETING "OPTIMIZED AGGREGATE GRADATION REQUIREMENTS" (IN ACCORDANCE WITH SECTION 10.04.03 OF THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION).
       - 1.A.A.B. FINE AGGREGATE MATERIAL MEETING MDOT SPECIAL PROVISION 20SP-1002A-01 REQUIREMENTS FOR ALKALI SILICA REACTIVITY.
       - 1.A.A.C. 25 TO 40 PERCENT REPLACEMENT OF THE PORTLAND CEMENT CONTENT IN THE PCC MIXTURE WITH A SUPPLEMENTARY CEMENTITIOUS MATERIAL (GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS) OR OTHER APPROVED EQUAL).
     - 2.A.A.C. A MAXIMUM WATER CEMENT RATIO OF 0.43 TO REDUCE SCALING POTENTIAL.
     - 2.A.B. FOR NEW CONCRETE PAVEMENT AND/OR CURB INSTALLATIONS WHICH REQUIRE MORE THAN 10 CUBIC YARDS OF PCC REDI-MIX MATERIAL (APPROXIMATELY 1 TRUCKLOAD), THE PCC MIXTURE SHALL ALSO CONTAIN A VISCOSITY-MODIFYING ADMIXTURE INTENDED TO IMPROVE FINISHING CHARACTERISTICS AND REDUCE THE POTENTIAL FOR SURFACE SCALING.

Wimbleton Drive Phase 2 Project
Sewer and Water Lateral Special Assessment District

Sidwell Number	Street Address	Sewer Lateral Length (ft)	Total Cost Sewer Lateral	Water Lateral Length (ft)	Total Cost Water Lateral	Total Costs	
1925255007	541 WIMBLETON DR	40	$ 1,990.80	30	$ 1,066.20	$ 3,057.00	
1925255008	921 WARWICK DR	0	$ -	0	$ -	$ -	
1925280008	625 WIMBLETON DR	0	$ -	0	$ -	$ -	
1925280009	647 WIMBLETON DR	20	$ 995.40	0	$ -	$ 995.40	
1925280010	669 WIMBLETON DR	31	$ 1,542.87	40	$ 1,421.60	$ 2,964.47	
1925280025	701 WIMBLETON DR	0	$ -	0	$ -	$ -	
1925280026	715 WIMBLETON DR	22	$ 1,094.94	0	$ -	$ 1,094.94	
1925280027	733 WIMBLETON DR	0	$ -	0	$ -	$ -	
1925280028	777 WIMBLETON DR	0	$ -	0	$ -	$ -	
1925280029	921 POPPLETON AVE	0	$ -	0	$ -	$ -	
1925280030	939 POPPLETON AVE	0	$ -	0	$ -	$ -	
1925281005	928 POPPLETON AVE	0	$ -	0	$ -	$ -	
1925281010	887 WIMBLETON DR	20	$ 995.40	55	$ 1,954.70	$ 2,950.10	
1925281033	923 WIMBLETON DR	20	$ 995.40	55	$ 1,954.70	$ 2,950.10	
1925281040	983 WIMBLETON DR	0	$ -	0	$ -	$ -	
1925281041	1005 WIMBLETON DR	0	$ -	0	$ -	$ -	
1925281031	1054 ABBEY RD		$ -		$ 22.21	$ 22.21	
1925281030	1064 ABBEY RD		$ -		$ 22.21	$ 22.21	
1925281029	1074 ABBEY RD		$ -		$ 22.21	$ 22.21	
1925281028	1084 ABBEY RD		$ -		$ 22.21	$ 22.21	
1925281027	971 N ADAMS RD		$ -		$ 22.21	$ 22.21	
1925281026	961 N ADAMS RD		$ -		$ 22.21	$ 22.21	
1925281025	951 N ADAMS RD		$ -		$ 22.21	$ 22.21	
1925281024	941 N ADAMS RD UNIT 9		$ -		$ 22.21	$ 22.21	
1925281023	931 N ADAMS RD		$ -	10	$ 22.21	$ 22.21	
1925281022	921 N ADAMS RD		$ -		$ 22.21	$ 22.21	
1925281021	911 N ADAMS RD		$ -		$ 22.21	$ 22.21	
1925281020	901 N ADAMS RD		$ -		$ 22.21	$ 22.21	
1925281019	1085 WIMBLETON DR		$ -		$ 22.21	$ 22.21	
1925281018	1075 WIMBLETON DR		$ -		$ 22.21	$ 22.21	
1925281017	1065 WIMBLETON DR		$ -		$ 22.21	$ 22.21	
1925281016	1055 WIMBLETON DR		$ -		$ 22.21	$ 22.21	
1925258002	554 WIMBLETON DR	30	$ 1,493.10	21	$ 746.34	$ 2,239.44	
1925258003	612 WIMBLETON DR	41	$ 2,040.57	-	$ -	$ 2,040.57	
1925258004	636 WIMBLETON DR	41	$ 2,040.57	20	$ 710.80	$ 2,751.37	
1925258005	652 WIMBLETON DR	41	$ 2,040.57	20	$ 710.80	$ 2,751.37	
1925258006	680 WIMBLETON DR	41	$ 2,040.57	31	$ 1,101.74	$ 3,142.31	
1925258007	700 WIMBLETON DR	41	$ 2,040.57	35	$ 1,243.90	$ 3,284.47	
1925258008	871 POPPLETON AVE	41	$ 2,040.57	0*	$ -	$ 2,040.57	*
1925282001	812 WIMBLETON DR	62	$ 3,085.74	53	$ 1,883.62	$ 4,969.36	
1925282002	824 WIMBLETON DR	40	$ 1,990.80	0	$ -	$ 1,990.80	
1925282003	840 WIMBLETON DR	40	$ 1,990.80	31	$ 1,101.74	$ 3,092.54	

Wimbleton Drive Phase 2 Project
Sewer and Water Lateral Special Assessment District

Sidwell Number	Street Address	Sewer Lateral Length (ft)	Total Cost Sewer Lateral	Water Lateral Length (ft)	Total Cost Water Lateral	Total Costs
1925282004	868 WIMBLETON DR	40	$ 1,990.80	31	$ 1,101.74	$ 3,092.54
1925282015	886 WIMBLETON DR	40	$ 1,990.80	31	$ 1,101.74	$ 3,092.54
1925282008	900 WIMBLETON DR	41	$ 2,040.57	35	$ 1,243.90	$ 3,284.47
1925282024	930 WIMBLETON DR	0	$ -	0	$ -	$ -
1925282025	980 WIMBLETON DR	0	$ -	0	$ -	$ -
1925282012	1004 WIMBLETON DR	41	$ 2,040.57	30	$ 1,066.20	$ 3,106.77
1925282013	1038 WIMBLETON DR	41	$ 2,040.57	20	$ 710.80	$ 2,751.37
1925282017	1078 WIMBLETON DR	41	$ 291.51	-	$ -	$ 291.51
1925282023	1050 WIMBLETON DR		$ 291.51		$ -	$ 291.51
1925282022	1060 WIMBLETON DR		$ 291.51		$ -	$ 291.51
1925282021	1064 WIMBLETON DR		$ 291.51		$ -	$ 291.51
1925282020	1070 WIMBLETON DR		$ 291.51		$ -	$ 291.51
1925282019	1072 WIMBLETON DR		$ 291.51		$ -	$ 291.51
1925282018	1076 WIMBLETON DR		$ 291.51		$ -	$ 291.51

* Records indicate Lead Water Service, Zero Costs per the State of Michigan

MEMORANDUM

City Clerk's Office

DATE: April 21, 2026

TO: Melissa Coatta, City Engineer

FROM: Mya Brown, Deputy City Clerk

SUBJECT: Clerk's Confirmation of Public Hearing Notice: Water and Sewer Laterals Project, Sewer and Water Lateral Special Assessment District (SAD)

INTRODUCTION:
The public hearing notice process has been completed for replacement and improvements of sewer laterals meeting the requirements of assessments, for all properties within the project area on Wimbleton Drive from Oxford Road to Adams Road (SAD). Please see attachments for further confirmation.

PUBLIC COMMUNICATIONS:
Mailing Date: 04/16/2026
Test Mail Return Date: 04/20/2026
Publishing Dates in the Oakland Press: 04/19/2026
Posted in www.bhamgov/publicnotices

ATTACHMENTS:

1. Public Hearing Notice
2. Addresses
3. Map
4. Mailing Letter
5. Mail Machine Counter Repot
6. Proof of Publishing

NOTICE OF PUBLIC HEARING

BIRMINGHAM CITY COMMISSION

PUBLIC HEARING OF NECESSITY &
PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, May 4, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, May 18, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton Drive from Oxford Road to Adams Road
Nature of Improvement:	This work will include the installation of cape seal treatment for all properties within the project area on Wimbleton Drive from Oxford Road to Adams Road
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 4/19/2026 & 05/03/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012.

The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.

All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Parcel Identification Number	Postal Address
1925255008	921 WARWICK DR
1925255007	541 WIMBLETON DR
1925280008	625 WIMBLETON DR
1925280009	647 WIMBLETON DR
1925280010	669 WIMBLETON DR
1925280025	701 WIMBLETON DR
1925280026	715 WIMBLETON DR
1925280027	733 WIMBLETON DR
1925280028	777 WIMBLETON DR
1925280029	921 POPPLETON AVE
1925280030	939 POPPLETON AVE
1925281005	928 POPPLETON AVE
1925281010	1917 MIDCHESTER DR
1925281033	923 WIMBLETON DR
1925281040	983 WIMBLETON DR
1925281041	1005 WIMBLETON DR
1925281030	1064 ABBEY RD
1925279017	1001 N ADAMS RD
1925279018	1013 N ADAMS RD
1925279019	980 WORTHINGTON RD
1925279021	1049 N ADAMS RD
1925279020	1037 N ADAMS RD
1925279022	PO BOX 1628
1925279023	1063 N ADAMS RD
1925279024	1075 N ADAMS RD
1925279025	33 N MAIN ST
1925279026	410 EVERNIA ST APT 515
1925281016	1055 WIMBLETON DR
1925281017	2820 WOODSLEE DR
1925281018	19091 BEDFORD ST
1925281019	1085 WIMBLETON DR
1925281020	901 N ADAMS RD
1925281021	705 DAVIS AVE
1925281023	1039 N OLD WOODWARD AVE UNIT 5
1925281022	921 N ADAMS RD
1925281024	5823 WELLWOOD DR
1925281025	951 N ADAMS RD
1925281026	1407 WOODGLEN LN
1925281027	971 N ADAMS RD
1925281028	316 SHELL GATE RD
1925281029	1170 ARDEN LN
1925281031	5598 WHITE HALL CIR
1925258002	554 WIMBLETON DR
1925258003	612 WIMBLETON DR
1925258004	636 WIMBLETON DR

1925258005	652 WIMBLETON DR
1925258006	680 WIMBLETON DR
1925258007	700 WIMBLETON DR
1925258008	871 POPPLETON AVE
1925282001	812 WIMBLETON DR
1925282002	824 WIMBLETON DR
1925282003	840 WIMBLETON DR
1925282004	868 WIMBLETON DR
1925282015	886 WIMBLETON DR
1925282008	900 WIMBLETON DR
1925282024	930 WIMBLETON DR
1925282025	980 WIMBLETON DR
1925282012	1004 WIMBLETON DR
1925282013	1038 WIMBLETON DR
1925282023	1050 WIMBLETON DR
1925282017	5964 PELICAN BAY BLVD APT 435
1925282018	1076 WIMBLETON DR
1925282019	1072 WIMBLETON DR
1925282020	1070 WIMBLETON DR
1925282021	1064 WIMBLETON DR
1925282022	1060 WIMBLETON DR

151 Martin St

First Owner Name	POSTALCITY	POSTALSTAT	POSTALZIP5
CATHERINE D DEVOR	BIRMINGHAM	MI	48009
CLIFFORD RAGER	BIRMINGHAM	MI	48009
RICHARD M BRODSKY	BIRMINGHAM	MI	48009
JANE E GREENING	BIRMINGHAM	MI	48009
CAROL JIZMEJIAN	BIRMINGHAM	MI	48009
ROHIT ARORA	BIRMINGHAM	MI	48009
JACLYN BOUCHARD	BIRMINGHAM	MI	48009
MEIXUAN LIM	BIRMINGHAM	MI	48009
BRANDON JACOBS	BIRMINGHAM	MI	48009
SAMUEL G SCHWARTZ	BIRMINGHAM	MI	48009
JULIA DOYLE	BIRMINGHAM	MI	48009
MELINDA RANDICK SMART	BIRMINGHAM	MI	48009
GUERO PROPERTIES LLC	BIRMINGHAM	MI	48009
FRANK JAMES TAYLOR III	BIRMINGHAM	MI	48009
DAVID C HAMILTON	BIRMINGHAM	MI	48009
RONALD RISINGER	BIRMINGHAM	MI	48009
MONIQUE CLARK	BIRMINGHAM	MI	48009
ALLISON GREENE LVNG TRUST	BIRMINGHAM	MI	48009
SHANTHI LAKSHMI SIVANANDHAM	BIRMINGHAM	MI	48009
WALTER PALAMARCHUK	BIRMINGHAM	MI	48009
SHARON N MURPHY	BIRMINGHAM	MI	48009
SABAH KEER	BIRMINGHAM	MI	48009
SONESCOTT REALTY LLC	BIRMINGHAM	MI	48009
SHARON SUE SPEYER TRUST	BIRMINGHAM	MI	48009
PAMELA A MEEK	BIRMINGHAM	MI	48009
HARRY S RADCLIFF JR REVOC TRUST	BIRMINGHAM	MI	48009
JOEL J REMY	BIRMINGHAM	MI	48009
JOSEPH PARADISO	BIRMINGHAM	MI	48009
JOSEPH LEIDER	BIRMINGHAM	MI	48009
AMD HOLDINGS LLC	BIRMINGHAM	MI	48009
RICHARD HEGGIE	BIRMINGHAM	MI	48009
DANIEL JEMINI	BIRMINGHAM	MI	48009
TITAS LAURINAITIS	BIRMINGHAM	MI	48009
FRANK MONAGHAN	BIRMINGHAM	MI	48009
THOMAS J DECEMBER	BIRMINGHAM	MI	48009
PENSCO TRUST COMPANY	BIRMINGHAM	MI	48009
MARK FLESZAR	BIRMINGHAM	MI	48009
AI HOME PROPERTIES LLC	BIRMINGHAM	MI	48009
JANET K TALBOYS INTER VIVOS TRUST	BIRMINGHAM	MI	48009
YVONNE CHAN	BIRMINGHAM	MI	48009
KATHLEEN C RAFFERTY	BIRMINGHAM	MI	48009
MAJID PEZHMAN	BIRMINGHAM	MI	48009
KIM F KEZLARIAN	BIRMINGHAM	MI	48009
ANDREW T BARAN	BIRMINGHAM	MI	48009
MELITA MEDICO- REUBER	BIRMINGHAM	MI	48009

JACQUELINE L GIERER	BIRMINGHAM	MI	48009
TIM ERWIN HERTZLER	BIRMINGHAM	MI	48009
BRIAN P DUFFY	BIRMINGHAM	MI	48009
EARL EDWIN MEITZ	BIRMINGHAM	MI	48009
NIKOLA POPOVIC	BIRMINGHAM	MI	48009
JORDYN VINISH	BIRMINGHAM	MI	48009
ROBERT M BOYLE TRUST	BIRMINGHAM	MI	48009
DAVID S COSGROVE JR	BIRMINGHAM	MI	48009
CHARLES P WHITE	BIRMINGHAM	MI	48009
WILLIAM R CONNOLLY TRUST	BIRMINGHAM	MI	48009
MICHAEL O PEREZ	BIRMINGHAM	MI	48009
SHEALYN SHALHOUB	BIRMINGHAM	MI	48009
BRUCE E PEARCE	BIRMINGHAM	MI	48009
VICENTE ZAID GRANDE ESPINOSA	BIRMINGHAM	MI	48009
LISA BURK	BIRMINGHAM	MI	48009
CAROLYN NESBITT TRUST	BIRMINGHAM	MI	48009
JOLENE B SCAVONE LVNG TRUST	BIRMINGHAM	MI	48009
ROBERT BROWN JR	BIRMINGHAM	MI	48009
ROBERT GEENENS	BIRMINGHAM	MI	48009
SANDRA COLDEN	BIRMINGHAM	MI	48009
DEBORAH UNDERWOOD	BIRMINGHAM	MI	48009
City of Birmingham	BIRMINGHAM	MI	48009

PNUM	Postal City Postal State Postal Zip 5
08-19-25-255-008	BIRMINGHAM, MI 48009
08-19-25-255-007	BIRMINGHAM, MI 48009
08-19-25-280-008	BIRMINGHAM, MI 48009
08-19-25-280-009	BIRMINGHAM, MI 48009
08-19-25-280-010	BIRMINGHAM, MI 48009
08-19-25-280-025	BIRMINGHAM, MI 48009
08-19-25-280-026	BIRMINGHAM, MI 48009
08-19-25-280-027	BIRMINGHAM, MI 48009
08-19-25-280-028	BIRMINGHAM, MI 48009
08-19-25-280-029	BIRMINGHAM, MI 48009
08-19-25-280-030	BIRMINGHAM, MI 48009
08-19-25-281-005	BIRMINGHAM, MI 48009
08-19-25-281-010	WEST BLOOMFIELD, MI 48324
08-19-25-281-033	BIRMINGHAM, MI 48009
08-19-25-281-040	BIRMINGHAM, MI 48009
08-19-25-281-041	BIRMINGHAM, MI 48009
08-19-25-281-030	BIRMINGHAM, MI 48009
08-19-25-279-017	BIRMINGHAM, MI 48009
08-19-25-279-018	BIRMINGHAM, MI 48009
08-19-25-279-019	BIRMINGHAM, MI 48009
08-19-25-279-021	BIRMINGHAM, MI 48009
08-19-25-279-020	BIRMINGHAM, MI 48009
08-19-25-279-022	BIRMINGHAM, MI 48012
08-19-25-279-023	BIRMINGHAM, MI 48009
08-19-25-279-024	BIRMINGHAM, MI 48009
08-19-25-279-025	CLARKSTON, MI 48346
08-19-25-279-026	WEST PALM BEACH, FL 33401
08-19-25-281-016	BIRMINGHAM, MI 48009
08-19-25-281-017	ROYAL OAK, MI 48073
08-19-25-281-018	BEVERLY HILLS, MI 48025
08-19-25-281-019	BIRMINGHAM, MI 48009
08-19-25-281-020	BIRMINGHAM, MI 48009
08-19-25-281-021	BIRMINGHAM, MI 48009
08-19-25-281-023	BIRMINGHAM, MI 48009
08-19-25-281-022	BIRMINGHAM, MI 48009
08-19-25-281-024	ROCHESTER, MI 48306
08-19-25-281-025	BIRMINGHAM, MI 48009
08-19-25-281-026	BLOOMFIELD, MI 48304
08-19-25-281-027	BIRMINGHAM, MI 48009
08-19-25-281-028	ALAMEDA, CA 94501
08-19-25-281-029	BIRMINGHAM, MI 48009
08-19-25-281-031	WEST BLOOMFIELD, MI 48323
08-19-25-258-002	BIRMINGHAM, MI 48009
08-19-25-258-003	BIRMINGHAM, MI 48009
08-19-25-258-004	BIRMINGHAM, MI 48009

08-19-25-258-005	BIRMINGHAM, MI 48009
08-19-25-258-006	BIRMINGHAM, MI 48009
08-19-25-258-007	BIRMINGHAM, MI 48009
08-19-25-258-008	BIRMINGHAM, MI 48009
08-19-25-282-001	BIRMINGHAM, MI 48009
08-19-25-282-002	BIRMINGHAM, MI 48009
08-19-25-282-003	BIRMINGHAM, MI 48009
08-19-25-282-004	BIRMINGHAM, MI 48009
08-19-25-282-015	BIRMINGHAM, MI 48009
08-19-25-282-008	BIRMINGHAM, MI 48009
08-19-25-282-024	BIRMINGHAM, MI 48009
08-19-25-282-025	BIRMINGHAM, MI 48009
08-19-25-282-012	BIRMINGHAM, MI 48009
08-19-25-282-013	BIRMINGHAM, MI 48009
08-19-25-282-023	BIRMINGHAM, MI 48009
08-19-25-282-017	NAPLES, FL 34108
08-19-25-282-018	BIRMINGHAM, MI 48009
08-19-25-282-019	BIRMINGHAM, MI 48009
08-19-25-282-020	BIRMINGHAM, MI 48009
08-19-25-282-021	BIRMINGHAM, MI 48009
08-19-25-282-022	BIRMINGHAM, MI 48009


ABBEY ST
HENLEY ST
WARWICK DR
POPPLETON ST
WIMBLETON DR
PUTNEY ST
SHEPARDBUSH ST
N ADAMS RD
OXFORD ST
MOHEGAN ST

BIRMINGHAM
A WALKABLE CITY

April 14, 2026

TO: parcel #
NAME
ADDRESS
CITY/STATE/ZIP

Re: Wimbleton Phase 2 Paving Project, Contract #6-26(W)
Paving Special Assessment District (SAD)

To whom it may concern,

The City of Birmingham Wimbleton Phase 2 Project will begin in Spring 2026. The project includes the replacement of the water main, sewer along with a cape seal treatment of the roadway surface.

As part of the project, the existing unimproved streets will be surfaced with a cape seal treatment. To fund a portion of these roadway improvements, the City is proposing the establishment of a Paving Special Assessment District (SAD). A map identifying the properties included in the proposed Paving SAD is enclosed.

This letter serves as notice of two upcoming public hearings regarding the proposed Paving Special Assessment District:

- The Public Hearing of the Necessity to form a Special Assessment District for the road project meeting the requirements as part of the Wimbleton Phase 2 Project is **Monday, May 4, 2026**, during the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin St.

- If necessity is determined at the May 4 hearing, a Public Hearing of Confirmation to confirm the Special Assessment District will follow on **Monday, May 18, 2026**, during the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin St.

Consistent with previous projects of this nature, it has been the City's policy to assess the following:

- 85% of the short-foot costs for improvement are assessed on all properties fronting on the improvement.
- 25% of the long-foot costs for improvement are assessed on all residential properties siding on the improvement.
- 85% of the long-foot costs for improvement are assessed on improved business properties siding on the improvement.

- 25% of the long-foot costs for improvement are assessed on vacant business properties siding on the improvement.

The City is responsible for the remaining share of project costs, which equates to 15% of the short-foot costs and 75% of the long-foot costs.

The cost per property will be assessed based on an average cost associated with the proposed work on each street in the cape seal program, multiplied by the linear foot measurement of the property line fronting the street, and/or the side property line for corner lots, and then reduced by multiplying again by 85% for the short footage measurement, and/or 25% or 85% for the long footage measurement.

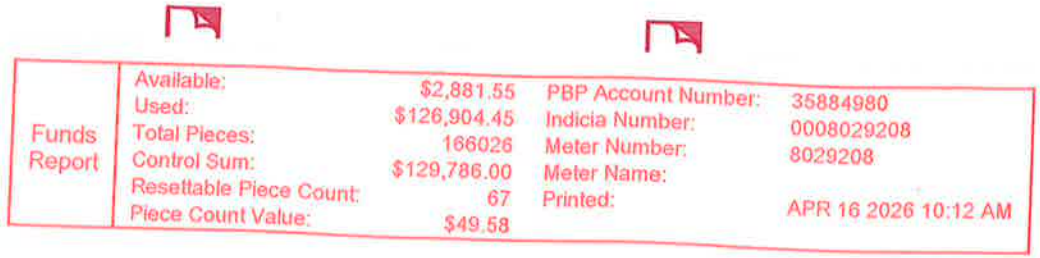
Upon completion of the work, an invoice will be issued to the property owner of record. Payment in full will be due within 30 days of receipt. The assessment may also be spread over a period of up to 10 annual installments. Any unpaid balance will accrue interest at a rate currently estimated at approximately 8.50%. Preliminary cost estimates will be presented at the Public Hearing of Necessity.

The Engineering Department will have a resident meeting on **Wednesday April 29, 2026**, from 5:30 p.m. – 6:30 p.m. at City Hall in the City Commission room to discuss the project and answer any questions about the SAD process and construction.

If you have any questions about the project, please contact the Engineering Office at (248) 530-1850. You will also have the opportunity to ask questions and speak directly to the City Commission at the Public Hearing of Necessity and at the Confirmation of the Roll.

Sincerely,

Melissa A. Coatta, P.E.
City Engineer


Funds Report
Available: $2,881.55
Used: $126,904.45
Total Pieces: 166026
Control Sum: $129,786.00
Resettable Piece Count: 67
Piece Count Value: $49.58
PBP Account Number: 35884980
Indicia Number: 0008029208
Meter Number: 8029208
Meter Name:
Printed: APR 16 2026 10:12 AM

DIY

From Page 1

That's why Finn started a lifestyle blog in 2013 titled "The DIY Playbook," which became a destination for beginners who wanted to tackle some of projects she did. Her early DIY work was to help decorate her apartment. Her ability and comfort using tools increased over time, especially since moving into a house that is over 100 years old.

"It has made me a more confident person in my life. If I can do or build that, I can handle anything," she said.

Being independent also taught 30-year-old Deyana Walker a lot about herself. Walker, who teaches remotely from Dallas, has built tables and floating shelves, and also turned a short school bus into a tiny home that she lived, worked and traveled in for more than a year.

Walker says she always wanted to travel, but it was not an option for her to pay someone hundreds of thousands of dollars for a newly built campervan. Converting the bus herself, including installing an electrical system for power and lights, and running water for the small shower and kitchenette, cost a fraction of that amount.

"Through the process of DIY, I figured out a lot about who I was and built myself up from a low point," Walker said, referencing a bad breakup that pushed her to build the first of two tiny homes on wheels. She is now applying the skills she acquired to home improvement projects in her Texas apartment.



Felicia Fonseca uses a jigsaw to cut slits into a piece of plywood for a wedding sign at a do-it-yourself party at an apartment in Flagstaff, Ariz., Sunday, February 15, 2026. **CHEYANNE MUMPHREY — THE ASSOCIATED PRESS**

WEIGHING THE PROS AND CONS

For beginners, taking on a project can seem daunting and some people don't know who or where to turn to. There are lots of people online saying, "If I can do it, so can you." There also are a lot of certified professionals warning of safety risks and the possibility of DIYers causing damage or encountering unexpected costs.

"You have to weigh the good and the bad: Am I willing to try, with the 50/50 chance I figure it out?" Walker said.

She also does extensive research before starting on a new project motivated by her desire to learn. Walker said she cross-references online tutorials, checks out library books and asks other amateur and professional builders for advice. She also takes safety precautions, such as wearing eye goggles, gloves and closed-toed shoes when cutting wood, working with sealants or lifting heavy things.

"When I first started, perfection was something I really strived for. After a while you find the beauty in the imperfections," Walker said.

She said she prefers to do most of her own projects and repairs but also gives herself permission to ask for or hire help.

BALANCING CONFIDENCE WITH CAUTION

Home repair experts say a nonnegotiable consideration should be safety, and many DIY advocates agree.

"When it comes to structural changes, electrical work beyond swapping out a light fixture, or plumbing changes that involve moving lines or opening up walls, that is best left to the professionals," Finn said. She hires professionals for jobs requiring inspections and permits, or when she is not comfortable with the level of expertise needed.

Finding professional help was not always possible while driving through remote areas in her remodeled bus, so Walker often sought guidance online. She recommends being cautious before relying on advice found on the internet.

"If I'm watching YouTube videos, I watch from a bunch of different creators and compare and contrast their work," Walker said. "Doing your due diligence of fact-checking and comparing resources is the best way to avoid getting false information on something that could be detrimental."

While safety and cost are important to consider, Lautz, of the National Association of Realtors, recommends evaluating the long-term durability and value of any home projects, especially as the U.S. housing stock ages. Doors and windows are projects that pay for themselves over time, and fresh paint and shiny wood floors are going to increase curb appeal, she said.

CARDS

From Page 1

partnerships with various merchants that give you money back for shopping with their brand. My Chase credit card regularly has offers for gas stations ranging from 3%-5% cash back. Simply click on an offer to activate it. Savings usually appear in the form of a statement credit or extra rewards.

Grocery rewards. Some grocery stores have teamed up with gas companies to offer additional savings. By spending at a particular grocery chain, you can earn discounts at the pump. Of course, the more you spend with the grocery store, the bigger your discount will be on gas.

Gas station loyalty programs. Most gas companies have them, and they're free to join. Be sure to enter your loyalty number or scan your rewards card in order to get the savings, which is usually a cents-per-gallon discount.

Upside app. Of the multiple cash-back apps out there, Upside is what NerdWallet recommends for gas station savings. When I checked my Upside app while writing this article, I saw an offer for 15 cents back per gallon at multiple gas stations near me. To snag the discount, claim an offer within the app, make a purchase, then upload your receipt before the offer expires. (In some cases, you may not even need to upload a paper receipt if you've linked your card in the app.)

Other money-saving apps. Apps like Fetch Rewards and Ibotta work similarly to Upside. After taking a picture of your receipt to verify a purchase, you'll earn rewards that can be redeemed for cash or gift cards. And apps like GasBuddy can help you find the cheapest gas prices in your area.

3. KNOW WHEN CREDIT CARDS DON'T MAKE FINANCIAL SENSE

Credit cards certainly save you money on gas, but in some situations, paying with cash or debit card is better. Some gas stations offer discounts for paying in cash, which may be superior to your credit card's rewards rate on gas.

For example, say your local gas station offers a 20-cents-per-gallon discount for cash-paying customers. If you get 10 gallons of gas at $4 per gallon, you'll save $2 by paying with cash. That same fill-up paid with a credit card that earns 2% back on gas would result in only 80 cents of savings. Doing some quick math at the pump can put a few dollars back in your pocket.

And cash or debit is always going to be the smarter choice if you tend to carry a balance on your credit card. The average APR charged for credit card accounts that incurred interest was , according to the Federal Reserve. And rewards-earning cards tend to charge even higher rates than that. If you're carrying a balance at those rates, any rewards you might earn by paying with plastic would likely be overshadowed by the interest you'd rack up in just a single billing cycle.

NOTICE OF PUBLIC HEARING

WATERFORD TOWNSHIP'S PRELIMINARY 2026/2027 ACTION PLAN INTRODUCTION FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM

In accordance with the Housing and Community Development Act and related regulatory requirements, the Charter Township of Waterford will conduct a public hearing for all interested residents during the regularly scheduled meeting of the Waterford Township Board of Trustees on Monday, May 11, 2026, beginning at 6:00 p.m. in the Waterford Township Hall Auditorium, 5200 Civic Center Drive, Waterford, Michigan.

The purpose of the hearing, among other requirements, will be to finalize and adopt the proposed activities for the 2026/2027 CDBG Program Year (Waterford's 52nd CDBG Year) Annual Action Plan and to obtain citizens' views on housing and community development needs and program performance. Following the public hearing, the Township will submit the finalized Annual Action Plan to HUD.

The 2026/2027 CDBG Program Year, which is funded by the U.S. Department of Housing and Urban Development (HUD), will begin on July 1, 2026. Waterford Township's entitlement amount for the 2026/2027 CDBG Program Year is estimated to be $347,793. The Township also projects receiving approximately $20,000 in program income from Housing Rehabilitation Loan repayments during the 52nd Program Year and a Line of Credit balance of $40,000 bringing the total available funding to $414,512.

The draft application may be found on the Township's website at:
https://www.waterfordmi.gov/287/Community-Development
or can be viewed, in person, at the Township Library and Development Services Department counters.

The following activities are identified in the 2026/2027 CDBG Annual Action Plan, which will primarily benefit low- and moderate-income persons, are as follows:

(1) PROGRAM ADMINISTRATION - Providing for administrative, management, and fair housing costs necessary for CDBG program operation. These funds will be implemented directly through the Township. These funds are eligible in accordance with 24CFR570.206.

(2) HOUSING REHABILITATION - Township Wide - Providing minor home and emergency repair services to income-qualified single-family homeowners. For applicants who receive assistance, the amount is contingent upon three factors: the number of necessary improvement items determined by the Township and the availability of program funds. Applications are accepted on a first-come, first-served basis on an ongoing basis. The program will be implemented directly through the Township. This program is eligible in accordance with 24CFR570.202(b) and meets the national objective as described in 24CFR570.208(a)(3)

(3) CODE ENFORCEMENT - Township CDBG Target Areas - Payment of a portion of the costs necessary to enforce the Township's codes in the CDBG Target Areas. This project shall be implemented directly through the Township. This project is eligible in accordance with 24CFR570.202(c) and meets the national objective as described in 24CFR570.208(a)(1).

(4) SPECIAL ECONOMIC DEVELOPMENT ASSISTANCE - Financial and technical assistance to small business to support economic growth, job creation, and job training opportunities for low- and moderate-income individuals as permitted under 24CFR570.201(o) and 24CFR570.203.

PROJECT	PROPOSED BUDGET
(1) PROGRAM ADMINISTRATION	$70,900
(2) HOUSING REHABILITATION	$169,916
(3) CODE ENFORCEMENT AND BLIGHT REMEDIATION AND DEMOLITION	$173,693
TOTAL:	**$414,512**
(4) SPECIAL ECONOMIC DEVELOPMENT ASSISTANCE	$1,738,965*

NOTES:

*Economic development assistance is intended to be provided through the implementation of Section 108 loans up to five (5) times the annual allocation amount to eligible businesses and will not be addressed with the Township's annual allocation or program income.

DISPLACEMENT PLAN

The Charter Township of Waterford's proposed 52nd-Year CDBG Program does not include any projects that would result in displacement of low-and moderate-income persons. However, if displacement does occur due to a federally funded Community Development project, eligible displaced individuals (in accordance with 24CFR570.606(b), Section 104(d) of the Community Development Act, the Uniform Relocation Act, and the Township's CDBG Displacement Policy) will be provided with moving expenses and, where required, replacement housing financial and technical assistance. This will be accomplished by working closely with Realtors, the U.S. Department of Housing and Urban Development, and/or other appropriate agencies available to find suitable housing for those displaced.

Interested persons are encouraged to express their views at the public hearing or through written comments that will be accepted by mail to the Development Services Department, 5200 Civic Center Drive, Waterford, MI 48329. Persons requiring information in alternative formats should contact the Department at (248) 674-6238. All comments received by March 24, 2026, will be considered.

Members of the public will only be able to speak during the public comment period and at the end of the meeting and such comments will be limited to three minutes per person. To provide for orderly public participation, a person wishing to speak must first state their name and request to be recognized by the Chairperson of the meeting. The Chairperson will recognize all persons wishing to speak during the public comment period. Prior to the meeting, members of the public may contact the members of the Township Board to provide input or ask questions by email or mail to the Township employee/official and at the addresses listed below. Persons with disabilities in need of accommodations to be able to participate in the meeting should provide at least 24-hour advance notice to the listed Township employee by phone, email, or mail and an attempt will be made to provide reasonable accommodations.

Kim Markee, Township Clerk Charter Township of Waterford
5200 Civic Center Drive, Waterford, Michigan 48329
Phone (248) 674-6266 or Email: publiccomments@waterfordmi.gov

NOTICE OF PUBLIC HEARING

WATERFORD TOWNSHIP'S
NOTICE OF PUBLIC HEARING FOR A PROPOSED APPLICATION FOR A LOAN GUARANTEE FUND PROGRAM UNDER THE SECTION 108 LOAN GUARANTEE PROGRAM

FOR THE

DRAYTON PLAINS BUSINESS AND ECONOMIC DEVELOPMENT LOAN FUND PROGRAM

In accordance with the Housing and Community Development Act and related regulatory requirements, the Charter Township of Waterford will conduct a public hearing for all interested residents during the regularly scheduled meeting of the Waterford Township Board of Trustees on Monday, May 11, 2026, beginning at 6:00 p.m. in the Waterford Township Hall Auditorium, 5200 Civic Center Drive, Waterford, Michigan.

The purpose of the meeting is to finalize the proposed application for Drayton Plains Business and Economic Development Loan Fund Program application. Following the public hearing, the Township will submit the proposed application to HUD for approval.

The proposed loan program will utilize the Section 108 Loan Guarantee Program to provide advantageous financing options to stimulate economic development and small and mid-sized business support and growth within the Drayton Plains subarea of the Township, generally located at Dixie Highway and Frembes Road.

The draft application may be found on the Township's website at:
https://www.waterfordmi.gov/287/Community-Development
or can be viewed, in person, at the Township Library and Development Services Department counters

Additional information regarding the Section 108 Loan Guarantee program can be found at:
https://www.hud.gov/hud-partners/community-section108

The Township anticipates five times the annual CDBG allocation received, or approximately $1.73 million, in loans funds will be made available through this program in the form of small loans (up to $50,000) to large loans (up to $500,000). These loan funds will leverage the annual allocation to provide small and midsized business loans to companies seeking to operate or expand within the Drayton Plains Subarea to support economic development and business growth with a focus on supporting low and moderate income residents, workers, and business owners. At least 70% of all funds issued will be required to directly support low- and moderate-income individuals.

Funds loaned to business will be repaid by the organizations receiving the funds. In addition to collateral obtained, the Township's annual CDBG allocation may be leveraged to cover unpaid debt services.

Eligible activities are governed by 24CFR570.703 and are specified in the draft application but generally include:

- Acquire, fix-up, improve, or prepare property for use
- Build or improve public infrastructure (streets, utilities, facilities)
- Support economic and community development projects
- Provide technical support, and supply operational, and equipment costs
- Rehabilitate or build housing, including nonprofit homeownership housing
- Cover relocation and environmental cleanup costs
- Pay loan interest, reserves, and financing-related expenses
- Pay required HUD fees

DISPLACEMENT PLAN

The Charter Township of Waterford's proposed Loan Guaranty Program does not include any projects that would result in displacement of low- and moderate-income persons. However, if displacement does occur due to a federally funded Community Development project, eligible displaced individuals (in accordance with 24CFR570.606(b), Section 104(d) of the Community Development Act, the Uniform Relocation Act, and the Township's CDBG Displacement Policy) will be provided with moving expenses and, where required, replacement housing financial and technical assistance. This will be accomplished by working closely with Realtors, the U.S. Department of Housing and Urban Development, and/or other appropriate agencies available to find suitable housing for those displaced.

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Kim Markee, Township Clerk Charter Township of Waterford 5200 Civic Center Drive, Waterford, Michigan 48329 Phone (248) 674-6266 or Email: publiccomments@waterfordmi.gov

NOTICE OF PUBLIC HEARING

BIRMINGHAM PLANNING BOARD

SPECIAL LAND USE PERMIT – FINAL SITE PLAN & DESIGN REVIEW

Meeting Date, Time, Location:	Monday, May 4, 2026 at 7:00 PM Municipal Building, 151 Martin Birmingham, MI 48009
Location of Request:	**126 S. Old Woodward – Snap Taco**
Nature of Hearing:	Consider the Special Land Use Permit, Final Site Plan & Design Review application for 126 S. Old Woodward, Snap Taco
City Staff Contact:	Nick Dupuis, Planning Director, 248 530 1856 ndupuis@bhamgov.org
Notice Requirements:	Mailed to all property owners and occupants within 300 feet. Published 04/19/2026
Approved minutes may be viewed at:	City Clerk's Office or online at bhamgov.org/commission

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760** Meeting ID: **655 079 760**
You may also present your written statement to the City Commission, City of Birmingham, 151 Martin Street, P.O. Box 3001, Birmingham, Michigan 48012-3001 prior to the hearing.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at (248) 530-1880 (voice) or (248) 644-3405 (TDD) at least one day in advance to request to request mobility, visual, hearing or other assistance.

NOTICE OF PUBLIC HEARING

BIRMINGHAM CITY COMMISSION

PUBLIC HEARING OF NECESSITY & PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, May 4, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, May 18, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton Drive from Oxford Road to Adams Road. Below are the assessed addresses; 1054 Abby, 1064 Abby, 1074 Abby, 1084 Abby, 901 Adams, 911 Adams 871 Poppleton, 921 Poppleton, 928 Poppleton, 939 Poppleton, 931 Adams, 941 Adams 951 Adams, 961 Adams, 971 Adams, 1001 Adams, 1013 Adams, 1025 Adams 1037 Adams, 1049 Adams, 1051 Adams, 1063 Adams, 1075 Adams, 1087 Adams 921 Warwick, 541 Wimbleton, 554 Wimbleton, 612 Wimbleton, 625 Wimbleton, 636 Wimbleton 647 Wimbleton, 652 Wimbleton, 669 Wimbleton, 680 Wimbleton, 700 Wimbleton, 701 Wimbleton 715 Wimbleton, 733 Wimbleton, 777 Wimbleton, 812 Wimbleton, 824 Wimbleton, 840 Wimbleton 868 Wimbleton, 887 Wimbleton, 900 Wimbleton, 923 Wimbleton, 930 Wimbleton, 980 Wimbleton 983 Wimbleton, 1004 Wimbleton, 1005 Wimbleton, 1038 Wimbleton, 1050 Wimbleton, 1055 Wimbleton 1060 Wimbleton, 1064 Wimbleton, 1065 Wimbleton, 1070 Wimbleton, 1072 Wimbleton, 1075 Wimbleton 1076 Wimbleton, 1078 Wimbleton, 1085 Wimbleton
Nature of Improvement:	This work will include the installation of cape seal treatment for all properties within the project area on Wimbleton Drive from Oxford Road to Adams Road
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 4/19/2026 & 05/03/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012. The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.
All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

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Wimbleton Drive Phase Two Project

Hearing of Necessity for Sewer and Water Laterals Special Assessment District (SAD)

Engineering Department

Date: May 4, 2026

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

➢Overview

- Limits of Wimbleton Drive Phase 2 Project are Wimbleton Drive from Oxford Road to Adams Road.
- Project includes:
  - New Water Main
  - Sewer Improvements
  - Installation of cape seal treatment
- Special Assessment District (SAD) for Sewer and Water Laterals to be paid by the property owner at one hundred percent of the costs.

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Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

- General Construction Information: Water

  Wimbleton Drive:

  - Existing Water: 6” Cast Iron Pipe, installed 1925
  - Proposed Water: 12” Ductile Iron

  - Over 100 years old
  - Wimbleton Street is the backbone of the water system in this area since it connects to larger size water main at Woodward Ave and Adams Road, and feeds the area to the north. There is no water main feed north of this area due to the City limits with Bloomfield Township (properties in Township are located on wells).
  - Historically these streets have experienced water main breaks.

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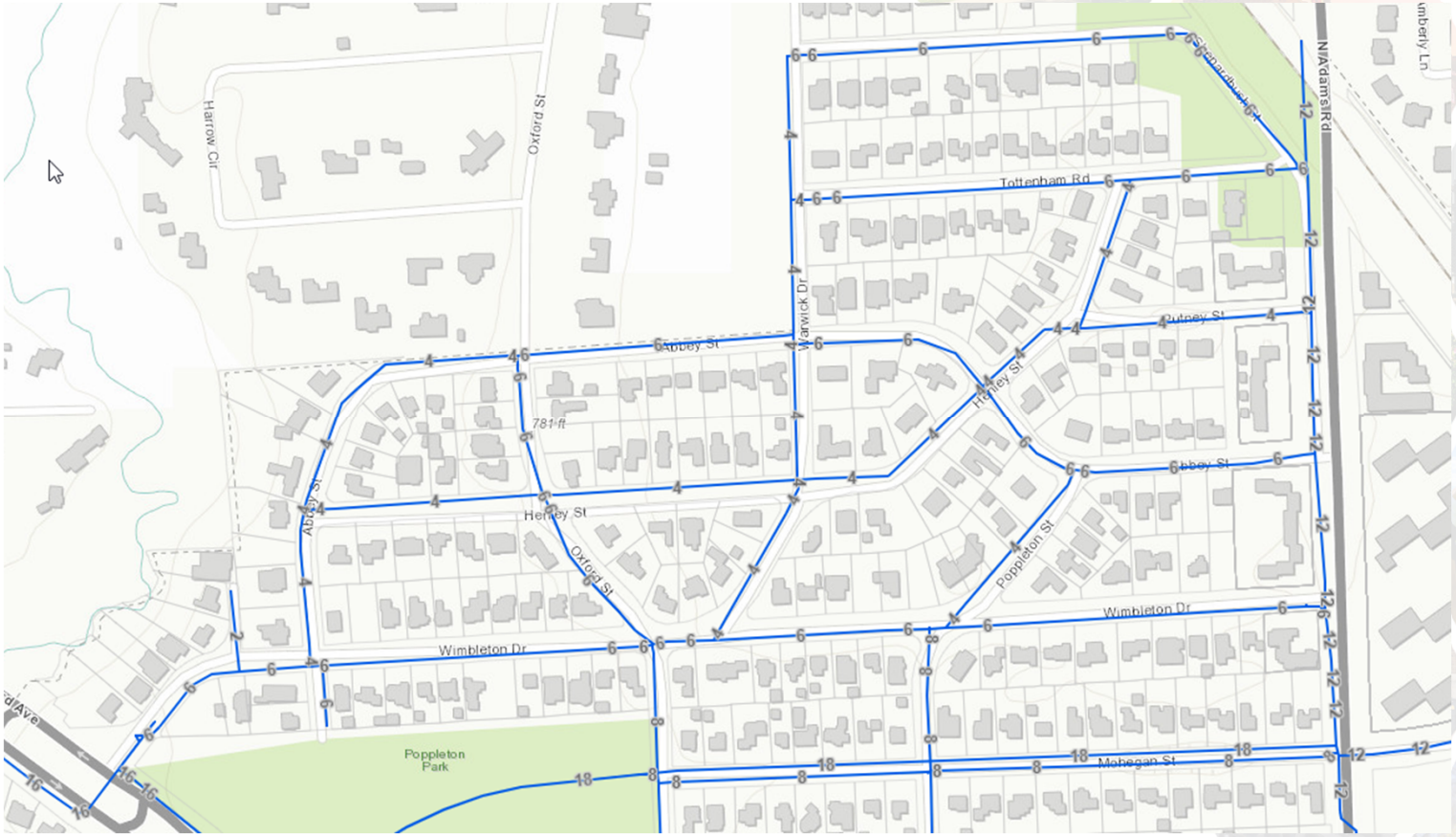
Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



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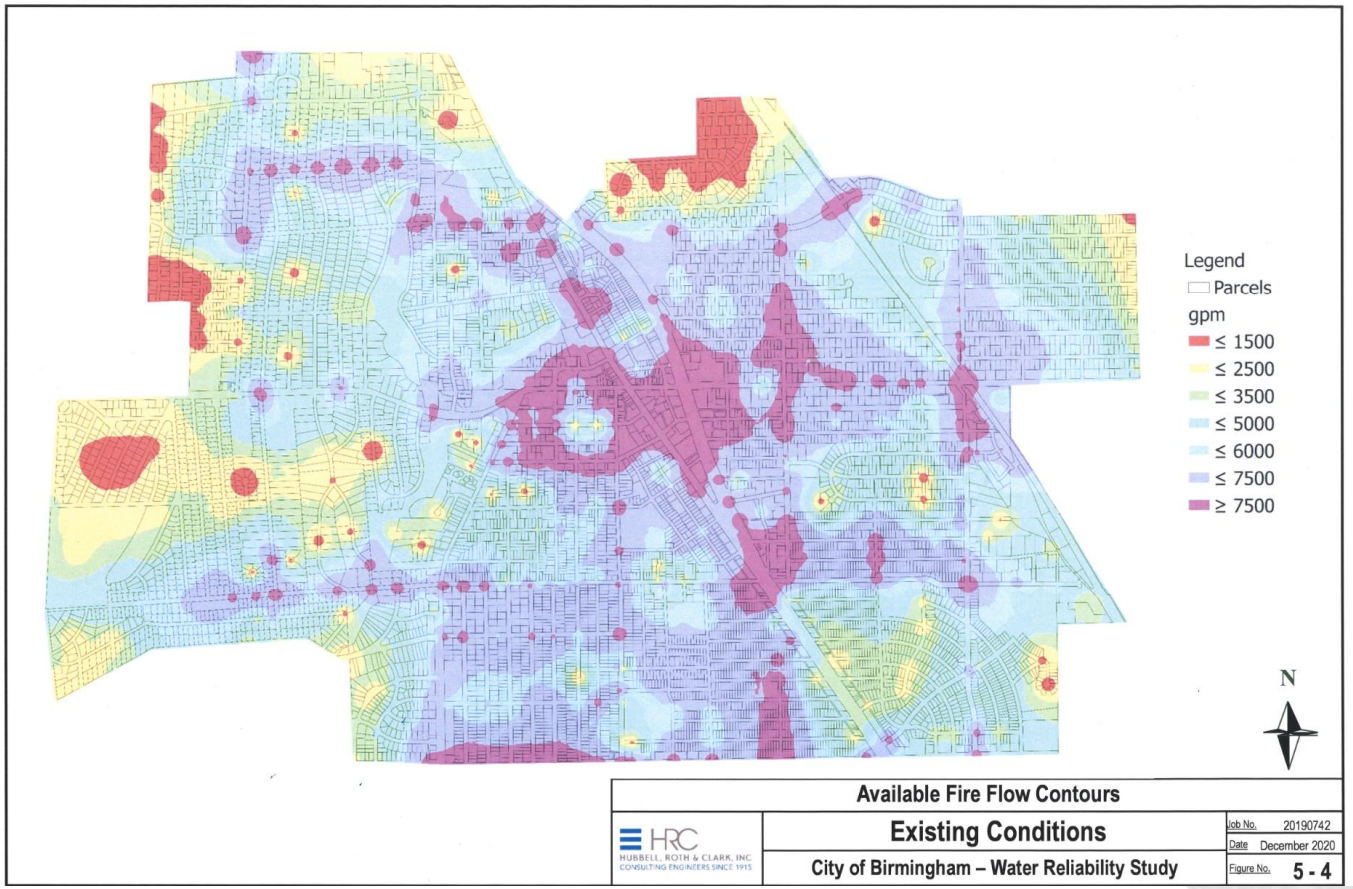
Existing 4” Water Main on Bird Phase 1A, Installed 1931

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



Existing Water Main

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



Existing Fire Flows Map

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Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

- General Construction Information: Sewer

  Wimbleton Drive:

  - Existing Sewer: 8”-12” combined sewer, installed in 1925 and 1926
  - Proposed Sewer: 12”- 36” Storm Sewer and 12”-15” Combined Sewer Repairs
  - Portions of the sewer are over 100 years old
  - Sections of sewer are in need of open cut replacement due to the condition of the pipe and not being a candidate for sewer lining
  - Existing catch basins are in poor condition and need replacement
  - Proposed storm sewer improvements will create a separated storm system on these streets and drain directly to the Rouge River
  - This phase of Wimbleton Drive is the downstream portion of the sewer system (area drains from the north towards the west).

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Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



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Existing Sewer System

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

➢Policy

- City policy: To protect the public investment being made with capital improvement projects in public roadways, as part of the project
  - Water Laterals:
    - Replace all water services that are 60 years of age or older, or are less than one inch in diameter, or are constructed of an unsuitable material.
    - All unsuitable water services will be replaced with a new 1” diameter service, or be replaced to match the existing diameter if greater than 1”

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Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

➢Policy

- City policy: To protect the public investment being made with capital improvement projects in public roadways, as part of the project
  - Sewer Laterals:
    - Replacement of all sewer laterals that are 50 years of age or older, or are less than 6” diameter, or are constructed of an unsuitable material.
    - All unsuitable sewer laterals will be replaced with 6" schedule 40 PVC or match existing size if larger than 6”.

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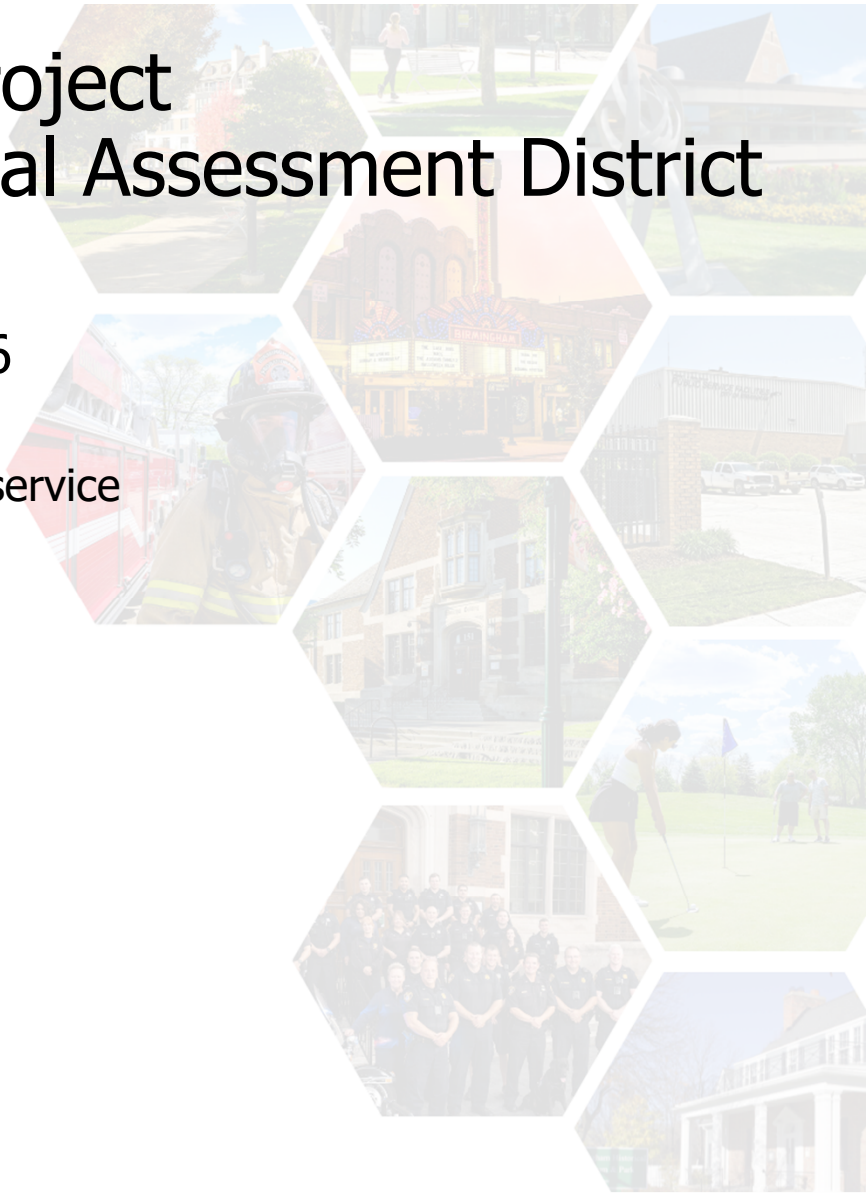
Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

- SAD:
  - Water Lateral: 100% cost to the property owner
  - Sewer Lateral : 100% cost to the property owner
  - Cost: The cost can be paid back in either a lump sum or over time with interest. The interest rate will be confirmed at the Confirmation of Roll.

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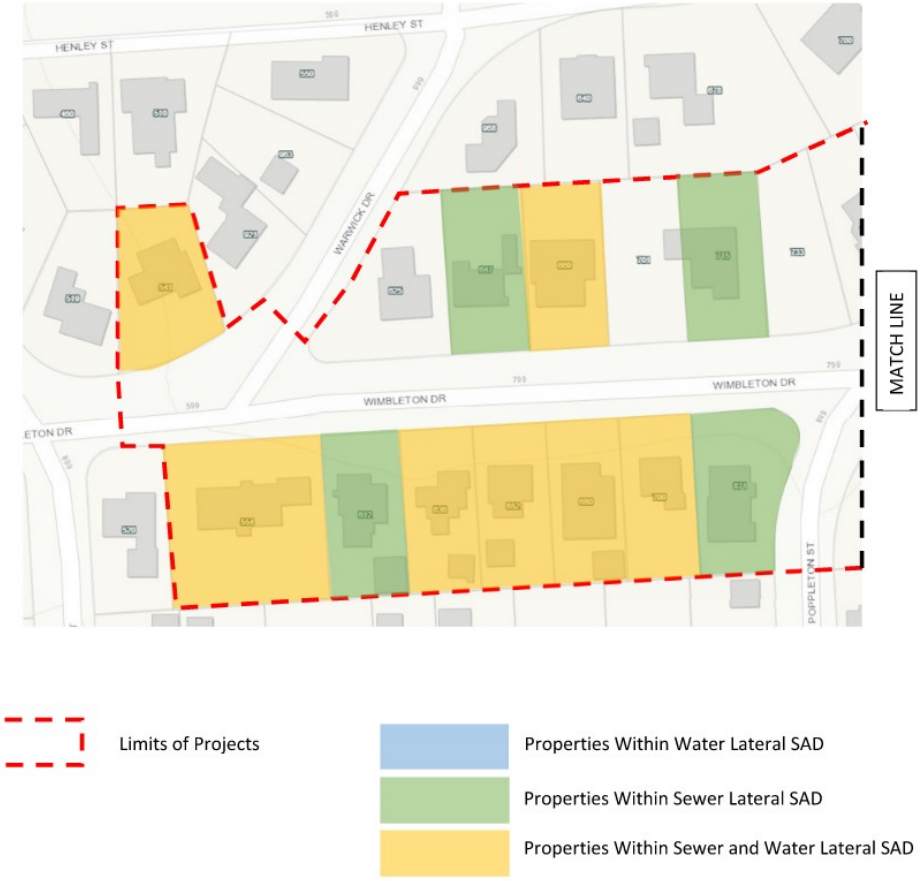
Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

- SAD:
  - Received Bids for Project on April 9, 2026
  - Water:
    - $35.54 per lineal foot for 1” diameter water service
  - Sewer:
    - $49.77 per lineal foot for 6” sewer pipe



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Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



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Sewer and Water Lateral SAD Project Limits

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



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Sewer and Water Lateral SAD Project Limits

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District



Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

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Sewer and Water Lateral SAD Project Limits

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

➢PROPERTIES LOCATED IN SEWER LATERAL SAD:

Sidwell Number	Street Address
1925255007	541 WIMBLETON DR
1925280009	647 WIMBLETON DR
1925280010	669 WIMBLETON DR
1925280026	715 WIMBLETON DR
1925281010	887 WIMBLETON DR
1925281033	923 WIMBLETON DR
1925281031	1054 ABBEY RD
1925281030	1064 ABBEY RD
1925281029	1074 ABBEY RD
1925281028	1084 ABBEY RD
1925281027	971 N ADAMS RD
1925281026	961 N ADAMS RD
1925281025	951 N ADAMS RD
1925281024	941 N ADAMS RD UNIT 9
1925281023	931 N ADAMS RD

Sidwell Number	Street Address
1925281022	921 N ADAMS RD
1925281021	911 N ADAMS RD
1925281020	901 N ADAMS RD
1925281019	1085 WIMBLETON DR
1925281018	1075 WIMBLETON DR
1925281017	1065 WIMBLETON DR
1925281016	1055 WIMBLETON DR
1925258002	554 WIMBLETON DR
1925258003	612 WIMBLETON DR
1925258004	636 WIMBLETON DR
1925258005	652 WIMBLETON DR
1925258006	680 WIMBLETON DR
1925258007	700 WIMBLETON DR
1925258008	871 POPPLETON AVE
1925282001	812 WIMBLETON DR

Sidwell Number	Street Address
1925282002	824 WIMBLETON DR
1925282003	840 WIMBLETON DR
1925282004	868 WIMBLETON DR
1925282015	886 WIMBLETON DR
1925282008	900 WIMBLETON DR
1925282012	1004 WIMBLETON DR
1925282013	1038 WIMBLETON DR
1925282017	1078 WIMBLETON DR
1925282023	1050 WIMBLETON DR
1925282022	1060 WIMBLETON DR
1925282021	1064 WIMBLETON DR
1925282020	1070 WIMBLETON DR
1925282019	1072 WIMBLETON DR
1925282018	1076 WIMBLETON DR

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Sewer and/or Water Lateral SAD

Wimbleton Drive Phase Two Project
Sewer and Water Lateral Special Assessment District

➢Summary

- The Engineering Department recommends the City Commission declare necessity and approve the SAD for Wimbleton Phase 2 Project for sewer and water laterals
- Should the Commission approve the SAD, a public hearing for confirmation of the roll will be held on May 18, 2026

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MEMORANDUM

Treasurer's Office

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Ryan Katz, Deputy Treasurer
Mary Chavez, Finance Director

SUBJECT: Confirmation of SAD Roll 920 - Wimbleton Phase 2 Project - Paving

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INTRODUCTION:
A Public Hearing of Confirmation of the Special Assessment Roll for the Wimbleton Phase 2 Paving Project is being held on May 18, 2026. The special assessment will reimburse the City for improvements made. If the City Commission approves the roll, the property owners who benefit from these improvements will be billed for the cost of the improvements.

Comments during the Hearing of Confirmation of the Special Assessment Roll are limited to those questions specifically addressing the assessment roll pursuant to Section 94-9 of the City Code.

BACKGROUND:
At the City Commission meeting on May 4, 2026, the City Commission determined the necessity of the Wimbleton Phase 2 Paving Project and a Hearing of Confirmation of the Special Assessment Roll was set for May 18, 2026.

LEGAL REVIEW:
The City Attorney has reviewed the suggested resolution for compliance with City Code. The purpose of this hearing is to review and hear any objections to the Special Assessment Roll. The Special Assessment Roll is a listing of all of the properties to be assessed for the improvements to the property. Pursuant to the City Code at section 94-9, whenever a Special Assessment Roll shall be confirmed by the City Commission, it shall be final and conclusive.

FISCAL IMPACT:
If confirmed, the preliminary assessment roll would be $200,621.65. Once the project is completed and final costs are known, the roll will be adjusted to actual costs as provided by City Code. Property owners have ten (10) years to pay the special assessment.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
Per the motion by the City Commission at the October 27, 2025, meeting, this project will receive cape seal treatment of the road surfaces within the project area.

PUBLIC COMMUNICATIONS:
Property owners were notified by mail of the public hearing dates. If the City Commission confirms the Special Assessment Roll, the Treasurer's office will notify the property owners in the Special Assessment District of the confirmation and the lien on their property.

SUMMARY:
The Treasurer's office recommends that the City Commission conduct the Hearing of Confirmation of Special Assessment Roll 920 and further to confirm the roll as attached to this report.

ATTACHMENTS:
1. Wimbleton Phase 2 Paving Hearing of Necessity

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution confirming Special Assessment Roll 920 as follows:

WHEREAS, Special Assessment Roll, designated Roll No. 920, has been heretofore prepared for Collection; and

WHEREAS, notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property to be assessed; and

WHEREAS, the Commission has deemed it practicable to cause payment of the cost thereof to be made after the time of construction; and

WHEREAS, the Commission Resolution 05-121-26 provided it would meet this 18th day of May, 2026 for the sole purpose of reviewing the assessment roll; and

WHEREAS, at said hearing held this May 18, 2026, all those property owners or their representatives present have been given an opportunity to be heard specifically concerning costs appearing in said special assessment roll;

NOW, THEREFORE, BE IT RESOLVED, that Special Assessment Roll No. 920 be in all things ratified and confirmed, and that the City Clerk be and is hereby instructed to endorse said roll, showing the date of confirmation thereof, and to certify said assessment roll to the City Treasurer for collection at or near the time of construction of the improvement.

BE IT FURTHER RESOLVED, that the special assessment shall be payable in ten (10) payments as provided in Section 94-10 of the Code of the City of Birmingham, with an annual interest rate of seven and three-quarters percent (7.75%) on all unpaid installments.

Sidwell Number	Street Address	Estimated Total Paving SAD Costs
1925255007	541 WIMBLETON DR	$ 7,509.58
1925255008	921 WARWICK DR	$ 1,412.57
1925280008	625 WIMBLETON DR	$ 7,496.24
1925280009	647 WIMBLETON DR	$ 5,087.74
1925280010	669 WIMBLETON DR	$ 3,672.69
1925280025	701 WIMBLETON DR	$ 5,482.15
1925280026	715 WIMBLETON DR	$ 4,352.16
1925280027	733 WIMBLETON DR	$ 4,830.53
1925280028	777 WIMBLETON DR	$ 5,640.97
1925280029	921 POPPLETON AVE	$ 5,284.60
1925280030	939 POPPLETON AVE	$ 904.05
1925281005	928 POPPLETON AVE	$ 10,420.08
1925281010	887 WIMBLETON DR	$ 8,521.94
1925281033	923 WIMBLETON DR	$ 7,808.58
1925281040	983 WIMBLETON DR	$ 5,912.37
1925281041	1005 WIMBLETON DR	$ 5,310.42
1925281031	1054 ABBEY RD	$ 484.19
1925281030	1064 ABBEY RD	$ 484.19
1925281029	1074 ABBEY RD	$ 484.19
1925281028	1084 ABBEY RD	$ 484.19
1925281027	971 N ADAMS RD	$ 484.19
1925281026	961 N ADAMS RD	$ 484.19
1925281025	951 N ADAMS RD	$ 484.19
1925281024	941 N ADAMS RD UNIT 9	$ 484.19
1925281023	931 N ADAMS RD	$ 484.19
1925281022	921 N ADAMS RD	$ 484.19
1925281021	911 N ADAMS RD	$ 484.19
1925281020	901 N ADAMS RD	$ 484.19
1925281019	1085 WIMBLETON DR	$ 484.19
1925281018	1075 WIMBLETON DR	$ 484.19
1925281017	1065 WIMBLETON DR	$ 484.19
1925281016	1055 WIMBLETON DR	$ 484.19
1925258002	554 WIMBLETON DR	$ 9,159.54
1925258003	612 WIMBLETON DR	$ 3,672.69
1925258004	636 WIMBLETON DR	$ 3,390.17

1925258005	652 WIMBLETON DR	$ 4,514.96
1925258006	680 WIMBLETON DR	$ 4,514.96
1925258007	700 WIMBLETON DR	$ 4,534.93
1925258008	871 POPPLETON AVE	$ 8,799.41
1925282001	812 WIMBLETON DR	$ 6,869.23
1925282002	824 WIMBLETON DR	$ 5,605.84
1925282003	840 WIMBLETON DR	$ 4,520.23
1925282004	868 WIMBLETON DR	$ 8,874.23
1925282015	886 WIMBLETON DR	$ 5,650.29
1925282008	900 WIMBLETON DR	$ 5,664.99
1925282024	930 WIMBLETON DR	$ 6,145.05
1925282025	980 WIMBLETON DR	$ 4,696.37
1925282012	1004 WIMBLETON DR	$ 5,153.02
1925282013	1038 WIMBLETON DR	$ 3,178.29
1925282017	1078 WIMBLETON DR	$ 1,183.39
1925282023	1050 WIMBLETON DR	$ 1,183.39
1925282022	1060 WIMBLETON DR	$ 1,183.39
1925282021	1064 WIMBLETON DR	$ 1,183.39
1925282020	1070 WIMBLETON DR	$ 1,183.39
1925282019	1072 WIMBLETON DR	$ 1,183.39
1925282018	1076 WIMBLETON DR	$ 1,183.39
		$ 200,621.65

MEMORANDUM

Engineering Department

DATE: May 4, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: Wimbleton Phase 1 Project, Contract #6-25(W)
Hearing of Necessity for Paving Special Assessment District (SAD)

INTRODUCTION:
Wimbleton Drive, from Oxford Road to Adams Road, is scheduled for construction this year. The roadway is currently an unimproved gravel road with an existing cape seal surface. In accordance with the City Commission resolution adopted on October 27, 2025, the road will receive a new cape seal treatment following completion of the underground infrastructure improvements.

BACKGROUND:
At the October 27, 2025, City Commission Meeting (Agenda – Video), a resolution was approved for the Wimbleton Phase 2 Project to receive water main replacement, sewer improvements, and cape seal treatment of the road surfaces within the project area. The proposed plans call for 8 inches of aggregate base, cape seal treatment, and driveway approaches. The proposed road width will be 26 feet. Driveway approaches where a property owner's lateral is located beneath the approach are included in the paving assessment. In certain locations, sections of driveway approaches must be removed and replaced due to underground utility work; these costs are not included in the paving assessment.

Consistent with City policy, the cost of the cape seal improvements will be partially offset through a Special Assessment District (SAD) comprised of properties that directly benefit from the improvements to the public right-of-way.

Cape Seal Costs:

- 85% of the short-foot costs for improvement are assessed on all properties fronting on the improvement.
- 25% of the long-foot costs for improvement are assessed on all residential properties siding on the improvement.
- 85% of the long-foot costs for improvement are assessed on improved business properties siding on the improvement.
- 25% of the long-foot costs for improvement are assessed on vacant business

properties siding on the improvement.

Approach Costs:

- 100% property owner cost

Parcels within the project area subject to paving special assessments are identified on the attached map. A list of properties proposed for inclusion in the Assessment District, along with estimated construction costs, is appended to this report.

LEGAL REVIEW:
Chapter 94 – Special Assessments of the Birmingham City Code outlines the process by which a special assessment is conducted in the City of Birmingham. This project will follow the prescribed City Code procedures. The City Attorney has no objections to the suggested Commission action.

FISCAL IMPACT:
Revenue generated from the paving SAD for the Wimbleton Phase 2 project will defray the costs incurred by the City for the construction of these improvements. The cost can be paid back in either a lump sum or over up to a 10-year period with interest. The interest rate will be confirmed at the Confirmation of the Roll Hearing on May 18, 2026.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
Per the motion by the City Commission at the October 27, 2025, meeting, this project will receive cape seal treatment of the road surfaces within the project area.

PUBLIC COMMUNICATIONS:
The Clerk's Office distributed the notice of Hearing of Necessity. The Engineering Department sent a letter to all property owners explaining the scope of work with the notice. The Engineering Department also held a resident meeting on April 29, 2026.

SUMMARY:
The Engineering Department recommends that the City Commission declare the necessity of the project and approve a special assessment district for paving as part of the Wimbleton Phase 2 project with cape seal treatment. Should the Commission approve the special assessment district, a public hearing for Confirmation of the Roll should be set for the City Commission meeting on May 18, 2026.

ATTACHMENTS:
1. Map of proposed SAD for paving
2. Wimbleton Phase 2 Project Plans
3. Spreadsheet with estimated cost of paving with cape seal

4. Wimbleton Phase 2 Clerk's Confirmation Packet
5. Presentation

SUGGESTED COMMISSION ACTION:
WHEREAS, Notice was given pursuant to Section 94-7 of the City Code, to each owner or party-in-interest of property and lots to be assessed, by first class mail, and by publication in a newspaper generally circulated in the City; and

WHEREAS, The City Commission has conducted a public hearing and has determined it is necessary to proceed with the project paving on Wimbleton Drive from Oxford Road to Adams Road; and

WHEREAS, The City has previously established a policy to defray the costs of Cape Seal treatments on unimproved streets by creating a Special Assessment District (SAD) consisting of the properties that are benefiting from this treatment; and

WHEREAS, The City Commission, after the public hearing, has determined that paving Wimbleton Drive from Oxford Road to Adams Road, is a necessity and is in the best interest of the City and will specially benefit the properties included in the Special Assessment District; and

WHEREAS, The Commission has approved the detailed plans and estimates of cost prepared by the City Engineer; and

WHEREAS, Formal bids and quotes have been received and the actual cost of paving has been determined; and

WHEREAS, The City Engineer has determined the boundaries of paving located within the limits of the following streets shall be installed as part of the Wimbleton Phase 2 Project (Contract #6-26(W)):

Wimbleton Drive - Oxford Road to Adams Road

WHEREAS, The formula used in making the assessment for paving is 85% of the front-foot costs for improvement are assessed on all properties fronting on the improvement, 25% of the side-foot costs for improvement are assessed on all residential properties siding on the cape seal treatment improvement, replacement of sidewalk ramps to meet ADA compliance, and for approaches is 100% of the contractor's charge for replacing the approach with concrete within the public right-of-way between the proposed curb and the property line if the lateral is located underneath the approach (calculated at the rate of $80.06 per front footage for paving, $66.47 per square yard for removed concrete approach and installed concrete approach, $65.31 per square yard for remove asphalt approach and installed concrete approach).

THEREFORE LET IT BE RESOLVED, The City Commission has determined that the scope of the public improvement as described is in the best interest of the City and will benefit the properties listed in the assessment roll is a necessity, and the City Commission directs the Manager to prepare a Special Assessment Roll and present the same to the City Commission for confirmation and further set a Public Hearing of Confirmation on May 18, 2026 and give notice of same.

Paving – Cape Seal Treatment

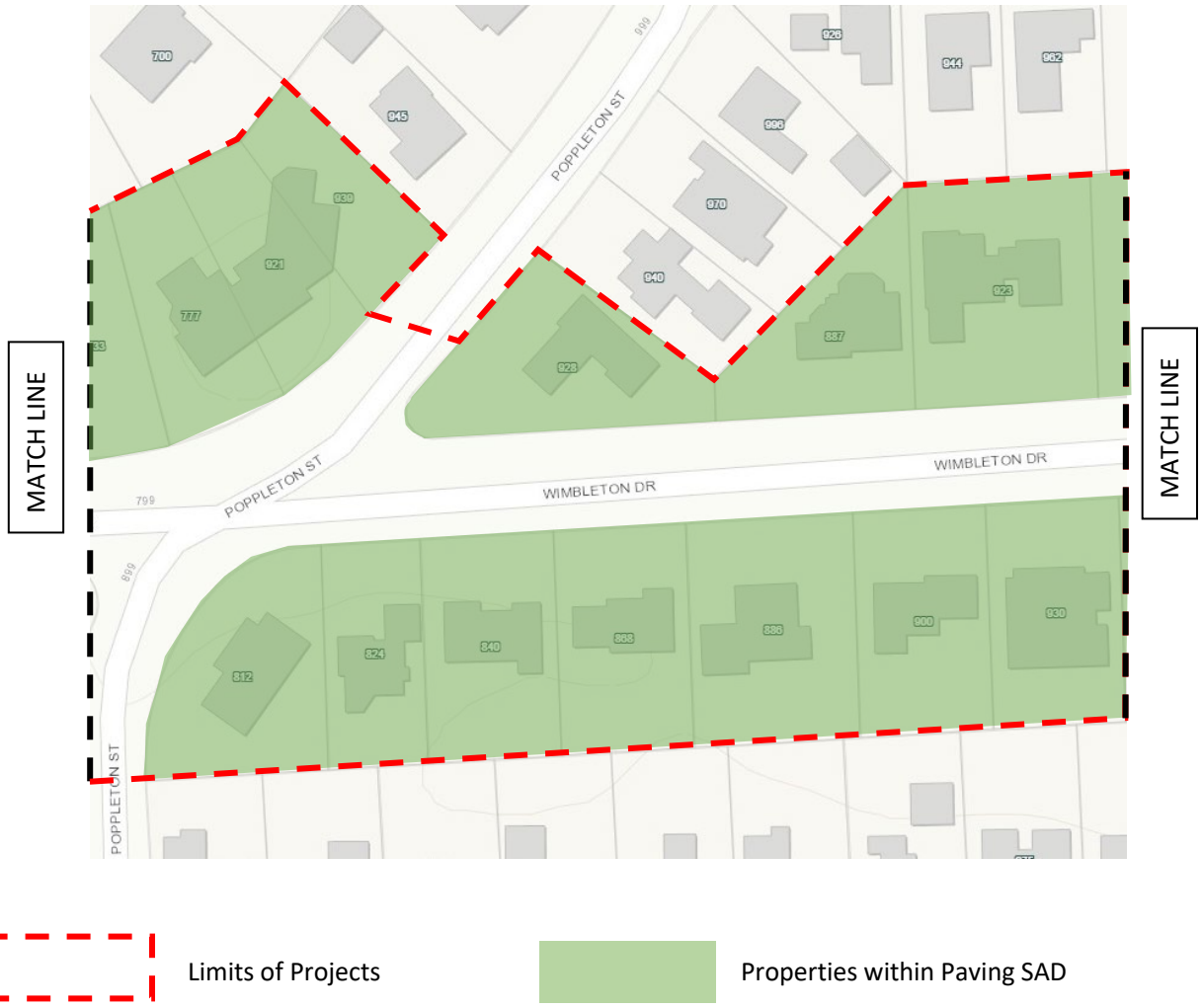
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1925255007	541 WIMBLETON DR	$11,267.03
1925255008	921 WARWICK DR	$1,412.57
1925280008	625 WIMBLETON DR	$11,549.13
1925280009	647 WIMBLETON DR	$7,658.62
1925280010	669 WIMBLETON DR	$6,243.57
1925280025	701 WIMBLETON DR	$8,053.03
1925280026	715 WIMBLETON DR	$6,923.04
1925280027	733 WIMBLETON DR	$7,617.37
1925280028	777 WIMBLETON DR	$8,607.37
1925280029	921 POPPLETON AVE	$8,053.24
1925280030	939 POPPLETON AVE	$1,536.88
1925281005	928 POPPLETON AVE	$19,949.46
1925281010	887 WIMBLETON DR	$13,268.19
1925281033	923 WIMBLETON DR	$12,159.30
1925281040	983 WIMBLETON DR	$8,681.01
1925281041	1005 WIMBLETON DR	$7,683.54
1925281031	1054 ABBEY RD	$1,173.71
1925281030	1064 ABBEY RD	$1,173.71
1925281029	1074 ABBEY RD	$1,173.71
1925281028	1084 ABBEY RD	$1,173.71
1925281027	971 N ADAMS RD	$1,173.71
1925281026	961 N ADAMS RD	$1,173.71
1925281025	951 N ADAMS RD	$1,173.71
1925281024	941 N ADAMS RD UNIT 9	$1,173.71
1925281023	931 N ADAMS RD	$1,173.71
1925281022	921 N ADAMS RD	$1,173.71
1925281021	911 N ADAMS RD	$1,173.71
1925281020	901 N ADAMS RD	$1,173.71
1925281019	1085 WIMBLETON DR	$1,173.71
1925281018	1075 WIMBLETON DR	$1,173.71
1925281017	1065 WIMBLETON DR	$1,173.71
1925281016	1055 WIMBLETON DR	$1,173.71
1925258002	554 WIMBLETON DR	$14,301.30
1925258003	612 WIMBLETON DR	$6,243.57
1925258004	636 WIMBLETON DR	$5,763.29

1925258005	652 WIMBLETON DR	$6,888.08
1925258006	680 WIMBLETON DR	$6,888.08
1925258007	700 WIMBLETON DR	$6,908.05
1925258008	871 POPPLETON AVE	$11,280.51
1925282001	812 WIMBLETON DR	$7,283.74
1925282002	824 WIMBLETON DR	$7,978.96
1925282003	840 WIMBLETON DR	$7,684.39
1925282004	868 WIMBLETON DR	$12,038.39
1925282015	886 WIMBLETON DR	$9,605.49
1925282008	900 WIMBLETON DR	$8,829.15
1925282024	930 WIMBLETON DR	$9,309.21
1925282025	980 WIMBLETON DR	$7,069.49
1925282012	1004 WIMBLETON DR	$7,674.47
1925282013	1038 WIMBLETON DR	$5,403.09
1925282017	1078 WIMBLETON DR	$1,900.97
1925282023	1050 WIMBLETON DR	$1,900.97
1925282022	1060 WIMBLETON DR	$1,900.97
1925282021	1064 WIMBLETON DR	$1,900.97
1925282020	1070 WIMBLETON DR	$1,900.97
1925282019	1072 WIMBLETON DR	$1,900.97
1925282018	1076 WIMBLETON DR	$1,900.97

Wimbleton Drive Phase 2 Project Area



Wimbleton Drive Phase 2 Project Area



Wimbleton Drive Phase 2 Project Area



Limits of Projects

Properties within Paving SAD

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

WIMBLETON DRIVE PHASE 2 PROJECT

CONTRACT #6-26(W)

SHEET INDEX

COVER SHEET (WIMBLETON DRIVE PAVING PROJECT)
C01 Utility Plan Wimbleton Drive Sta. P.O.B. to 4+25
C02 Utility Plan Wimbleton Drive Sta. 4+25 to 9+00
C03 Utility Plan Wimbleton Drive Sta. 9+00 to 12+50
C04 Utility Plan Wimbleton Drive Sta. 12+50 to P.O.E.
C05 Utility Plan Poppleton St. (South) Sta. P.O.B. to P.O.E.
C06 Sewer Profiles 1 of 3
C07 Sewer Profiles 2 of 3
C08 Sewer Profiles 3 of 3
C09 Supplemental Water Main Profiles
C10 Utility Service Plan Sta. P.O.B. to 9+00
C11 Utility Service Plan Sta. 9+00 to P.O.E.
C12 Paving and Grading Plan Sta. P.O.B. to Sta. 4+25
C13 Paving and Grading Plan Sta. 4+25 to Sta. 9+00
C14 Paving and Grading Plan Sta. 9+00 to Sta. 12+50
C15 Paving and Grading Plan Sta. 12+50 to Sta. P.O.E.
C16 Paving and Grading Plan Poppleton St. Sta P.O.B. to P.O.E.
C17 Intersection Grading Detail - Wimbleton & Warwick
C18 Intersection Grading Detail - Wimbleton & Poppleton
C19 Notes and Details
C20 SESC Plan
C21 Wimbleton Drive Storm Outfall Removal & SESC Plan
C22 Wimbleton Drive Storm Outfall Utility Plan
C23 Wimbleton Drive Storm Outfall Grading Plan & Details
C24 Advanced Warning Signage (AWS) Traffic Diagram
Q1 Quantities

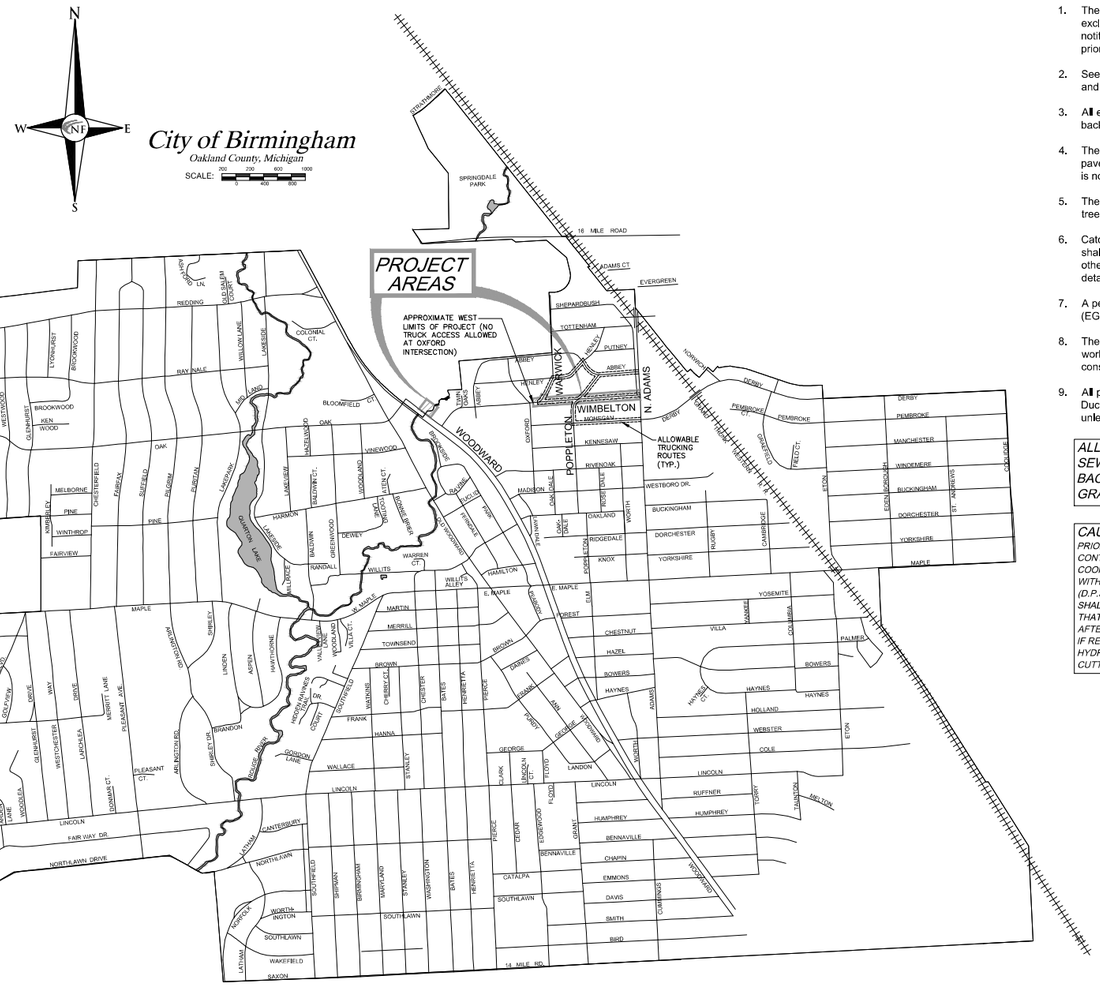
City of Birmingham - Water Main Standard Notes & Details - 1 of 2
City of Birmingham - Water Main Standard Notes & Details - 2 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 1 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 2 of 2
City of Birmingham - Storm Drain Sewer Standard Notes & Details - 1 of 1
City of Birmingham - Paving Standard Notes & Details - 1 of 1

WATER / SEWER SERVICE NOTE

ALL WATER AND SEWER SERVICE LATERAL INFORMATION IS SHOWN PER RECORD, WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL PRIVATE-SIDE WATER AND SEWER LATERAL INFORMATION, AS REQUIRED, TO CONSTRUCT THE PROJECT (INC.).

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CONSTRUCTION NOTES

These notes shall apply for all work within this contract:

1. The contractor shall notify MISS DIG 1-800-482-7171 at least 3 working days excluding Saturday, Sunday, and Holidays before making any excavations and notify the City of Birmingham Engineering Department a minimum of 24 hours prior to the start of construction (248-530-1850).
2. See the City of Birmingham Standard Notes & Details for water main, sewer, and paving work.
3. All excavation under or within three feet of pavement, public or private, shall be backfilled and compacted with sand.
4. The joints at the edges of all excavations in the pavement shall be sawcut, or pavement will be removed to existing joints, as directed by the Engineer. There is no separate pay item for saw cutting pavements.
5. The contractor shall be responsible for damage to existing utilities, pavement, trees, landscaping, gravel, etc., whether located on public or private property.
6. Catch basin and inlet castings scheduled for replacement, or new construction shall be EJIW 5000Z4 DI / 5000M4 DI Hinged Assembly unless specified otherwise. Manhole castings shall be EJIW 1040-A cover as noted on the detail sheets and plans, unless otherwise specified.
7. A permit from the Michigan Department of Environment, Great Lakes & Energy (EGLE) is required for all new water main and sanitary sewer installations.
8. The contractor shall coordinate and cooperate with all other utility companies working in the same area, project related or not, during the same allotted construction period.
9. All proposed Public Water Main for this project shall be Pressure Class 52 Ductile Iron Pipe (D.I.P.) in conformance with City of Birmingham specifications, unless otherwise noted.

ALL WATER MAIN, STORM AND SEWER TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR (SAND) MATERIAL.

CAUTION!!! LIVE WATER MAIN
PRIOR TO CUTTING IN NEW MAIN FITTINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING EXISTING WATER MAIN SHUT-DOWNS WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (D.P.S.). MORE IMPORTANTLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY ENSURING THAT PRESSURES DO NOT EXIST IN THE MAIN AFTER SHUT-DOWN & PRIOR TO CUTTING THE MAIN. IF REQUIRED, THE CONTRACTOR SHALL UTILIZE A HYDRA-STOP DEVICE TO CLOSE OFF FLOW WHILE CUTTING IN NEW TEE.

DESIGN ENGINEER SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

Know what's below Call before you dig.

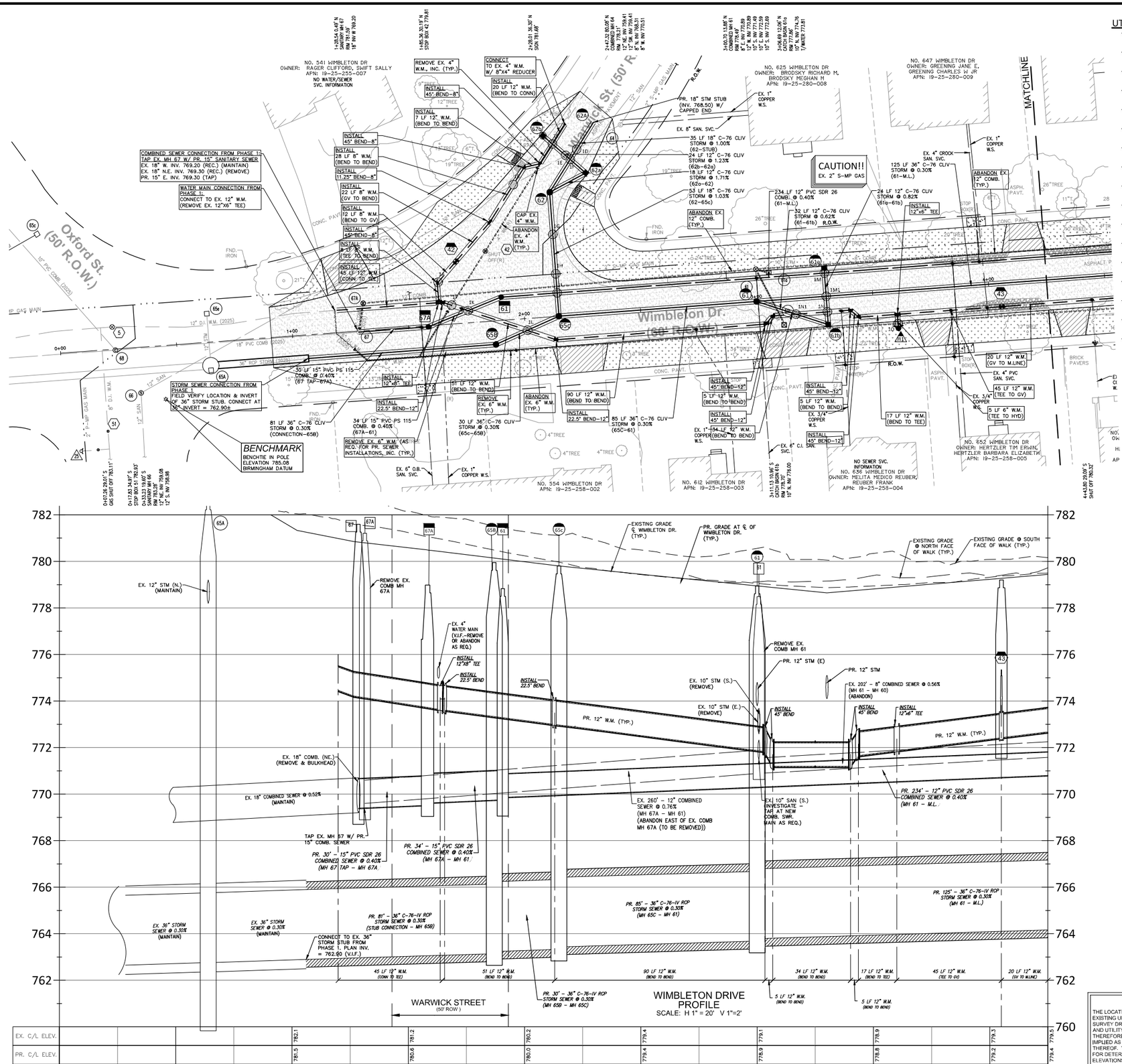
BENCHMARK NOTE

BENCHMARKS SET AND SHOWN PER SHEET WERE ESTABLISHED OFF OF THE CITY OF BIRMINGHAM BENCHMARK DATUM.

APPROVED DATE

03-27-26 ADDENDUM 1

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)



UTILITY CROSSING SCHEDULE

1A	EX. 2" GAS B/P V.I.F. PR. 8" WM T/P 774.49
1B	PR. 8" WM B/P 772.19 PR. 12" SAN T/P 760.36
1C	PR. 12" STM B/P 773.77 PR. 8" WM T/P 772.27
1D	PR. 18" STM B/P 768.16 PR. 12" SAN T/P 760.41
1E	PR. 12" STM B/P 773.75 PR. 12" SAN T/P 760.40
1F	PR. 12" STM B/P 773.74 PR. 18" STM T/P 770.02
1G	EX. 2" GAS B/P V.I.F. PR. 18" STM T/P 769.57
1H	EX. 2" GAS B/P V.I.F. PR. 18" STM T/P 769.39
1I	PR. 12" SAN B/P 769.96 PR. 18" STM T/P 769.31
1J	EX. 4" WM B/P V.I.F. PR. 12" WM T/P 774.55
1K	PR. 8" WM B/P 773.39 PR. 15" COMB T/P 770.97
1L	PR. 12" WM B/P 773.09 PR. 36" STM T/P 766.61
1M	PR. 12" STM B/P 774.00 PR. 12" COMB T/P 771.42
1M1	PR. 12" STM B/P 773.90 PR. 36" STM T/P 767.34
1N	PR. 12" STM B/P 773.88 PR. 12" WM T/P 772.24
1N1	PR. 12" STM B/P 773.74 PR. 12" WM T/P 772.24
1O	PR. 12" STM B/P 774.14 PR. 12" WM T/P 772.64

EX. SEWER STRUCTURE SCHEDULE

(66) MAINTAIN
0+33.23 19.60'S
COMB. MH 66
RIM 783.28
12" INV NE 759.08
12" INV S 758.98

(67A) REMOVE
(INSTALLED 2025 DURING PH. 1 WIMBLETON (#6-25W))
SAN. MH 67A
RIM 781.17
18" S. INV 769.50
(REMOVE)
12" N INV 770.0±
(ABANDON)

(67) TAP, BULKHEAD & ADJUST
(INSTALLED 2025 DURING PH. 1 WIMBLETON (#6-25W))
1+28.54 0.49'N
SAN. MH 67
RIM 781.55
PR. RIM XXX.XX
18" W. INV 769.20
(MAINTAIN)
18" N. INV 769.30
(REM & BULKHEAD)
PR. 15" E INV. 769.40
(TAP)

(64) MAINTAIN
2+47.32 80.08'N
COMB. MH 64
RIM 778.21
12" INV NE 759.41
12" INV SW 759.41
8" INV N 768.31
8" INV W 770.51

(61) REMOVE
3+00.70 13.98' N
COMB. MH 61
RIM 778.49
8" INV E 770.89 (ABANDON)
12" INV W 770.89 (ABANDON)
10" INV S 771.49 (INVESTIGATE)
10" INV E 772.59 (REMOVE)
10" INV S. INV 772.69 (REMOVE)

(68) MAINTAIN
COMB. MH 68

EX. STORM STRUCTURE SCHEDULE

(61a) REMOVE
3+08.34 9.52'N
CATCH BASIN 61a
RIM 778.70 (REC)
12" INV. NW 774.19 (REC)
(REMOVE)

(61b) REMOVE
3+11.13 10.96'S
CATCH BASIN 61b
RIM 778.70
12" INV SE 776.00
(REMOVE)

(65A) MAINTAIN
STORM CB. 65A

(65e) MAINTAIN
STORM CB. 65e

WATER MAIN SCHEDULE

(51) MAINTAIN
0+17.83 34.97'S
STOP BOX 51
RIM 782.93

(A) MAINTAIN
HYDRANT 25

(5) MAINTAIN
GVW 5
(INSTALLED 2025 DURING PH. 1 WIMBLETON (#6-25W))

(42) REMOVE BOX & ABANDON VALVE (INC.)
GV 42 (REC)

(42) PR. 8" GATE VALVE IN 5' DIA. WELL
PR. RIM 779.50
PR. T/PIPE 774.00

(43) PR. 12" GATE VALVE IN 5' DIA. WELL
PR. RIM 779.10
PR. T/PIPE 773.21

(H1) PR. HYDRANT & ASSEMBLY FG 778.60
PR. T/PIPE 773.10

Sanitary Structure Schedule

Structure Name	Structure Details
#61 PR. 4' COMBINED MANHOLE	PR. RIM 778.83 PR. 12" E. INV. 769.86 PR. 15" W. INV. 769.76
#67A PR. 4' COMBINED MANHOLE	PR. RIM 778.98 PR. 15" E. INV. 769.62 PR. 15" W. INV. 769.52

Storm Drainage Structure Schedule

Structure Name	Structure Details
#61 PR. 6' STORM MANHOLE	PR. RIM 778.95 PR. 12" E. INV. 773.80 PR. 36" E. INV. 763.79 PR. 36" W. INV. 763.69
#61a PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.20
#61b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.20 PR. 12" N. INV. 774.00 PR. 12" W. INV. 774.00
#62 PR. 4' STORM MANHOLE	PR. RIM 778.15 PR. 18" NE. INV. 768.15 PR. 12" NE. INV. 773.40 PR. 18" S. INV. 768.05
#62a PR. 4' STORM C.B. W/ 4' SUMP & SED. TRAP	PR. RIM 777.80 PR. 12" NW. INV. 773.70 PR. 12" SW. INV. 773.70
#62A PR. 18" STORM STUB W/ CAPPED END	PR. RIM 770.31 PR. 18" SW. INV. 768.50
#62b PR. 2' STORM INLET	PR. RIM 777.80 PR. 12" SE. INV. 774.00
#65B PR. 6' STORM MANHOLE	PR. RIM 779.95 PR. 36" NE. INV. 763.24 PR. 36" W. INV. 763.14
#65c PR. 6' STORM MANHOLE	PR. RIM 779.80 PR. 36" E. INV. 763.43 PR. 18" N. INV. 767.50 PR. 36" SW. INV. 763.33

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX. PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" HMA ON 8" 21AA)
- PR. BITUMINOUS CAPESEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

(RECORD) CURB STOP LOCATION (APPROX.)
LANDSCAPE BED
EX. SOIL BORING
PUBLIC PHONE
WELL
PUMP
SIGN
POST/BOLLARD
PARKING METER
MAIL BOX (APPROX.)
ROCK/BOULDER
SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
GROUND ELEVATION

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼ of Section 25, T. 2N, R.10E
City of Birmingham, Oakland County, Michigan

SHEET
Utility Plan Wimbleton Drive Sta. P.O.B. to 4+25

Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

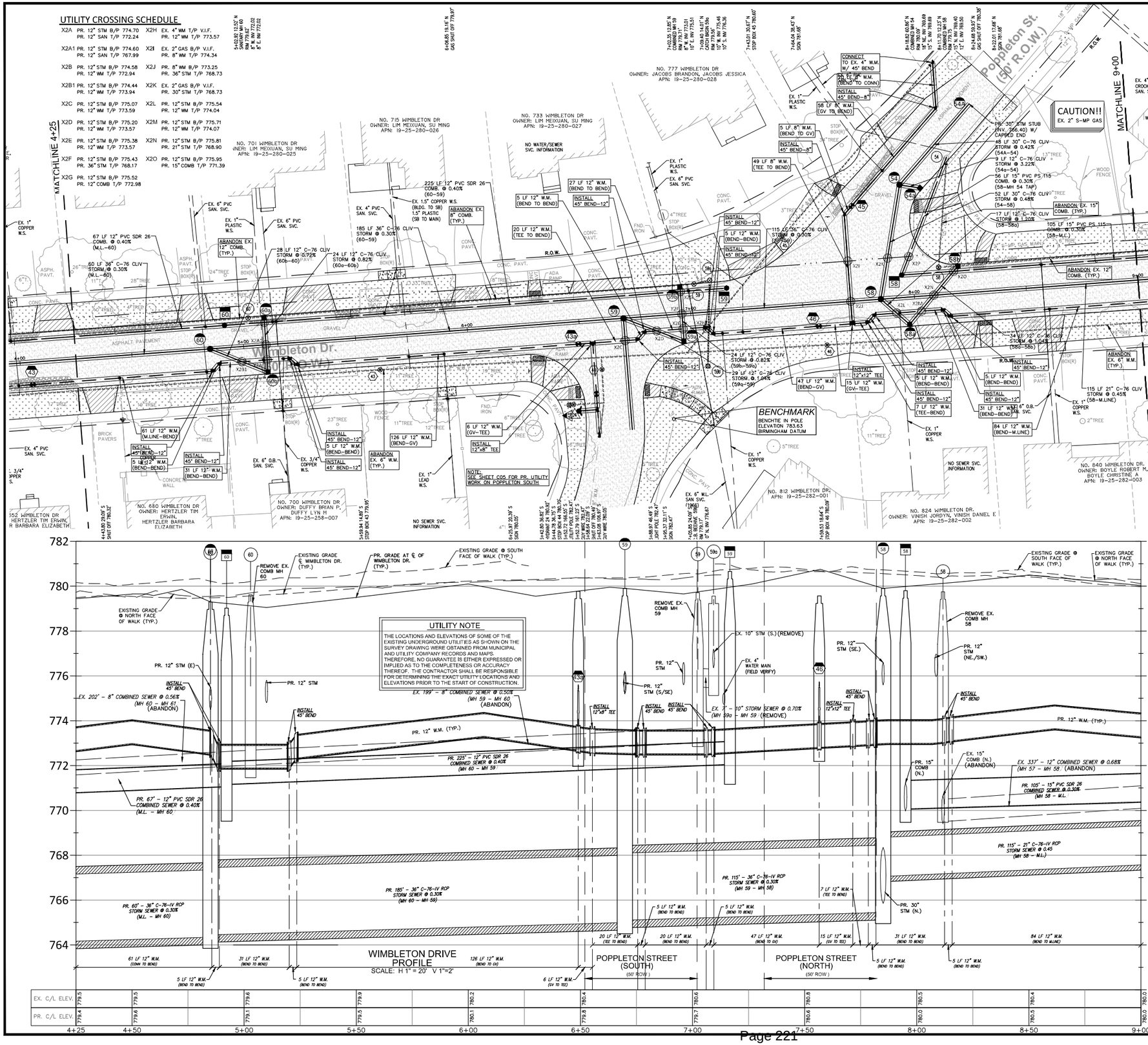
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C01

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UTILITY CROSSING SCHEDULE

X2A	PR. 12" STM B/P 774.70 PR. 12" SAN T/P 772.24	X2H	EX. 4" WM T/P V.I.F. PR. 12" WM T/P 773.57
X2A1	PR. 12" STM B/P 774.60 PR. 12" SAN T/P 767.99	X2I	EX. 2" GAS B/P V.I.F. PR. 8" WM T/P 774.34
X2B	PR. 12" STM B/P 774.58 PR. 12" WM T/P 772.94	X2J	PR. 8" WM B/P 773.25 PR. 36" STM T/P 768.73
X2B1	PR. 12" STM B/P 774.44 PR. 12" WM T/P 773.94	X2K	EX. 2" GAS B/P V.I.F. PR. 30" STM T/P 768.73
X2C	PR. 12" STM B/P 775.07 PR. 12" WM T/P 773.59	X2L	PR. 12" STM B/P 775.54 PR. 12" WM T/P 774.04
X2D	PR. 12" STM B/P 775.20 PR. 12" WM T/P 773.57	X2M	PR. 12" STM B/P 775.71 PR. 12" WM T/P 774.07
X2E	PR. 12" STM B/P 775.38 PR. 12" WM T/P 773.57	X2N	PR. 12" STM B/P 775.81 PR. 21" STM T/P 768.90
X2F	PR. 12" STM B/P 775.43 PR. 36" STM T/P 768.17	X2O	PR. 12" STM B/P 775.95 PR. 15" COMB T/P 771.39
X2G	PR. 12" STM B/P 775.52 PR. 12" COMB T/P 772.98		



EX. SEWER STRUCTURE SCHEDULE

54	TAP & ADJUST 8+18.82 60.86' N COMBINED MH 54 RIM 780.09' PR. RIM XXX.XX 18" NE. INV. 769.69 (MAINTAIN) 15" S. INV 769.69 (ABANDON) PR. 15" S INV. 769.80 (TAP)	58	REMOVE 8+11.70 12.23' N COMBINED MH 58 RIM 779.75 15" N. INV 769.40 12" E. INV 769.50
60	REMOVE 5+02.92 12.52' N SANITARY MH 60 RIM 779.62' 8" W. INV 772.02 8" E. INV 772.02	59	REMOVE 7+02.35 12.85' N COMBINED MH 59 RIM 779.71' 8" W. INV 773.01 10" E. INV 775.51

EX. STORM STRUCTURE SCHEDULE

59a	REMOVE 7+09.40 14.01' N CATCH BASIN 59a RIM 779.56' 10" W. INV 775.46 (REMOVE) 10" S. INV 776.36 (REMOVE)	61b	REMOVE 7+05.85 24.09' S C.B. BEEHIVE 59b RIM 779.17' 10" N. INV 776.67 (REMOVE)

WATER MAIN SCHEDULE

43	REMOVE BOX & ABANDON VALVE (INC.) 5+59.94 14.89' S STOP BOX 43 779.95'	46	REMOVE BOX & ABANDON VALVE (INC.) 7+59.53 18.64' S STOP BOX 46 780.09'	45	PR. 8" GATE VALVE IN 5' DIA. WELL PR. RIM 780.00 PR. T/PIPE 774.50
44	REMOVE BOX & ABANDON VALVE (INC.) 6+44.78 36.75' S STOP BOX 44 780.70'	24	REMOVE 6+42.80 36.82' S HYDRANT 24 780.92'	46	PR. 12" GATE VALVE IN 5' DIA. WELL PR. RIM 780.35 PR. T/PIPE 773.86
45	REMOVE BOX & ABANDON VALVE (INC.) 7+43.01 30.67' N STOP BOX 45 780.60'	43A	PR. 12" GATE VALVE IN 5' DIA. WELL PR. RIM 780.05 PR. T/PIPE 773.64		

0 Sanitary Structure Schedule	
Structure Name	Structure Details
#58 PR. 4' COMBINED MANHOLE	PR. RIM 779.80 PR. 15" E. INV. 770.07 PR. 15" N. INV. 769.97
#59 PR. 4' COMBINED MANHOLE	PR. RIM 780.66 PR. 12" W. INV. 772.06
#60 PR. 4' COMBINED MANHOLE	PR. RIM 779.02 PR. 12" E. INV. 771.17 PR. 12" W. INV. 771.07

0 Storm Drainage Structure Schedule	
Structure Name	Structure Details
#54 PR. 5' STORM MANHOLE	PR. RIM 779.70 PR. 12" E. INV. 775.20 PR. 30" NE. INV. 766.20 PR. 30" S. INV. 766.10
#54a PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 779.50 PR. 12" W. INV. 775.50
#54A PR. 30" STORM STUB W/ CAPPED END	PR. RIM 769.35 PR. 30" SW. INV. 766.40
#58 PR. 6' STORM MANHOLE	PR. RIM 779.90 PR. 12" SE. INV. 775.60 PR. 30" N. INV. 765.85 PR. 21" E. INV. 767.05 PR. 36" W. INV. 765.45
#58a PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 779.75 PR. 12" NE. INV. 775.80 PR. 12" NW. INV. 775.80
#58b PR. 2' STORM INLET	PR. RIM 779.95 PR. 12" SW. INV. 776.15
#59 PR. 6' STORM MANHOLE	PR. RIM 779.90 PR. 36" E. INV. 765.10 PR. 12" S. INV. 775.20 PR. 12" E. INV. 775.20 PR. 36" W. INV. 765.00
#59a PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 779.50 PR. 12" N. INV. 775.50 PR. 12" W. INV. 775.50
#59b PR. 2' STORM INLET	PR. RIM 779.40 PR. 12" S. INV. 775.70
#60 PR. 6' STORM MANHOLE	PR. RIM 779.30 PR. 12" E. INV. 774.50 PR. 36" E. INV. 764.45 PR. 36" W. INV. 764.35
#60a PR. 2' STORM INLET	PR. RIM 778.70 PR. 12" S. INV. 774.90
#60b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.90 PR. 12" N. INV. 774.70 PR. 12" W. INV. 774.70

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" MIN. ON 6" 21AA)
- PR. BITUMINOUS CAPSEAL
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- GROUND ELEVATION
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Utility Plan Wimbleton
Drive Sta. 4+25 to 9+00

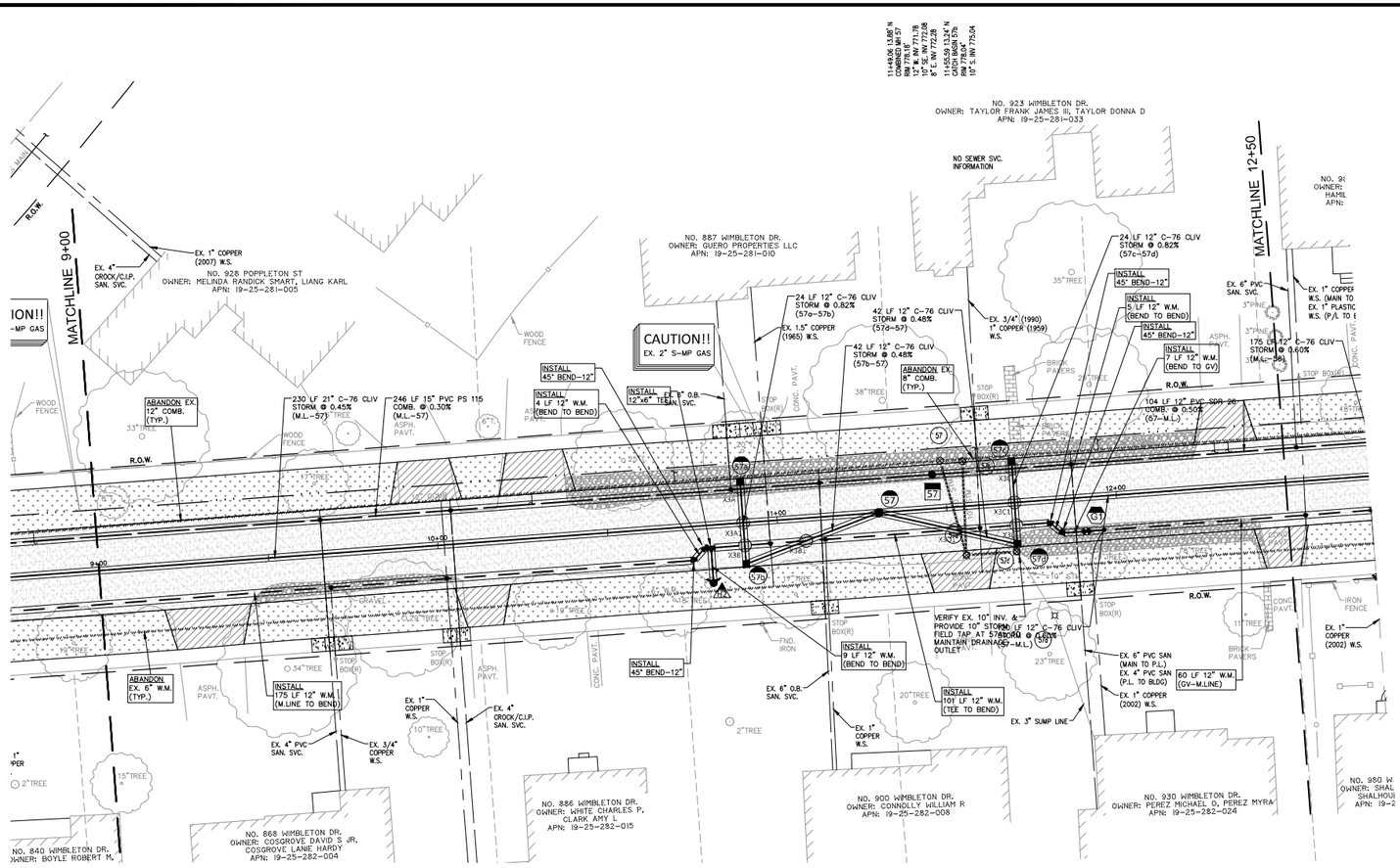
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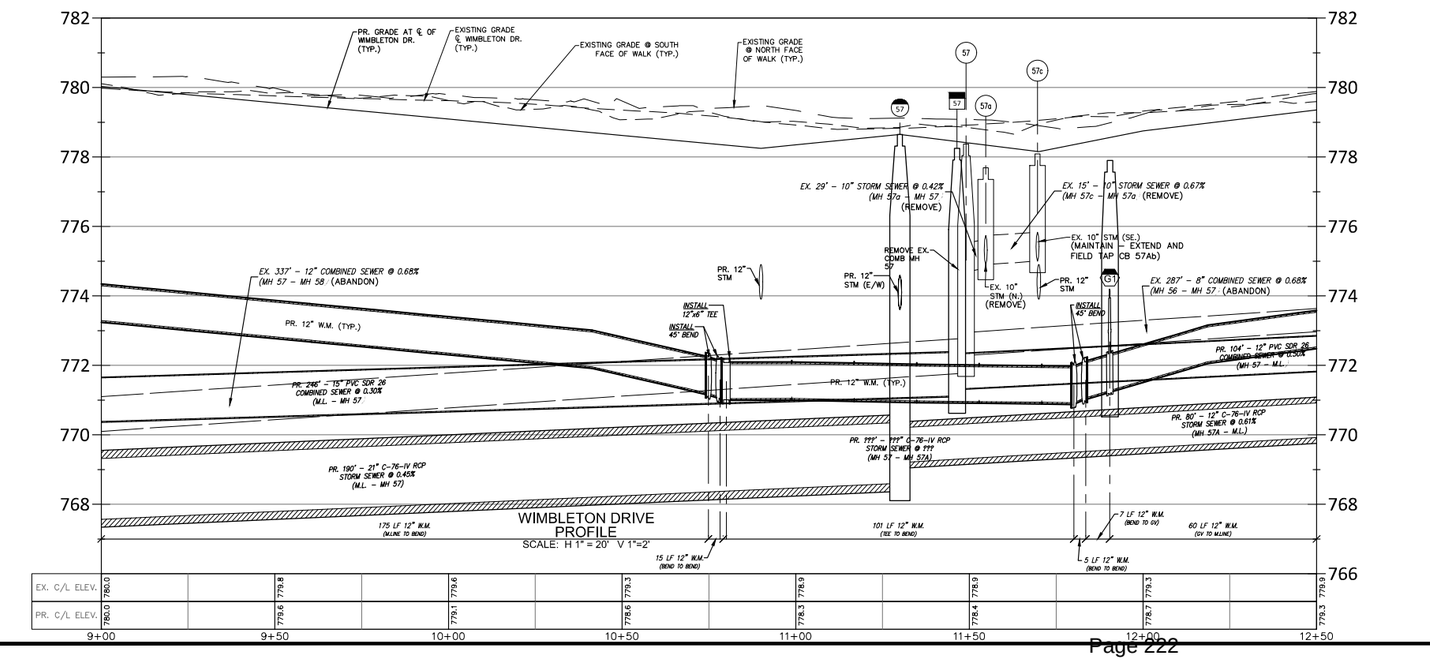
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C02

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UTILITY CROSSING SCHEDULE

X3A PR. 12" STM B/P 773.82
PR. 15" COMB T/P 772.20

X3A1 PR. 12" STM B/P 773.73
PR. 21" STM T/P 770.02

X3B PR. 12" STM B/P 773.59
PR. 12" WM T/P 772.09

X3B1 PR. 12" STM B/P 773.68
PR. 12" WM T/P 773.04

X3C PR. 12" STM B/P 773.80
PR. 12" COMB T/P 772.44

X3C1 PR. 12" STM B/P 773.73
PR. 12" STM T/P 770.50

X3D PR. 12" STM B/P 773.68
PR. 12" WM T/P 772.04

X3D1 PR. 12" STM B/P 773.54
PR. 12" WM T/P 772.04

EX. SEWER STRUCTURE SCHEDULE

57 REMOVE
11+49.06 13.86' N
COMBINED MH 57
RIM 778.18'
12" W. INV 771.78
10" SE. INV 772.08
8" E. INV 772.28

EX. STORM STRUCTURE SCHEDULE

57a REMOVE
11+54.74 14.38' S
C.B. BEEHIVE 57a
RIM 777.69'
10" N. INV 772.19 (REMOVE)
10" E. INV 772.39 (REMOVE)
10" NW. INV 772.39 (REMOVE)

57c REMOVE
11+69.61 14.46' S
C.B. BEEHIVE 57c
RIM 778.09'
10" W. INV 774.49 (REMOVE)
10" SE. INV 774.49 (V.I.F., EXTEND & TAP 10" TO NEW CB 57Ab)

57b REMOVE
11+55.59 13.24' N
CATCH BASIN 57b
RIM 778.04'
10" S. INV 775.04 (REMOVE)

57d MAINTAIN
11+79.34 34.02' S
C.B. BEEHIVE 57d
RIM 777.35'
10" NW. INV 775.05 (MAINTAIN)

WATER MAIN SCHEDULE

G1 PR. 12" GATE VALVE IN 5' DIA. WELL
PR. RIM 778.35
PR. T/PIPE 772.21

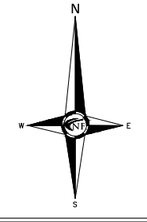
H2 PR. HYDRANT & ASSEMBLY
FG 778.45
PR. T/PIPE 772.95

Sanitary Structure Schedule

Structure Name	Structure Details
#57 PR. 4' COMBINED MANHOLE	PR. RIM 778.25 PR. 15" W. INV. 771.12 PR. 12" E. INV. 771.32

Storm Drainage Structure Schedule

Structure Name	Structure Details
#57 PR. 5' STORM MANHOLE	PR. RIM 778.65 PR. 12" E. INV. 773.60 PR. 12" W. INV. 773.60 PR. 12" E. INV. 769.20 PR. 21" W. INV. 768.60
#57a PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.00
#57b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.00 PR. 12" N. INV. 773.80 PR. 12" E. INV. 773.80
#57c PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.00
#57d PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 777.80 PR. 12" N. INV. 773.80 PR. 12" W. INV. 773.80



UTILITY NOTE

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LEGEND

- SWR. SVC. (PER VIDEO INSP.) / MANHOLE / COMB / SAN — EXISTING SAN/COMB SEWER
- CLEAN-OUT / CVB / GVB / HYDRANT — EXISTING WATER MAIN
- RCDB / MANHOLE / CB / END SECTION — EXISTING STORM SEWER
- ELEC. METER / ELEC. MANHOLE / ELEC. HANDHOLE — EXISTING BURIED CABLES
- GAS METER / GAS MANHOLE / GV / GAS VALVE — EXISTING GAS MAIN
- UTILITY POLE / STRAIN POLE / LIGHT POLE / GUY WIRE — OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.) — EX. PAVERS
- LS LANDSCAPE BED
- EX. SOIL BORING — PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PUBLIC PHONE — PR. 4" CONC. SIDEWALK
- WELL
- PUMP — PR. FULL-DEPTH ASPH. (4" HMA ON 8" 21AA)
- SIGN
- POST/BOLLARD — PR. BITUMINOUS CAPESEAL
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD — SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION

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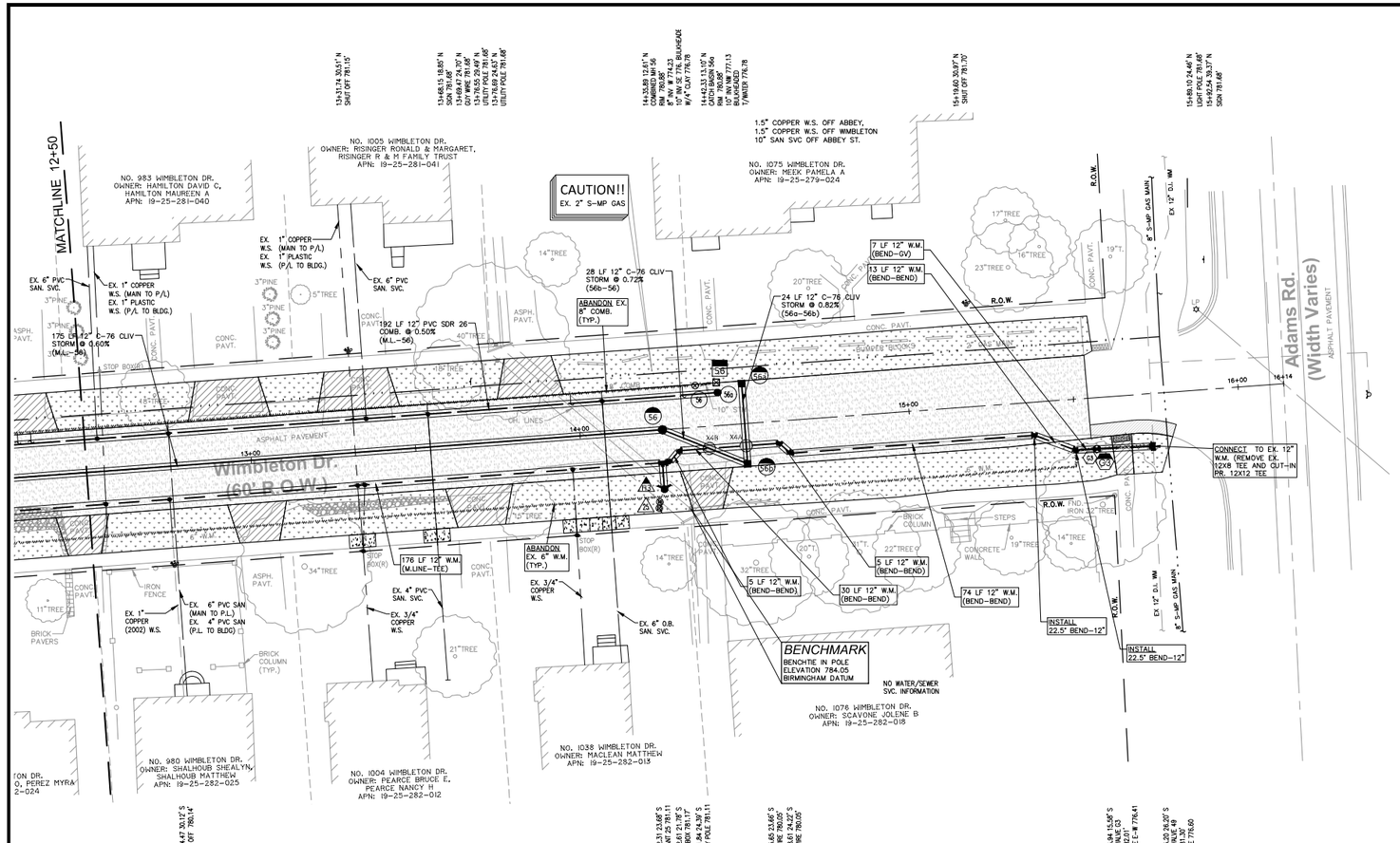
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Drive Sta. 9+00 to 12+50

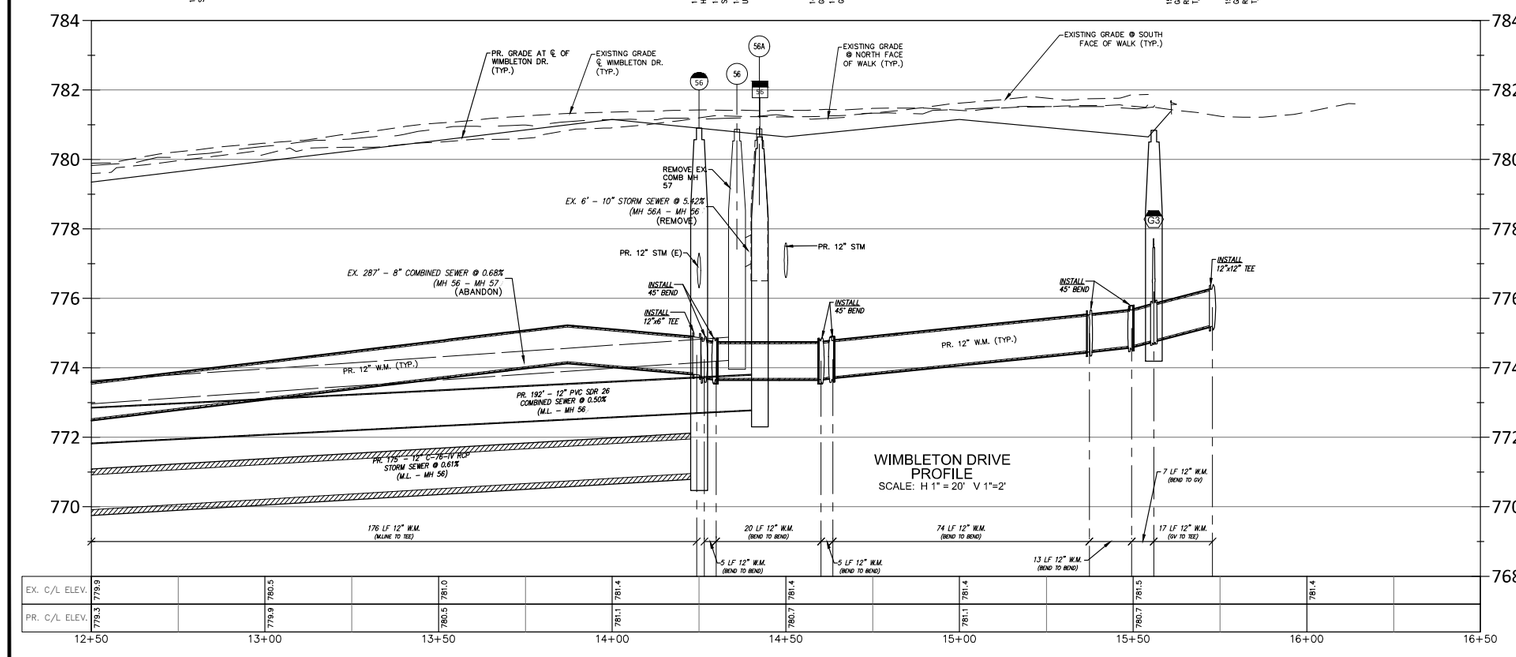
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APPROVED BY:
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NFE JOB NO. O979
SHEET NO. C03

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EX. C/L ELEV.	779.9		780.5		781.0		781.4		781.4		781.4		781.5		781.4	
PR. C/L ELEV.	779.3	779.9		780.5		781.1		780.7		781.1		780.7		781.4		

UTILITY CROSSING SCHEDULE

X4A PR. 12" STM B/P 776.38
PR. 12" WM T/P 774.74

X4A PR. 12" STM B/P 776.24
PR. 12" WM T/P 774.74

EX. SEWER STRUCTURE SCHEDULE

56 REMOVE
14+35.89 12.61' N
COMBINED MH 56
RIM 780.88'
8" INV. W 774.23
10" INV SE 776. BULKHEADED
W/4" CLAY 776.78

EX. STORM STRUCTURE SCHEDULE

56b REMOVE
14+42.33 13.15' N
CATCH BASIN 56a
RIM 780.88'
10" INV NW 777.13
BULKHEADED
T/WATER 776.78

WATER MAIN SCHEDULE

G3 RETROFIT 12" GATE VALVE IN EXISTING WELL
15+05.94 15.58' S
GATE VALVE G3
RIM 782.01'
T/PIPE E-W 776.41
(REMOVE EX. 8" VALVE AND D.I. WATER MAIN PIPE)
PR. RIM 782.00
PR. T/PIPE 776.40

A12 PR. HYDRANT & ASSEMBLY
FG 780.75
PR. T/PIPE 775.25

A2 REMOVE
14+22.31 23.68' S
HYDRANT 25 781.11'

Sanitary Structure Schedule

Structure Name	Structure Details
#56 PR. 4' COMBINED MANHOLE	PR. RIM 780.65 PR. 12" W. INV. 772.80

Storm Drainage Structure Schedule

Structure Name	Structure Details
#56 PR. 4' STORM MANHOLE	PR. RIM 780.90 PR. 12" E. INV. 776.30 PR. 12" W. INV. 770.97
#56a PR. 2' STORM INLET	PR. RIM 780.50 PR. 12" S. INV. 776.70
#56b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 780.50 PR. 12" N. INV. 776.50 PR. 12" W. INV. 776.50

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LEGEND

- SWR. SVC. (PER VOED MAP.) / CLEAN-OUT
- MANHOLE / CMB / CMH
- CVB / GW / HYDRANT
- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- R.C.B. / MANHOLE / CB / END SECTION
- EXISTING STORM SEWER
- ELEC. METER / ELEC. MANHOLE / TELEPHONE MANHOLE
- EXISTING BURIED CABLES
- GAS METER / GAS MARKER / GV / GAS VALVE
- EXISTING GAS MAIN
- UTILITY POLE / STRAIN POLE / LIGHT POLE / GUY WIRE
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- EX. PAVERS
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" HMA ON 6" 21AA)
- PR. BITUMINOUS CAPSEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SHEET
Utility Plan Wimbleton Drive Sta. 12+50 to P.O.E.

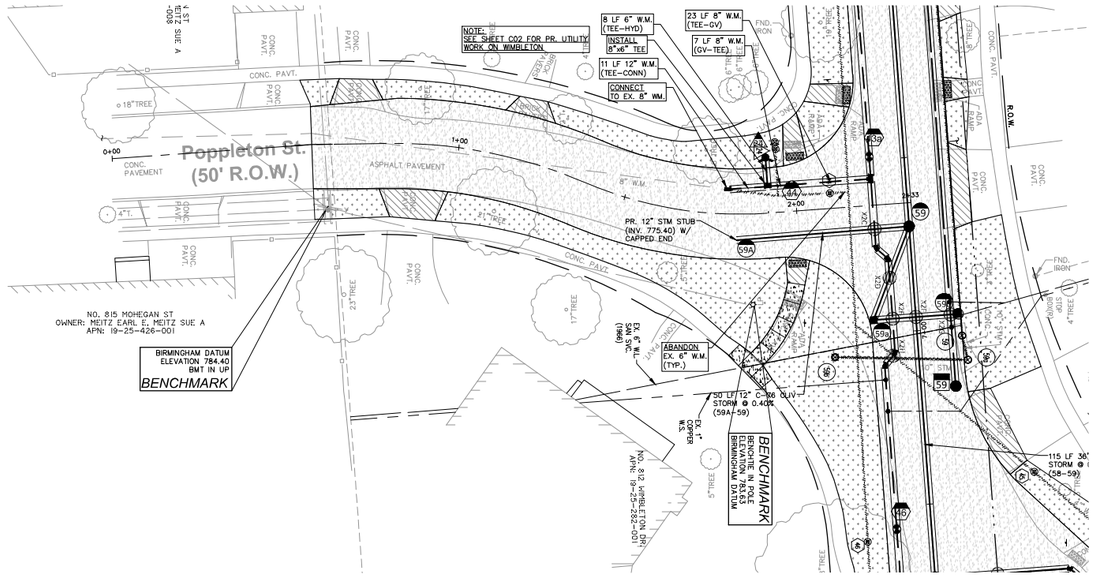
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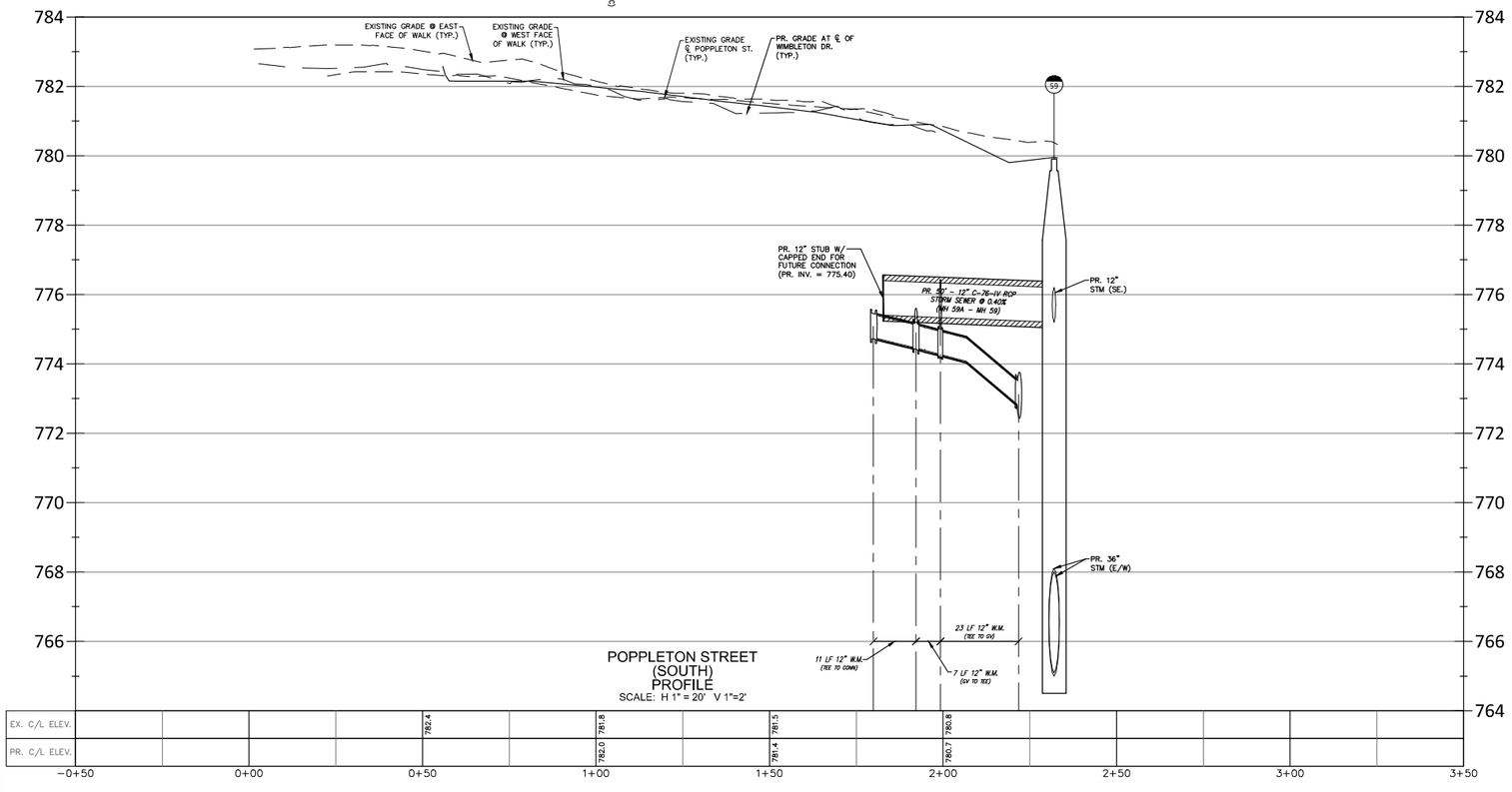
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C04

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POPPLETON STREET (SOUTH) PROFILE
SCALE: H 1" = 20' V 1"=2'

UTILITY CROSSING SCHEDULE

01 EX. 8" WM B/P 745.03
PR. 15" STM T/P 743.48
VERTICAL CLEARANCE: 1.55'

WATER MAIN SCHEDULE

44 PR. 8" GATE VALVE IN 5" DIA. WELL
PR. RIM 780.70
PR. T/PIPE 774.92

24 PR. HYDRANT & ASSEMBLY
FG 780.0
PR. T/PIPE 775.30

Storm Drainage Structure Schedule

Structure Name	Structure Details
#59A PR. 12" STORM STUB W/ CAPPED END	PR. RIM 776.63 PR. 12" N. INV. 775.40

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- CLEAN-OUT
- CMB SAN
- EXISTING SAN/COMB SEWER
- GV HYDRANT
- EXISTING WATER MAIN
- RCDB MANHOLE CB END SECTION
- EXISTING STORM SEWER
- ELEC. METER
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- EXISTING BURIED CABLES
- GAS METER
- GAS MARKER
- GAS VALVE
- EXISTING GAS MAIN
- UTILITY POLE
- LIGHT POLE
- STRAIN POLE
- GUY WIRE
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- EX PAVERS
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
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- SPRINKLER VALVE BOX
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- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" MIN. ON 6" 21AA)
- PR. BITUMINOUS CAPSEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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SHEET
Utility Plan Poppleton St. (South) Sta. P.O.B. to P.O.E.

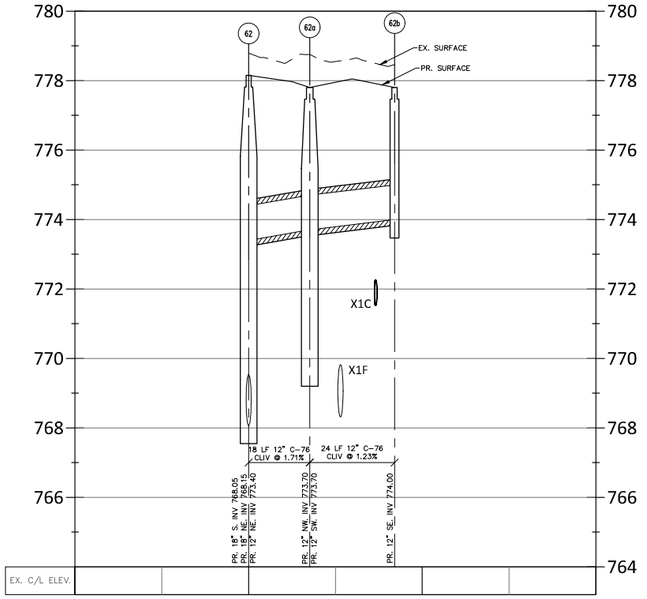
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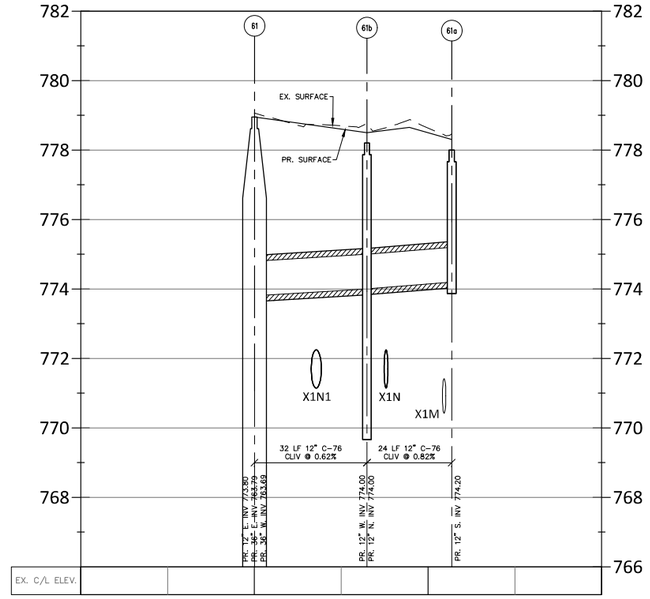
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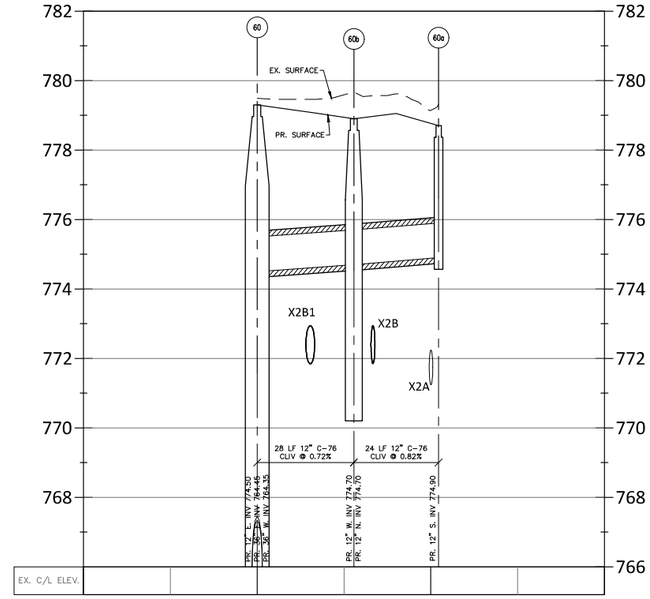
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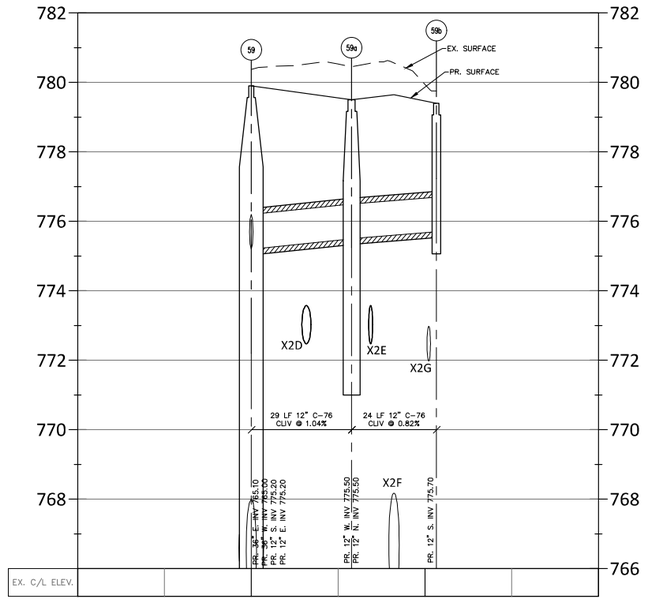
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SHEET NO. C05

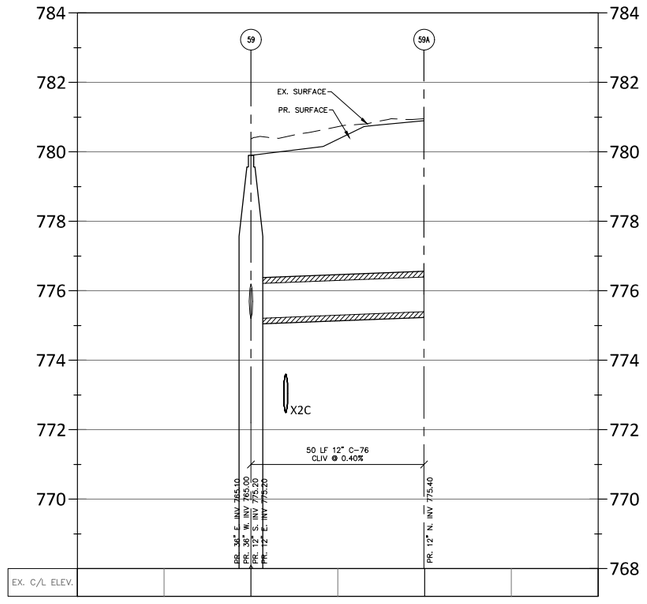
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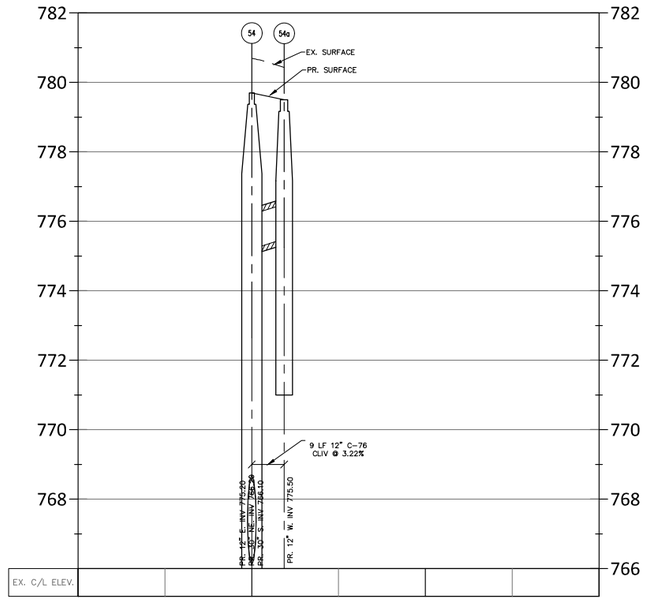












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SHEET
Sewer Profiles 1 of 3

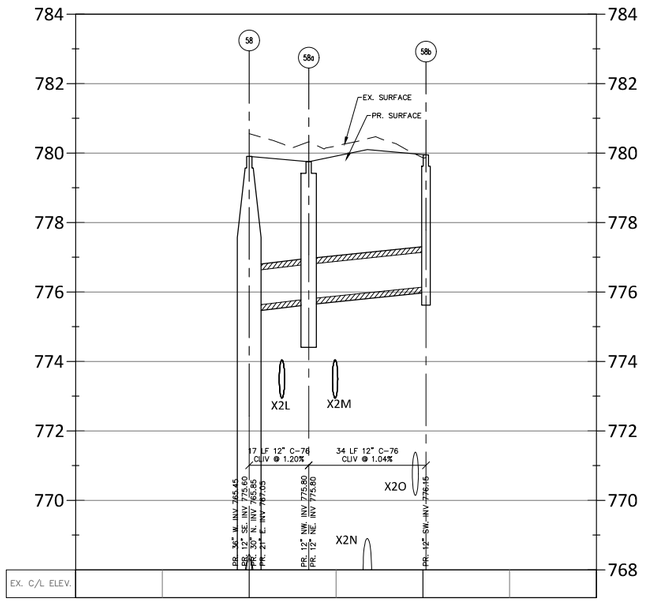
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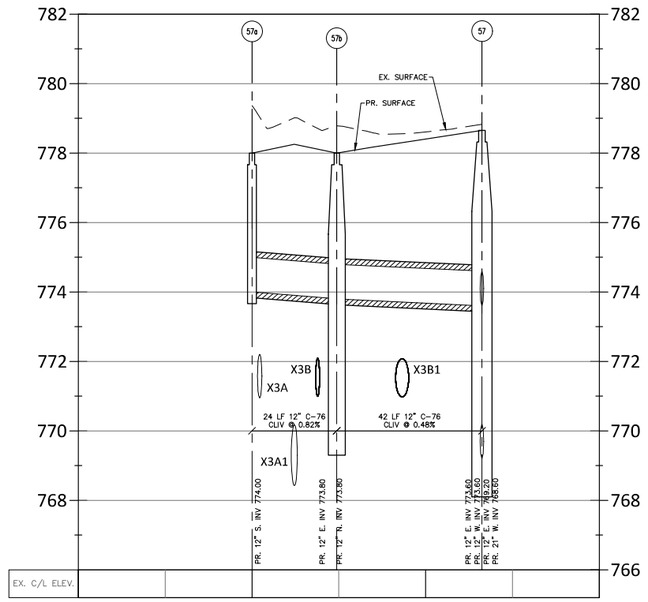
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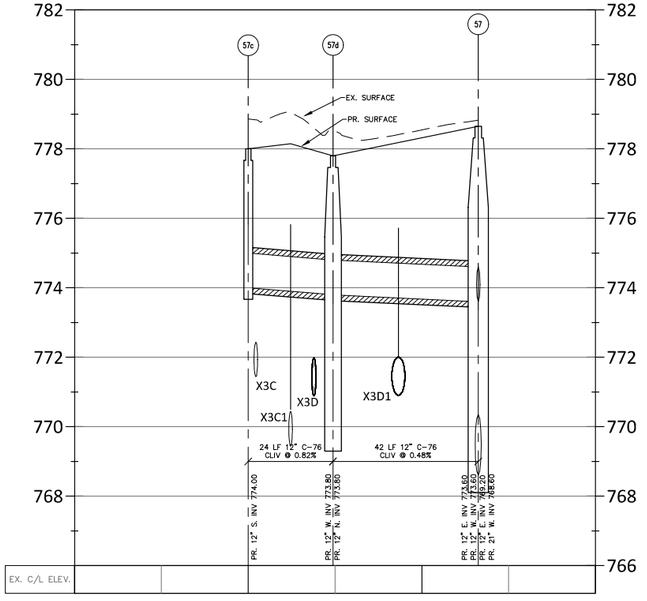
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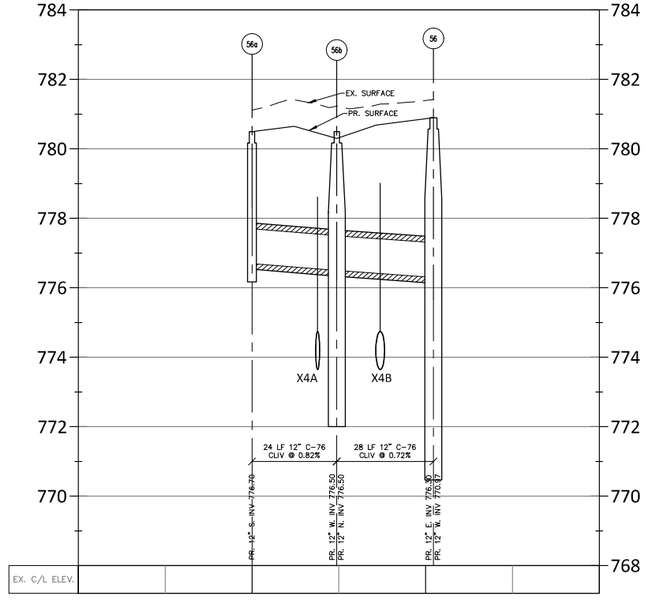
NFE JOB NO. **O979**
SHEET NO. **C06**

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NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
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PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Sewer Profiles 2 of 3

811
Know what's below
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

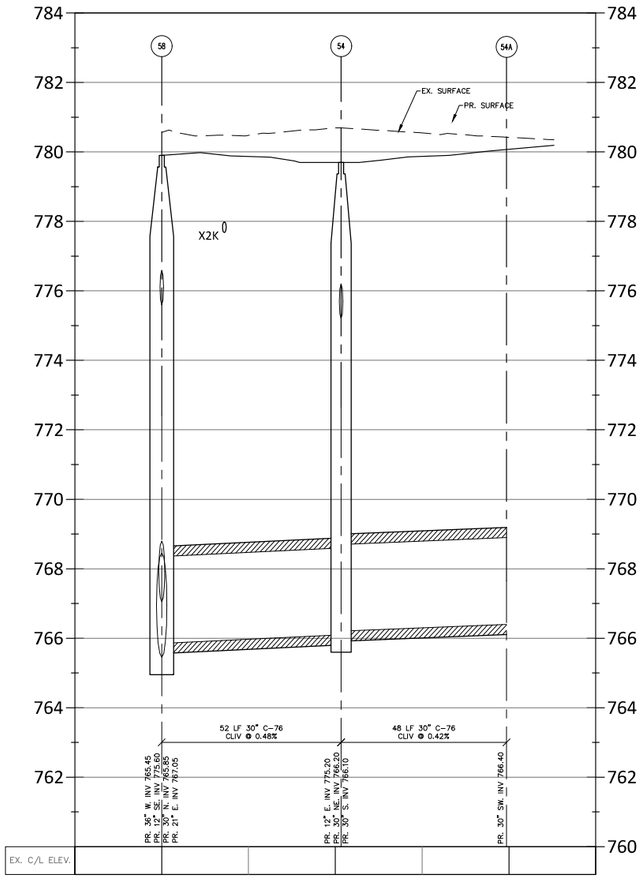
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January 5, 2026

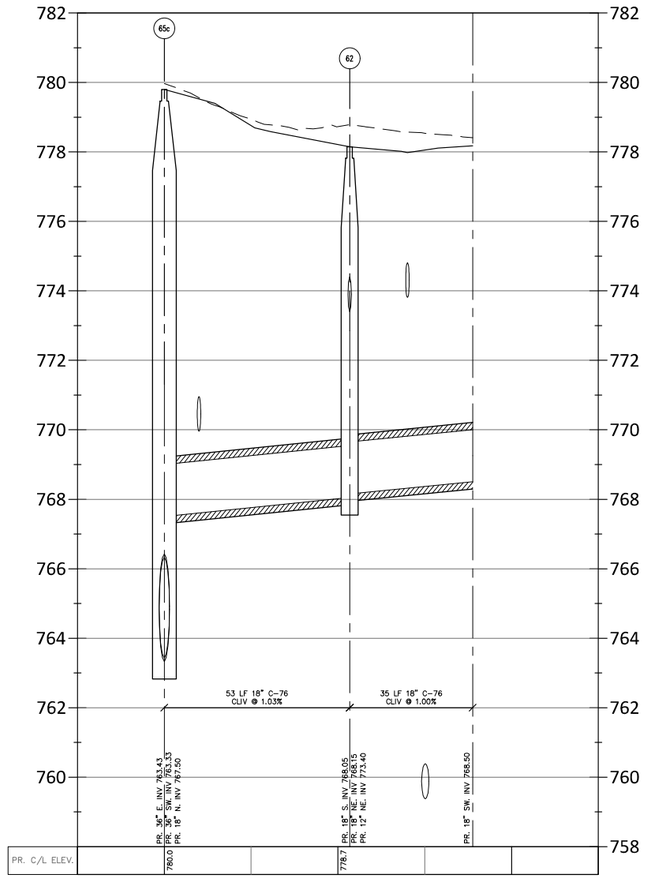
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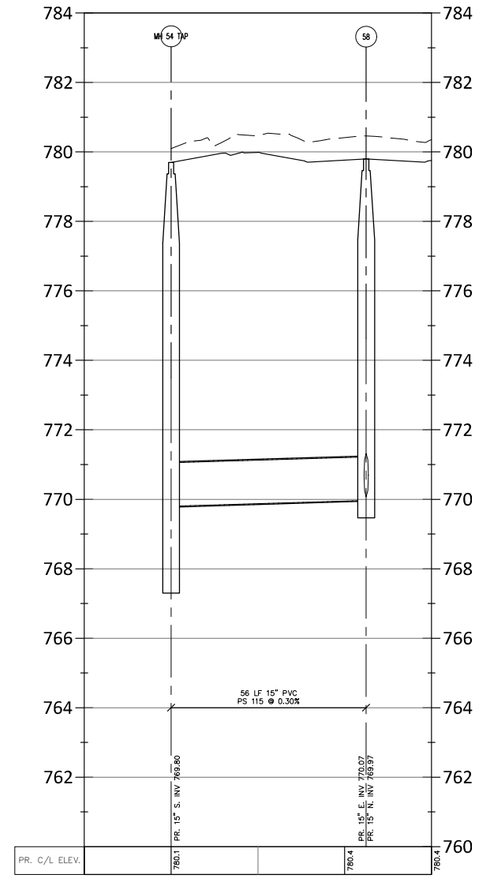
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NFE JOB NO. O979
SHEET NO. C07

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Wimbleton Drive Phase 2
Paving Project
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PROJECT LOCATION
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of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Sewer Profiles 3 of 3

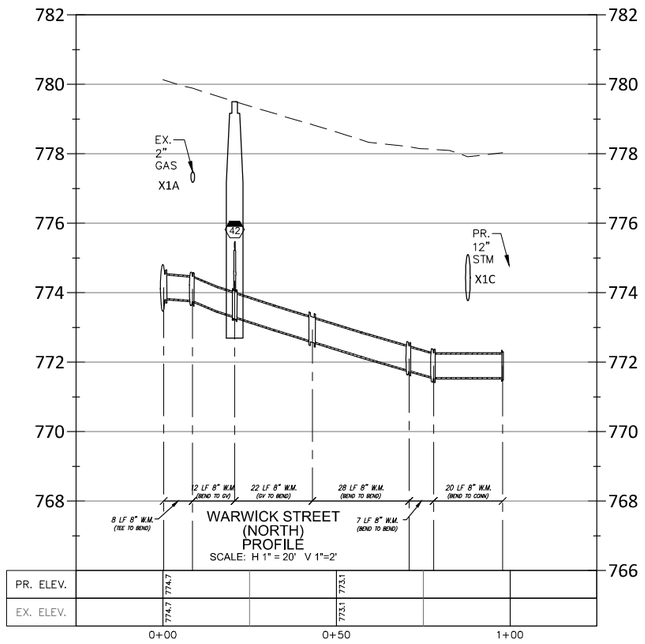
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DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

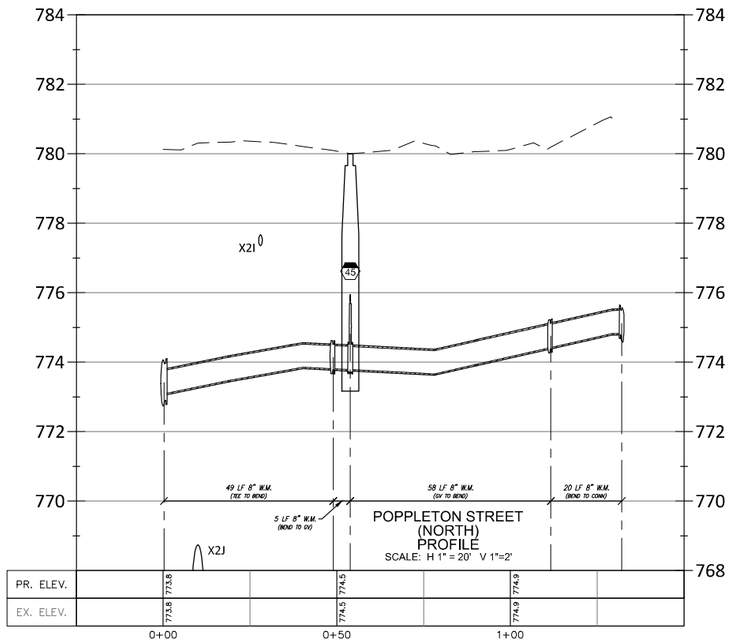
DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
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NFE JOB NO. **O979**
SHEET NO. **C08**

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Storm Sewer Profile
(-0+25.00 - 1+25.00)



Storm Sewer Profile
(-0+25.00 - 1+50.00)

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PROJECT LOCATION

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City of Birmingham,
Oakland County, Michigan

SHEET

Supplemental Water Main Profiles

811
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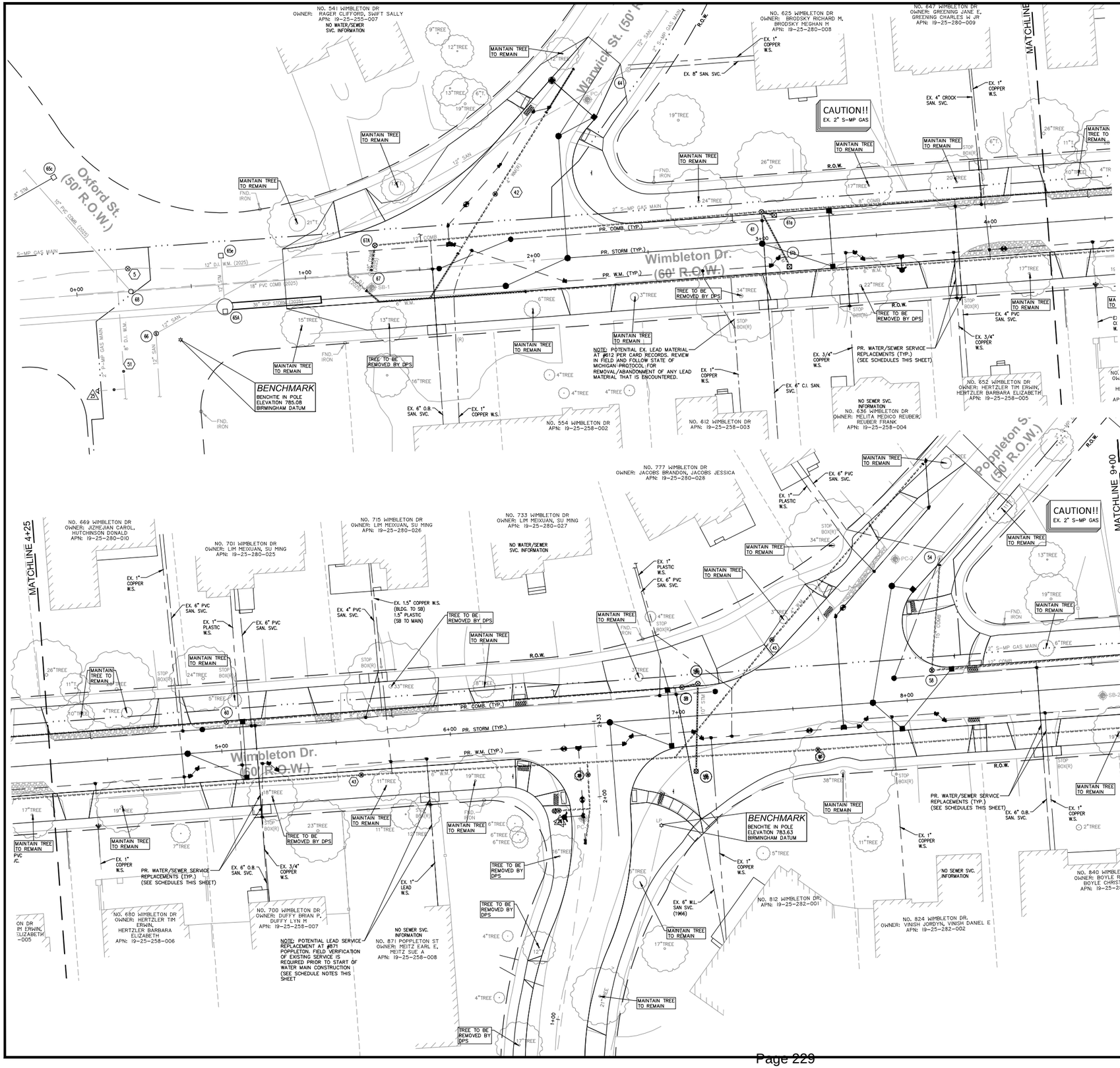
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

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NFE JOB NO. O979
SHEET NO. C09

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Combined Sewer Service Schedule - Wimbleton Drive Sta. P.O.B. to 9+00

Existing MH61 to MH62

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
1+02	586 Oxford St.	12" Comb.	South	6"	Unknown	Active	Hdr & cut 2 ring - Sta 1	N/A
1+22	541 Wimbleton Dr	12" Comb.	North	6"	PVC	Active	Hdr & cut 2 ring - Sta 1	N/A
1+52	541 Wimbleton Dr	12" Comb.	North	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	50/0" (Estimated)
1+56	554 Wimbleton Dr	12" Comb.	South	6"	C.I.	Active	Tap to New Conn. Exist. Drain	XF/0
1+98	541 Wimbleton Dr	12" Comb.	North	6"	Unknown	Capped	No st	N/A
1+87	554 Wimbleton Dr	12" Comb.	South	6"	Unknown	Capped	No st	N/A
2+56	625 Wimbleton Dr	12" Comb.	North	6"	Unknown	Capped	No st	N/A
2+70	612 Wimbleton Dr	12" Comb.	South	6"	Unknown	Capped	No st	N/A
2+88	612 Wimbleton Dr	12" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)

Existing MH61 to MH60

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
3+01	632 Wimbleton Dr.	8" Comb.	South	6"	C.I.	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	40/0"
3+31	636 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)
3+85	652 Wimbleton Dr.	8" Comb.	South	4"	PVC	Active	Tap to New Conn. Sewer Main	40/0"
3+96	647 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No st	N/A
3+98	647 Wimbleton Dr.	8" Comb.	North	4"	Crock	Active	Tap to New Conn. Sewer Main	20/0
4+43	680 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	40/0" (Estimated)
4+54	699 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No st	N/A
4+55	680 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Capped	No st	N/A
4+85	680 Wimbleton Dr.	8" Comb.	North	6"	PVC	Active	Tap to New Conn. Sewer Main	5/0

Existing MH60 to MH59

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
5+13	709 Wimbleton Dr.	8" Comb.	South	6"	PVC	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	5/0
5+32	720 Wimbleton Dr.	8" Comb.	South	6"	U.B.	Active	Tap to New Conn. Sewer Main	15/0"
5+73	700 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Capped	No st	N/A
5+99	875 Poppleton St.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)
5+71	715 Wimbleton Dr.	8" Comb.	North	6"	PVC	Active	Tap to New Conn. Sewer Main	27/0
5+72	733 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No st	N/A
5+75	871 Poppleton St.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	15/0" (Estimated)
6+16	733 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	21/0" (Estimated)
6+97	777 Wimbleton Dr.	8" Comb.	North	6"	PVC	Likely Active	Tap to New Conn. Sewer Main	16/0
6+98	812 Wimbleton Dr.	8" Comb.	South	6"	W.L.	Active	Tap to New Conn. Exist. Drain	0/0"

Existing MH58 to MH57

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+58	840 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Conn. Sewer	40/0
8+80	840 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Insert new-Replace/Tap to New Conn. Sewer	40/0" (Estimated)

Water Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+25

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
3+93	647 Wimbleton Dr.	1" Copper	0	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
1+65	554 Wimbleton Dr.	1" Copper	21/1"	1"	N
3+73	612 Wimbleton Dr.	1" Copper*	3/1"	1"	N
3+76	636 Wimbleton Dr.	3/4" Copper	23/1"	1"	Y
3+83	652 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y

*NOTE: Records indicate that portion of existing lead service is still active from ex. main to original stop box. There is a copper service from existing main to a new stop box that is reinstated to a copper service to building.

Water Service Schedule - Bird Avenue Sta. 4+25 to 9+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+83	668 Wimbleton Dr.	1" Copper	0	1"	N
5+05	701 Wimbleton Dr.	1" Plastic	0	1"	N
5+73	715 Wimbleton Dr.	1.5" Copper	0	1.5"	N
Unknown	733 Wimbleton Dr.	Unknown (Likely Lead Material)	0	1"	N
7+23	777 Wimbleton Dr.	Plastic	21/1"	1"	N
7+80	928 Poppleton St	1" Plastic	35/1"	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+84	680 Wimbleton Dr.	1" Copper	4/1"	1"	N
5+37	700 Wimbleton Dr.	3/4" Copper	24/1"	1"	Y
5+89	878 Poppleton St.	1" Lead**	20 (Public)/1" 45 (Pvt.)/1"	1"	Y
7+15	812 Wibleton Dr.	1" Copper	8/1"	1"	N
7+93	824 Wimbleton Dr.	1" Copper	12/1"	1"	N
8+60	840 Wimbleton Dr.	1" Copper	9/1"	1"	N

**NOTE: Records indicate that lead water services at #871 Poppleton St. likely exist between the ex. water main and the shut-off valve and possibly exists between the shut off valve and the house meter. In advance of any other construction, and incidental to other work for this contract, the Contractor shall perform limited excavation on both the sides of the shut-off valve near the ROW to confirm materials on each side, and shall be prepared to replace both "public" and "private" portions of the service line using applicable pay items for each. If required, replacement of the "private" portion of the service line between the ROW and house meter shall be paid using the following pay items: "New Water Service", 1", Private Property (Bored), PEX", and "Water Service Connection, 1", Connection at Meter, #71 Poppleton".

TREE PROTECTION NOTES

SEE TYPICAL TREE PROTECTION NOTES AND DETAILS ON SHEET C11. THE CONTRACTOR SHALL CONTACT CITY D.P.S. IN ADVANCE IF TREE TRIMMING IS REQUIRED PRIOR TO CONSTRUCTION TO AVOID DAMAGE TO EXISTING TREES THAT ARE PROPOSED TO REMAIN.

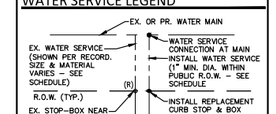
E.G.L.E. & O.C.W.R.C. SEWER PERMIT NOTES

ALL PROPOSED COMBINED SEWER MAINS REQUIRE AN APPROVED PART 41 PERMIT FROM MICHIGAN E.G.L.E. AND AN OAKLAND COUNTY SEWER INSPECTION PERMIT.

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



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Birmingham, MI 48012

PROJECT LOCATION
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SHEET
Utility Service Plan Sta. P.O.B. to 9+00

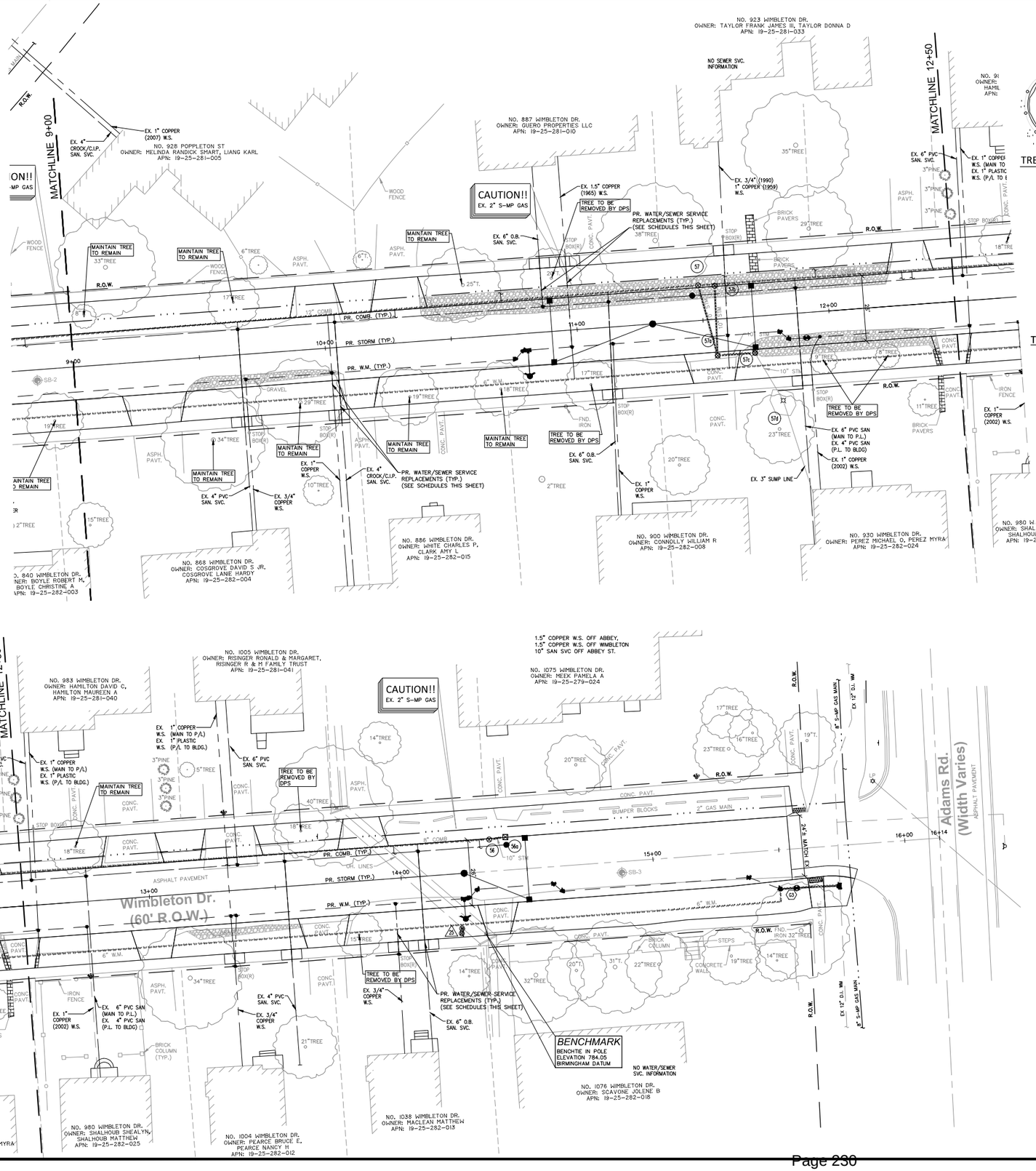
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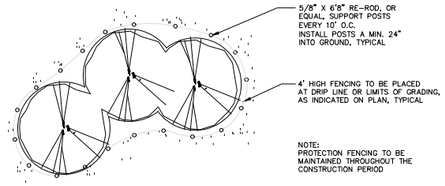
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DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'
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NFE JOB NO. O979
SHEET NO. C10

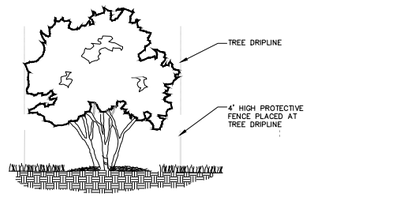
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TREE PROTECTION DETAIL-PLAN

NTS



TREE PROTECTION DETAIL-SECTION

NTS

GENERAL TREE PROTECTION NOTES

1. APPROVED TREE PROTECTION SHALL BE ERECTED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL THE IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
2. ALL UNDERSTORY VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE PRESERVED.
3. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN THE DRIP LINE.
4. WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
5. DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY TREE, SCHEDULED TO REMAIN.
6. ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
7. SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINES OF PROTECTED TREES.
8. TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
9. ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH RIGIDLY STAKED FENCING.
10. THE PARKING OF IDLE AND RUNNING EQUIPMENT SHALL BE PROHIBITED UNDER THE DRIP LINE OF PROTECTED TREES.
11. THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
12. ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
13. THE GRUBBING OF UNDERSTORY VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE CLEARED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MINIMALLY WITH A HYDRO-AXE.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT PER ORDINANCE GUIDELINES, FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
15. TREES TO BE REMOVED SHALL BE FIELD VERIFIED, EVALUATED AND FLAGGED FOR REMOVAL, BY THE LANDSCAPE ARCHITECT OR FORESTER, ONLY AS DIRECTED BY THE OWNER OR OWNERS REPRESENTATIVE.

Combined Sewer Service Schedule - Bird Avenue Sta. 9+00 to P.O.E.

Existing MH36 to MH37

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
9+96	868 Wimbleton Dr.	12" Comb.	South	4"	PVC	Active	Tap to Ex. Comb. Sewer Main	40/6"
10+04	886 Wimbleton Dr.	12" Comb.	South	4"	CROCK/C.I.P.	Likely Active	Tap to Ex. Comb. Sewer Main	40/6"
10+28	886 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	40/6" (Estimated)
10+70	887 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	20/6" (Estimated)
10+89	887 Wimbleton Dr.	12" Comb.	North	6"	O.B.	Active	Tap to Ex. Comb. Sewer Main	20/6"
11+13	900 Wimbleton Dr.	12" Comb.	South	6"	O.B.	Active	Tap to Ex. Comb. Sewer Main	41/6"

Existing MH37 to MH66

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
11+50	923 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	20/6" (Estimated)
11+90	930 Wimbleton Dr.	12" Comb.	South	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	41/6"
11+94	930 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
11+96	923 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Capped	None	N/A
12+30	930 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
12+34	930 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
12+53	981 Wimbleton Dr.	12" Comb.	North	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	5/6"
12+54	980 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
12+56	981 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Capped	None	N/A
12+60	980 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
12+75	980 Wimbleton Dr.	12" Comb.	South	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	0/6"
13+13	1004 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Capped	None	N/A
13+15	1005 Wimbleton Dr.	12" Comb.	North	6"	Unknown	Capped	None	N/A
13+32	1004 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
13+37	1005 Wimbleton Dr.	12" Comb.	North	6"	PVC	Active	Tap to Ex. Comb. Sewer Main	5/6"
13+55	1004 Wimbleton Dr.	12" Comb.	South	4"	PVC	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6"
13+98	1038 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)
14+07	1038 Wimbleton Dr.	12" Comb.	South	6"	O.B.	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6"
14+32	1076 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to New Comb. Sewer	41/6" (Estimated)

Water Service Schedule -Wimbleton Drive Sta. 9+00 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
10+97	887 Wimbleton Dr.	1.5" Copper	36/1.5"	1.5"	N
11+60	923 Wimbleton Dr.	3/4" Copper	83/1"	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
9+68	868 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y
10+02	886 Wimbleton Dr.	1" Copper	10/1"	1"	N
11+14	900 Wimbleton Dr.	1" Copper	13/1"	1"	N
11+95	930 Wimbleton Dr.	1" Copper	13/1"	1"	N

Water Service Schedule -Bird Avenue Sta. 12+50 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
12+56	983 Wimbleton Dr.	1" Copper	0	1"	N
8+45	1005 Wimbleton Dr.	1" Copper	0	1"	N

South Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
12+75	980 Wimbleton Dr.	1" Copper	10/1"	1"	N
13+35	1004 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y
13+97	1038 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y
Unknown	1076 Wimbleton Dr.	Unknown (Likely low Material)	TBD (10/1")	1"	N

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

TREE PROTECTION NOTES

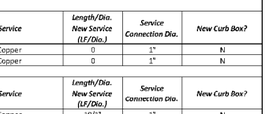
SEE TYPICAL TREE PROTECTION NOTES AND DETAILS ON THIS SHEET. THE CONTRACTOR SHALL CONTACT CITY D.P.S. IN ADVANCE IF TREE TRIMMING IS REQUIRED PRIOR TO CONSTRUCTION TO AVOID DAMAGE TO EXISTING TREES THAT ARE PROPOSED TO REMAIN.

E.G.L.E. & O.C.W.R.C. SEWER PERMIT NOTES

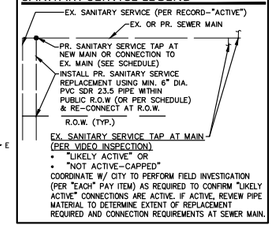
ALL PROPOSED COMBINED SEWER MAINS REQUIRE AN APPROVED PART 41 PERMIT FROM MICHIGAN E.G.L.E. AND AN OAKLAND COUNTY SEWER INSPECTION PERMIT.



WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT

City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT

BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION

Part of the N.E. ¼ of Section 25, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

SHEET

Utility Service Plan Sta. 9+00 to P.O.E.

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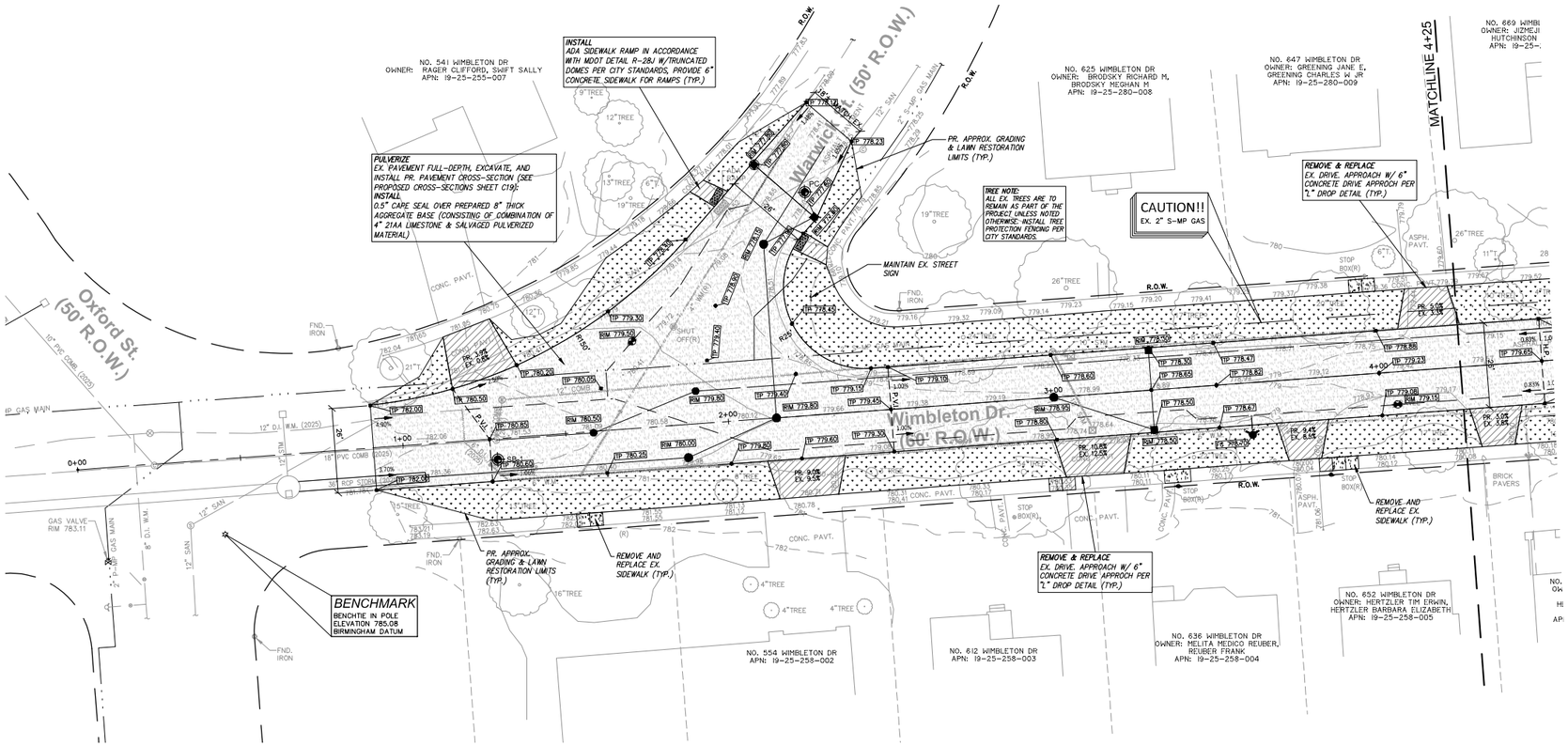
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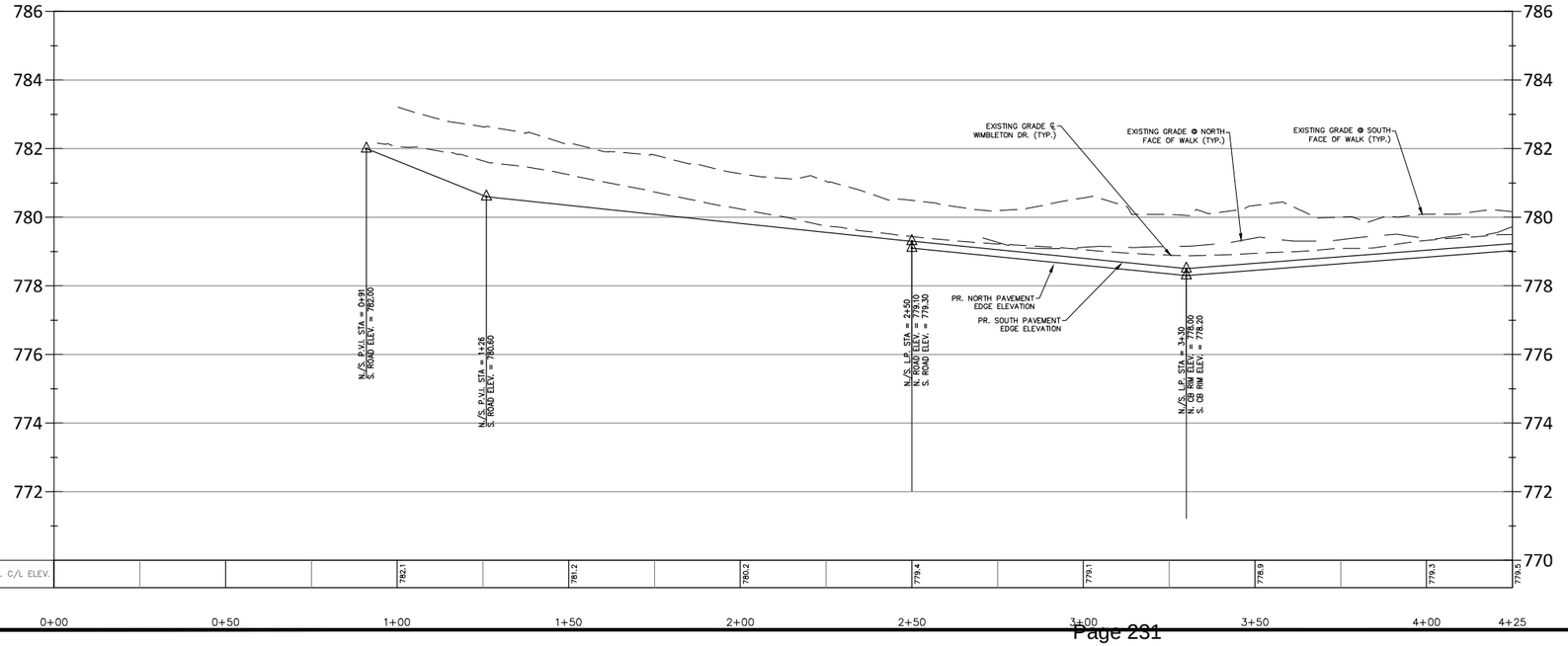
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'

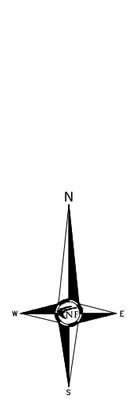
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SHEET NO. C11

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LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
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- PUMP
- SIGN
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- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 6" 21AA)
- PR. BITUMINOUS OVERSEAL
- PR. 18" NS. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- TC 600.00 PR. TOP OF CURB ELEVATION
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City of Birmingham,
Oakland County, Michigan

SHEET

Paving and Grading Plan
Sta. P.O.B. to Sta. 4+25

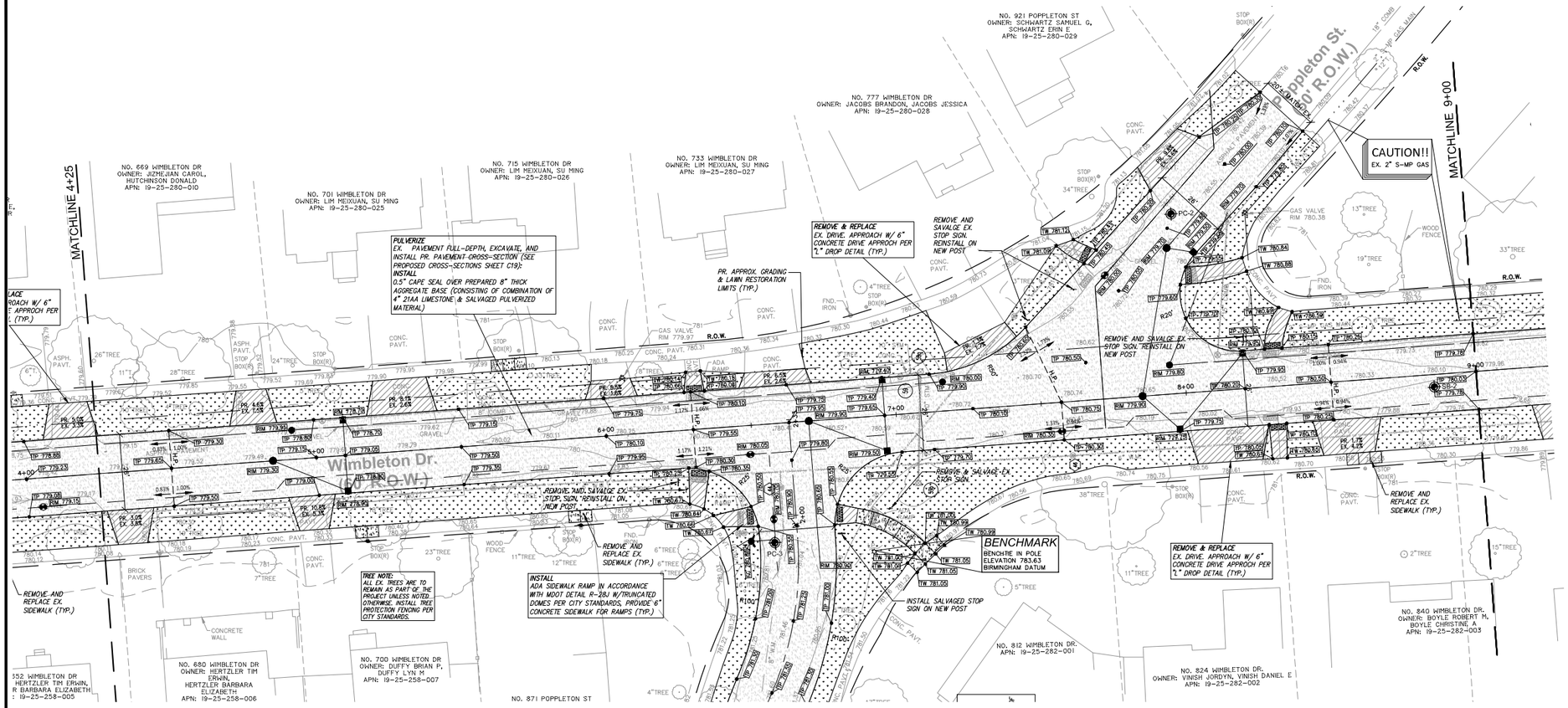
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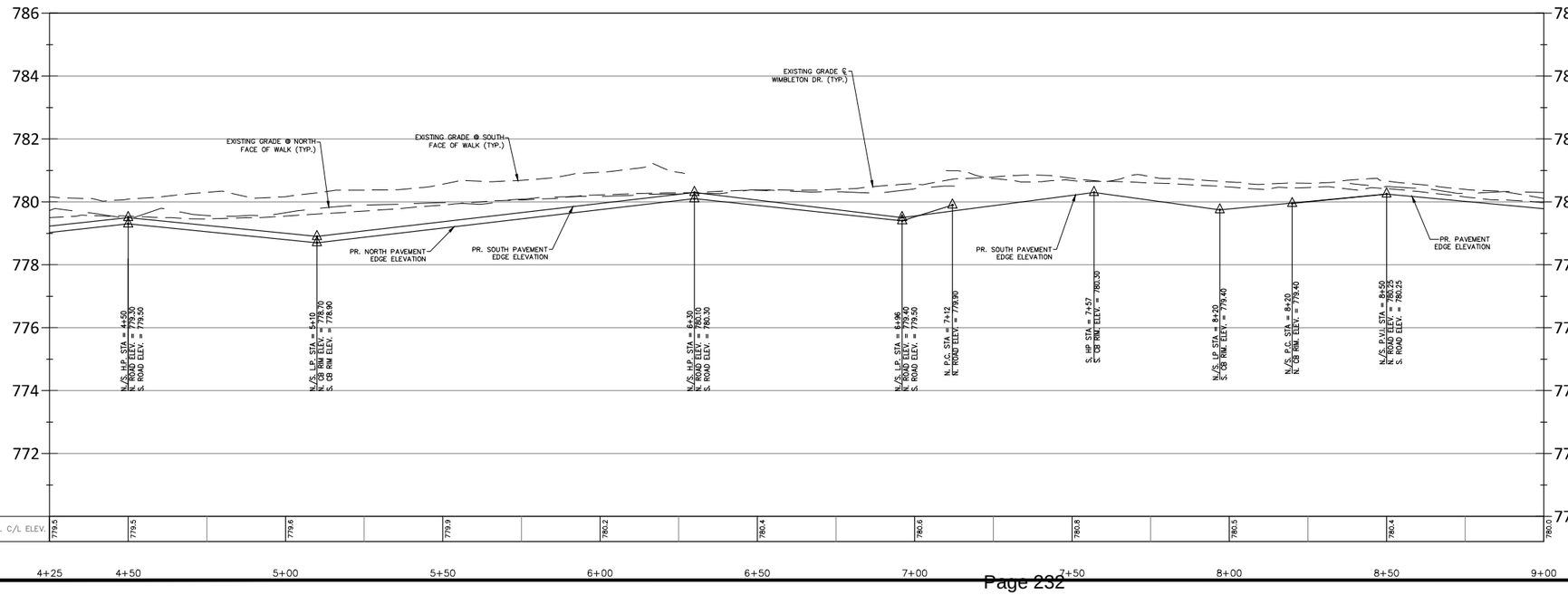
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SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C12

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SHEET
Paving and Grading Plan
Sta. 4+25 to Sta. 9+00

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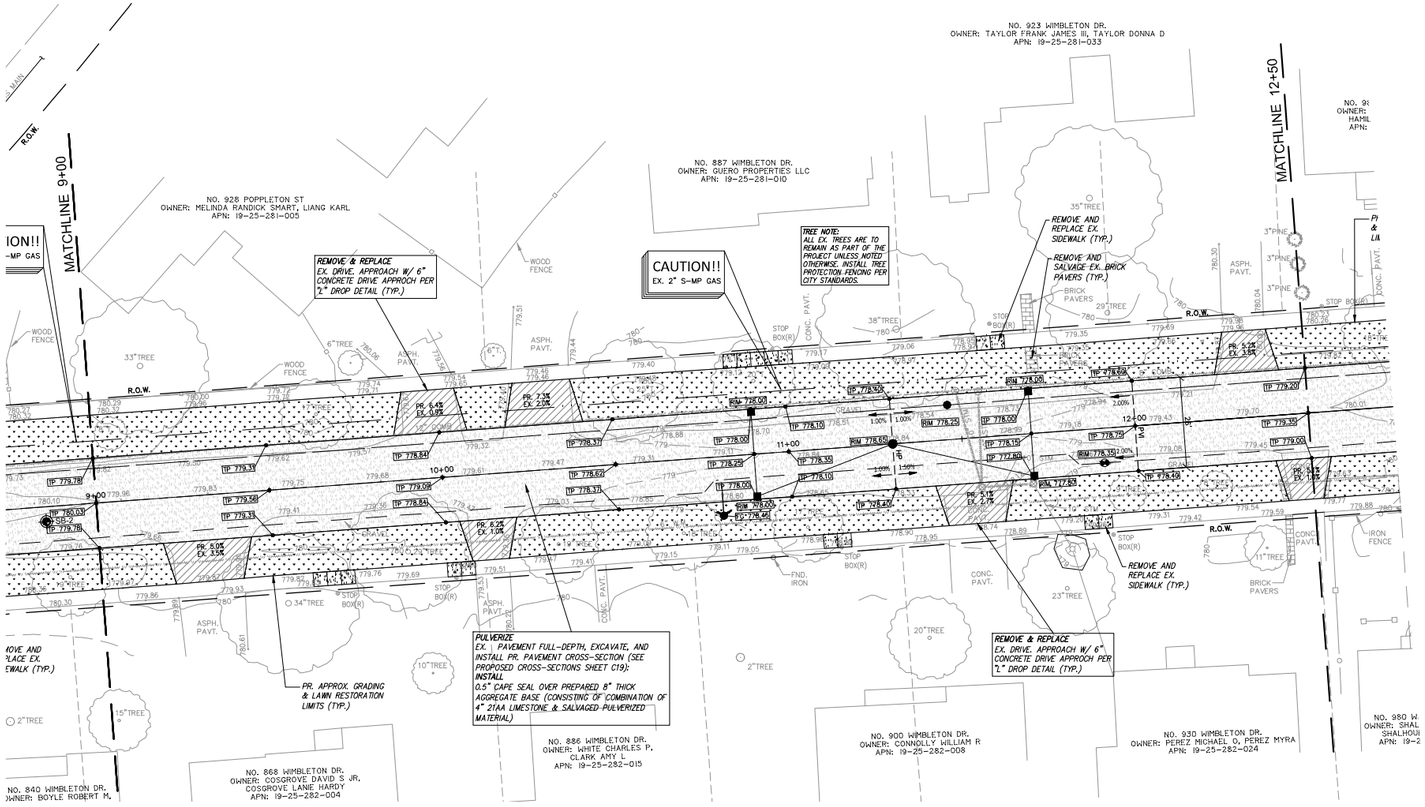
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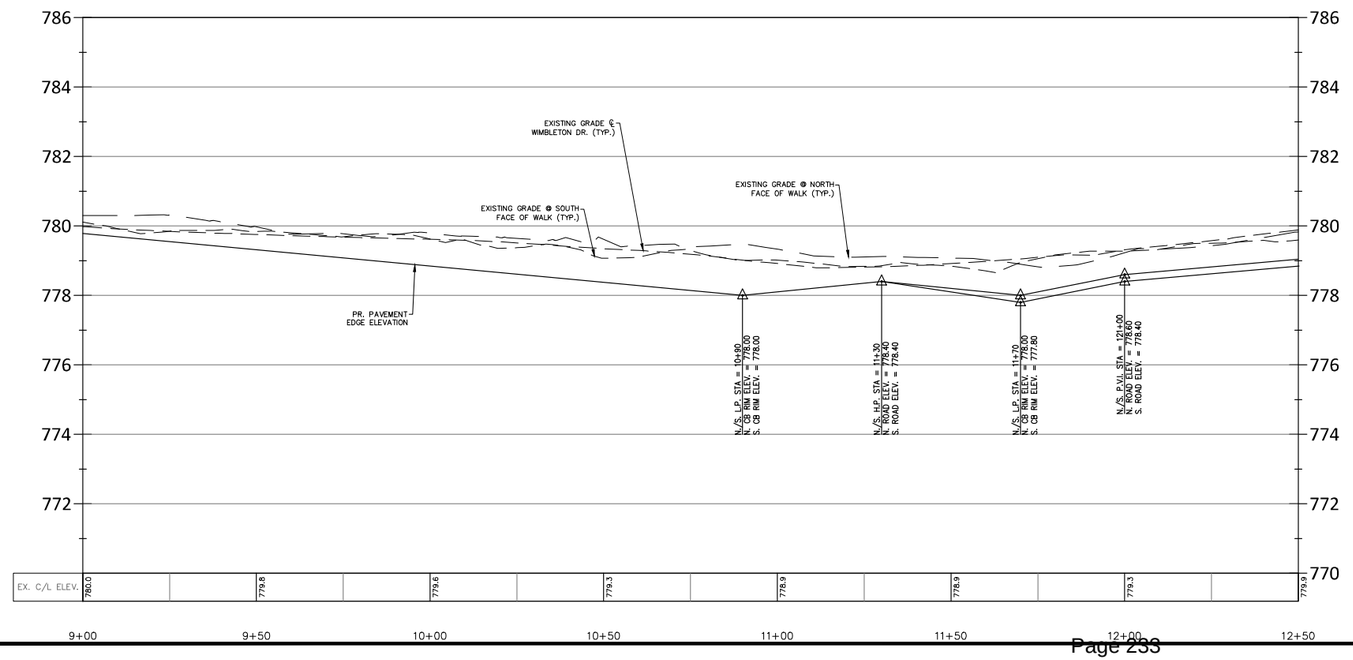
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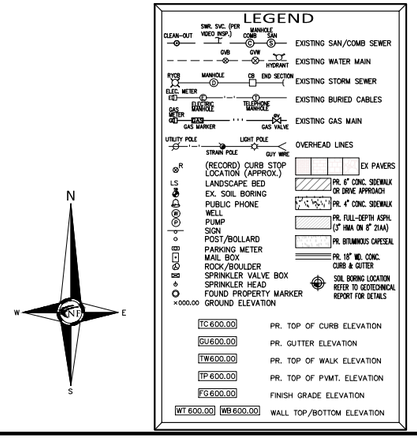
LEGEND

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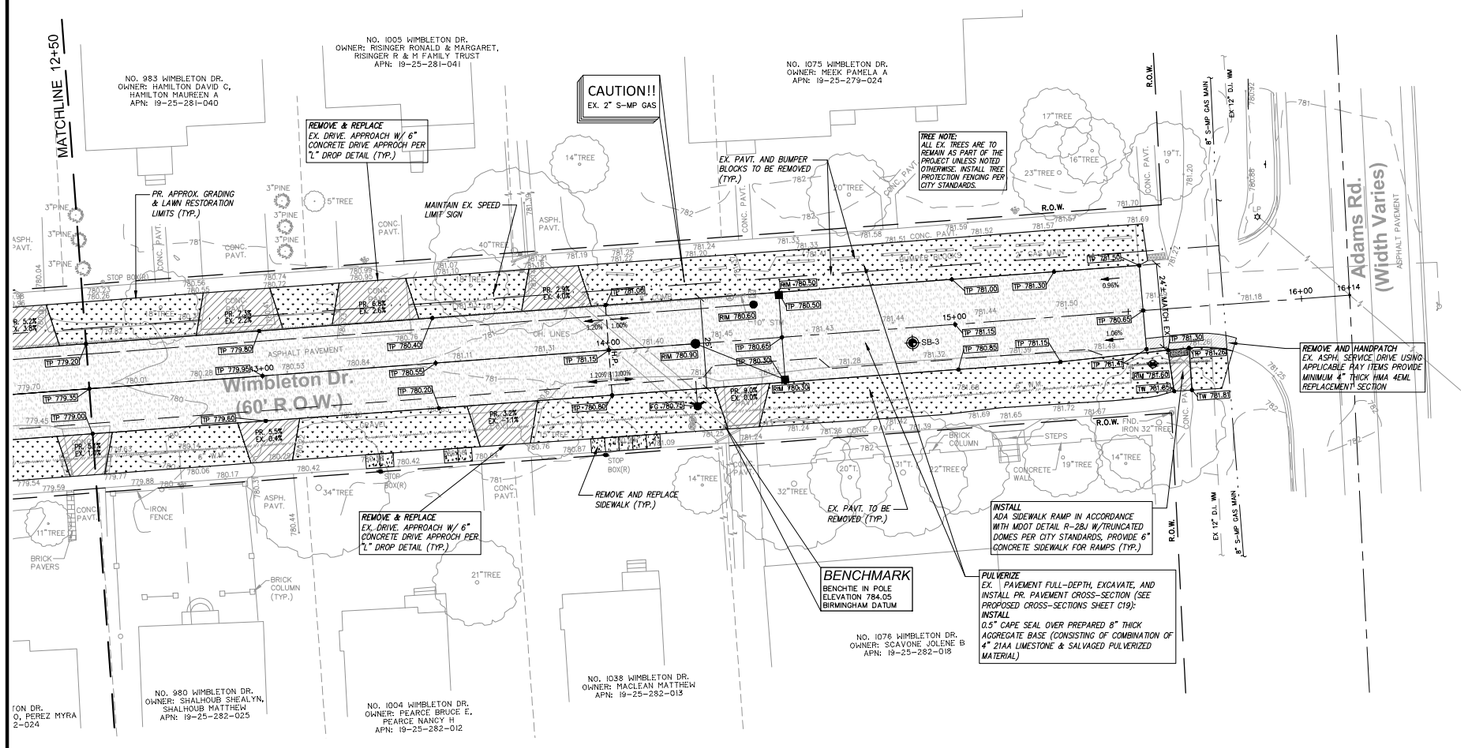
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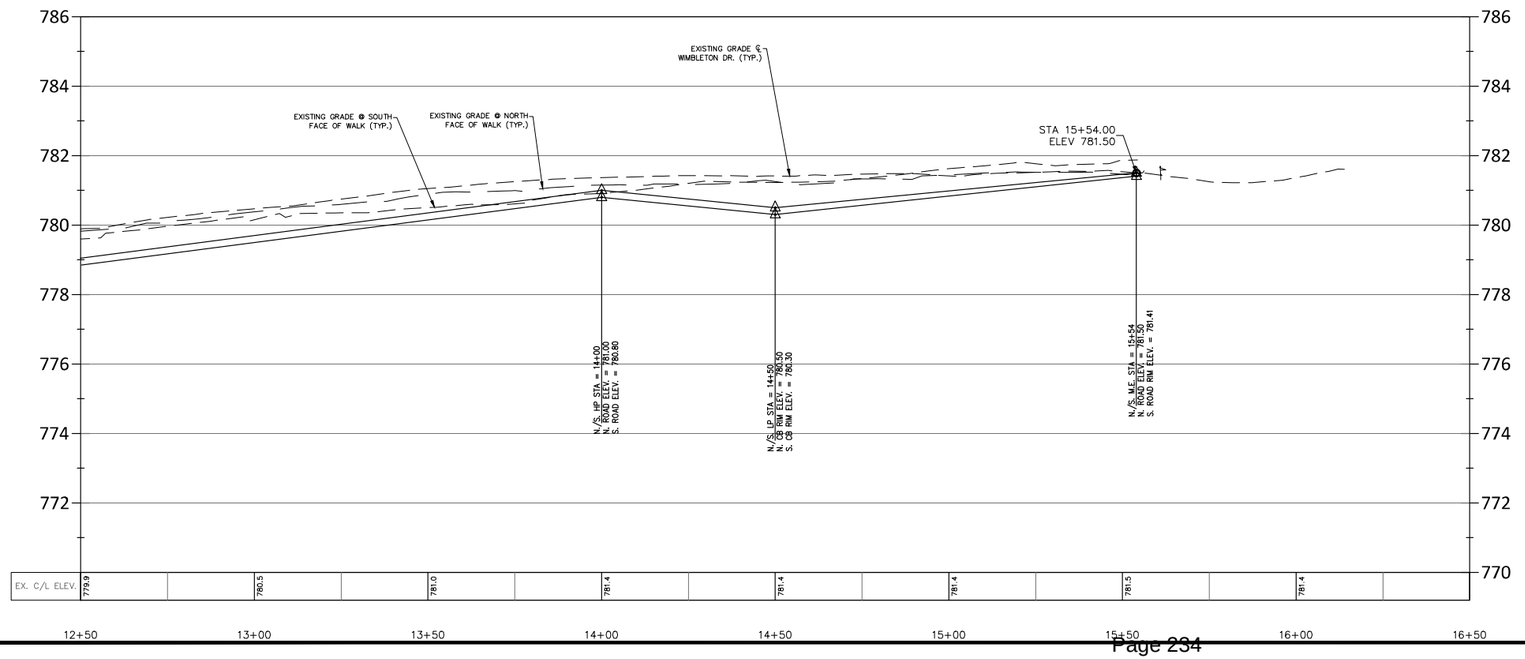
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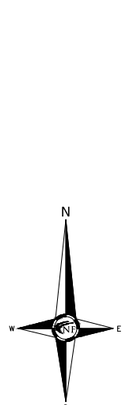
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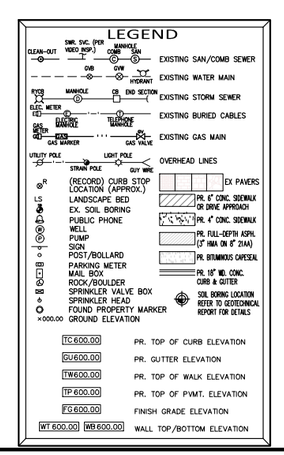
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Engineering Department
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City of Birmingham,
Oakland County, Michigan

SHEET
Paving and Grading Plan
Sta. 12+50 to Sta. P.O.E.

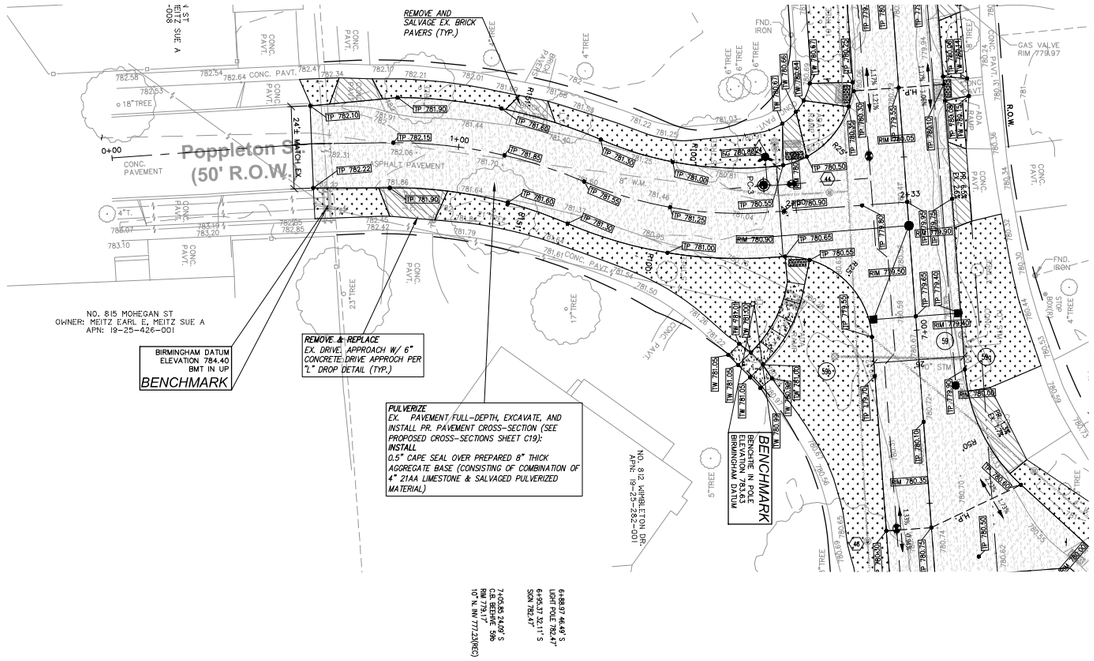
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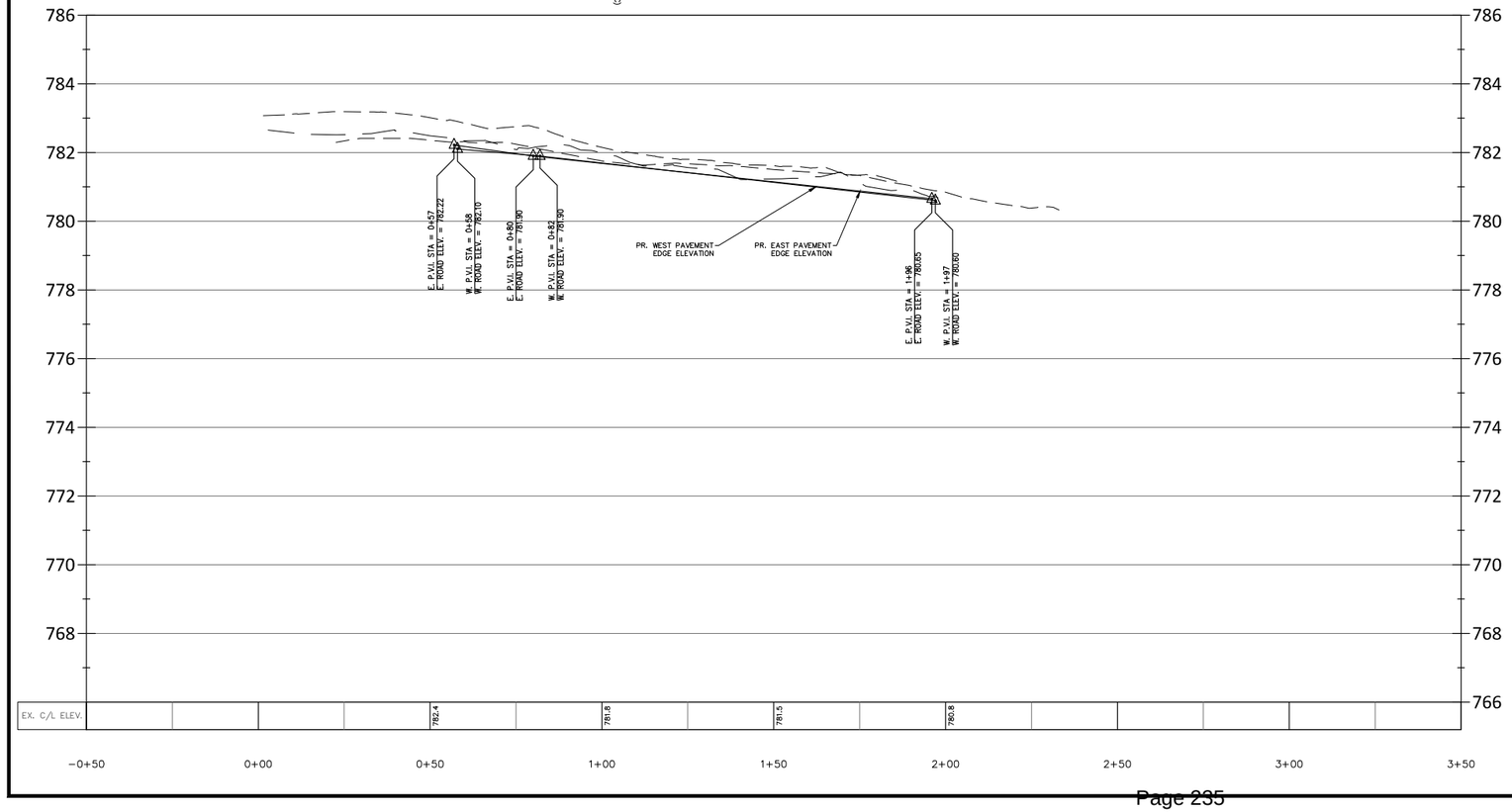
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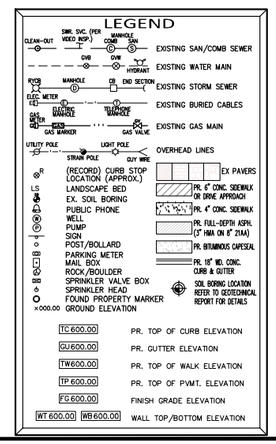
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Poppleton St. Sta P.O.B.
to P.O.E.

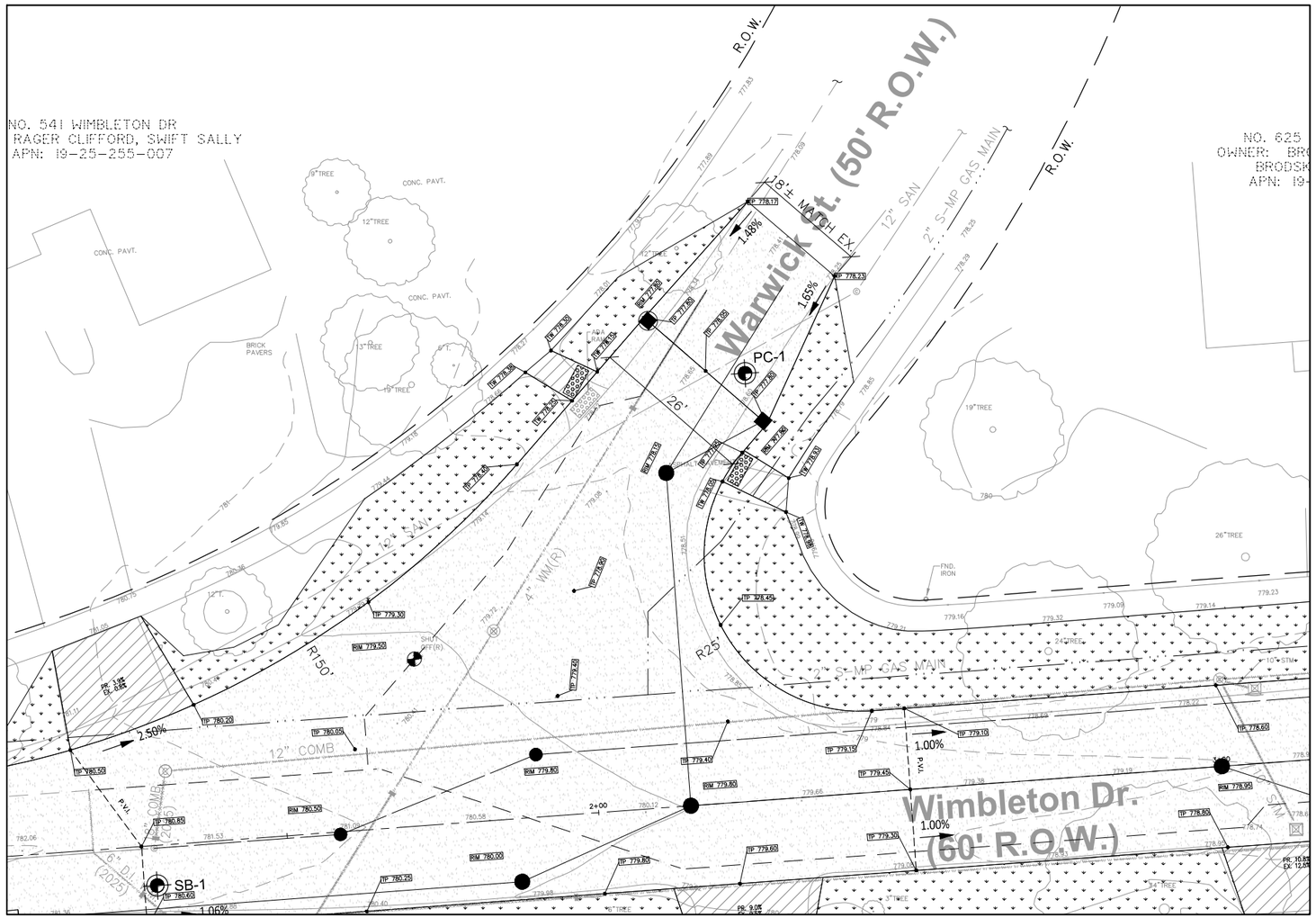
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NFE JOB NO. O979
SHEET NO. C16

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WIMBLETON DRIVE AND WARWICK STREET INTERSECTION

ADA COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL OF ¼ INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

THE CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12.

WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').

DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING REQUIREMENTS:

LANDING SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

LANDINGS SHALL BE PROVIDED AT THE TOPS OF CURB RAMPS. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.

RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 6" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- TC 600.00 PR. TOP OF CURB ELEVATION
- GU 600.00 PR. GUTTER ELEVATION
- TW 600.00 PR. TOP OF WALK ELEVATION
- TP 600.00 PR. TOP OF PVMT. ELEVATION
- FG 600.00 FINISH GRADE ELEVATION
- WT 600.00 WB 600.00 WALL TOP/BOTTOM ELEVATION

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

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A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
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PROJECT LOCATION
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SHEET
Intersection Grading Detail - Wimbleton & Warwick

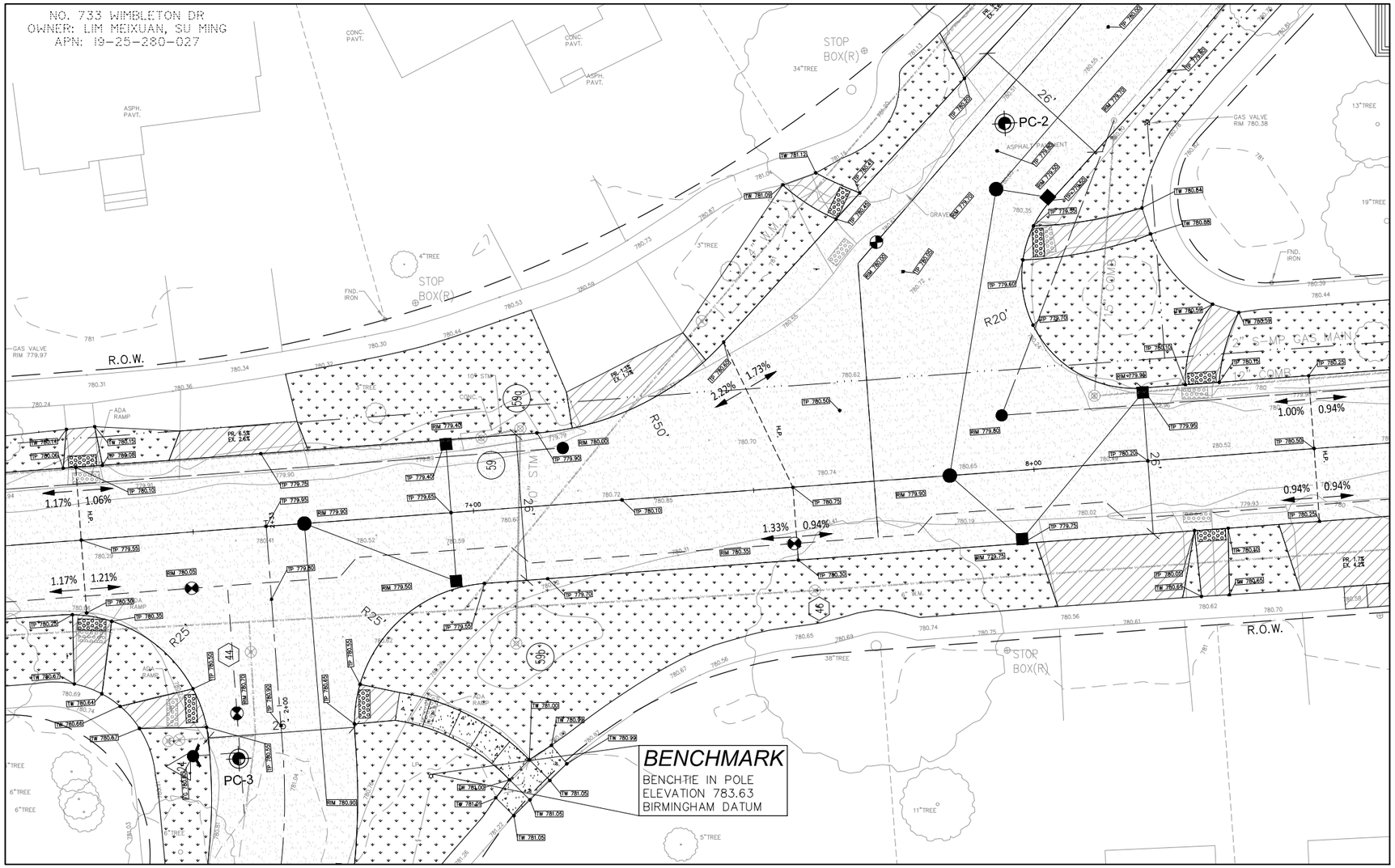
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'
10 5 0 5 10 5

NFE JOB NO. O979
SHEET NO. C17

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WIMBLETON DRIVE AND POPPLETON STREET INTERSECTION

ADA COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL OF ¼ INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

THE CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12.

WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').

DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

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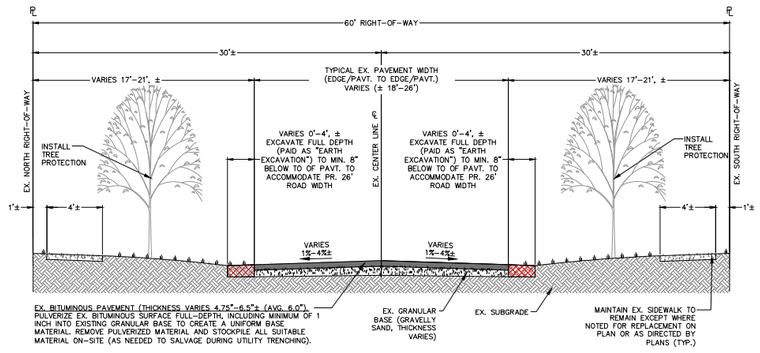
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

NFE JOB NO. O979
SHEET NO. C18

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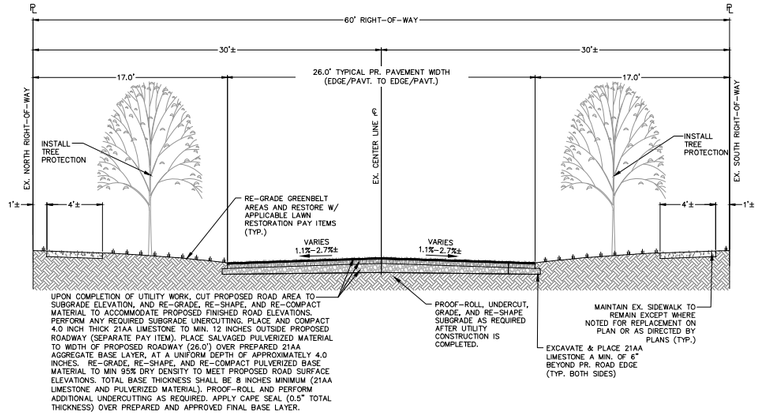
NOTE:
PROVIDE 6" PERFORATED UNDERDRAIN AROUND STRUCTURE AT 2.5' BELOW RIM

UNDERDRAIN DETAIL
N.T.S.



EXISTING BITUMINOUS PAVEMENT SECTION
N.T.S.
WIMBLETON DRIVE
APPLIES TO: STA. P.O.B. TO STA. P.O.E

NOTE: REFER TO GEOTECHNICAL INVESTIGATION REPORT BY G2 CONSULTING GROUP, DATED 11/12/25, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



PROPOSED BITUMINOUS PAVEMENT SECTION
N.T.S.
WIMBLETON DRIVE
APPLIES TO: STA. P.O.B. TO STA. P.O.E

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Notes and Details

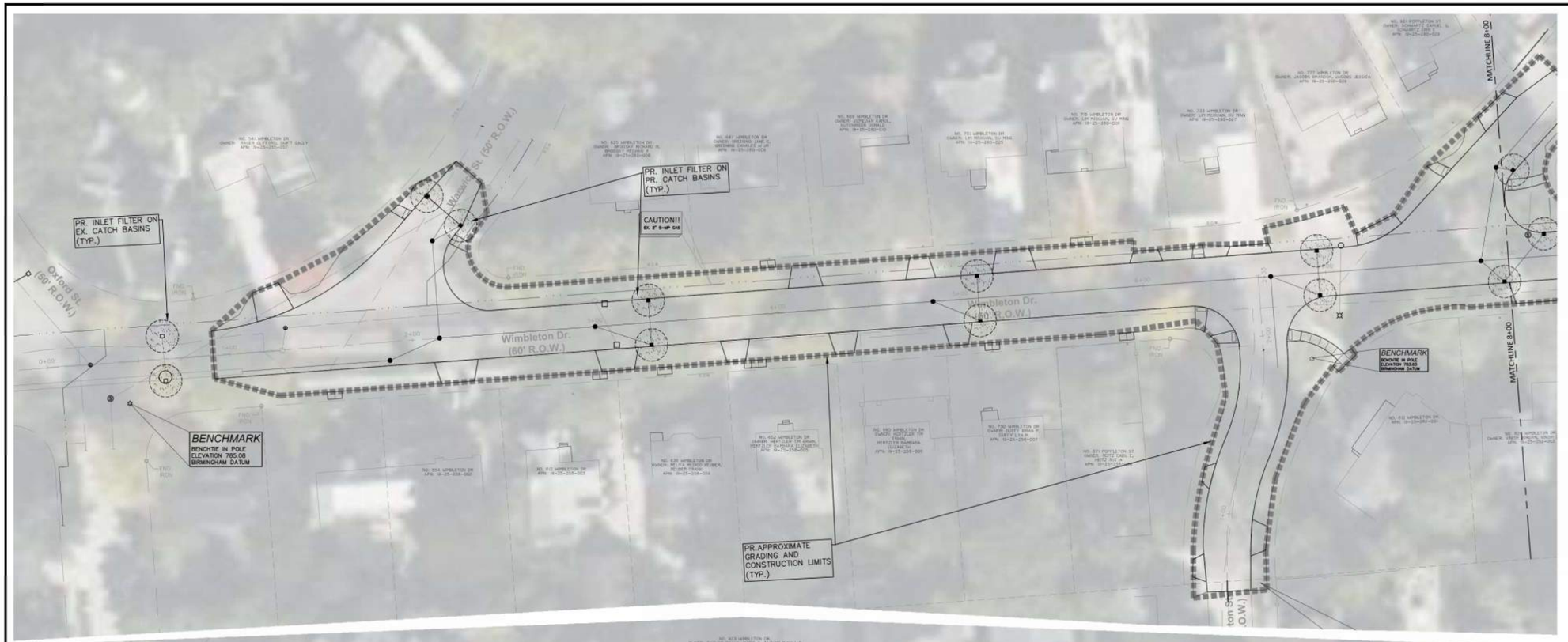
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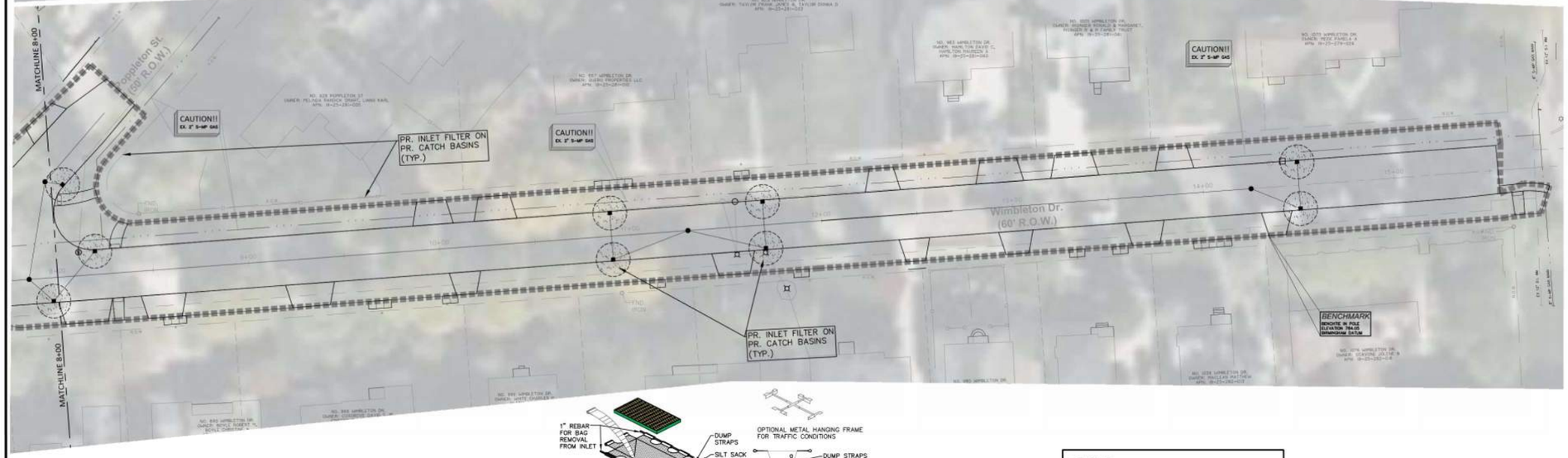
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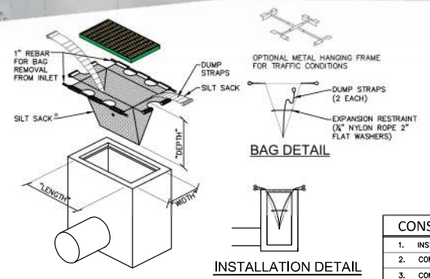
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NFE JOB NO. O979
SHEET NO. C19

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SILT SACK FILTER DETAIL

BAG DETAIL

INSTALLATION DETAIL

LEGEND

- INDICATES APPROXIMATE LIMITS OF EARTH DISTRUPTION
- INDICATES SILT SACK INLET FILTER INSTALLED AND MAINTAINED IN EXISTING CATCH BASIN (IN ACCORDANCE WITH CITY SPECIFICATIONS AND O.C.W.R.C. DETAILS)

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE UNDERGROUND CONSTRUCTION	2ND MONTH
3.	COMPLETE ROAD CONSTRUCTION	3RD MONTH
4.	COMPLETE LANDSCAPE RESTORATION	4TH MONTH
5.	REMOVE SOIL EROSION MEASURES	5TH MONTH

NOTES

A DISTANCE OF APPROXIMATELY 0.25 MI TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 2.1 ACRES.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 59 (URBAN LAND), 60B (URBAN LAN-MARTELLE COMPLEX, 0 TO 8 PERCENT SLOPES), 62B (URBAN LAND-SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES), AND ShbuoB (SHEBEON-URBAN LAND COMPLEX, 0 TO 4 PERCENT SLOPES) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

SOIL EROSION CONTROL NOTES

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

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DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 30'
30 15 0 15 30 45
NFE JOB NO. O979
SHEET NO. C20

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE & COMPLETE UNDERGROUND CONSTRUCTION	1ST MONTH
3.	COMPLETE ROUGH GRADING AND INSTALLATION OF STORM OUTFALL SETTLING POOL	2ND MONTH
4.	COMPLETE FINAL GRADING AND INSTALL GREENBELT RESTORATION MEASURES	2ND/3RD MONTH
5.	REMOVE SOIL EROSION MEASURES	4TH MONTH

STREET CLEANING SCHEDULE (MINIMUM REQUIREMENT)

TASKS	SUN	MON	TUE	WED	THU	FRI	SAT
SCRAPE STREETS	X	X	X	X	X	X	X
SWEEP STREETS				X			

SOIL EROSION CONTROL

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DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANY GAS SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MDOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.



LOCATION MAP
1" = 1,200'

NOTES

WORK IS PROPOSED WITHIN THE CITY OF BIRMINGHAM, INCLUDING THE WOODWARD AVENUE PUBLIC R.O.W. (MDOT JURISDICTION), AND WITHIN PRIVATE PARCEL #35980 WOODWARD AVENUE (P.I.D. 19-25-177-018) WITHIN BLOOMFIELD TOWNSHIP.

A DISTANCE OF APPROXIMATELY 0 FEET TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 4,125 S.F. (0.095 ACRES).

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 59 (URBAN LAND), 60B (URBAN LAN-MARTELLE COMPLEX, 0 TO 8 PERCENT SLOPES), 62B (URBAN LAND-SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES), AND 68 (CONOCHAH-FOX ASSOCIATION) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

REMOVAL LEGEND

- TREE OR MISC. REMOVAL
- REMOVE EX. GUARDRAIL AS INDICATED
- REMOVE EX. UTILITY AS INDICATED
- INDICATES AREAS OF CONCRETE PAVEMENT/ SIDEWALK TO BE REMOVED

SESC LEGEND

- INDICATES LIMITS OF SILT FABRIC FENCE - 36" HGT.
- INDICATES LIMITS OF SOIL DISRUPTION
- INDICATES SILT SACK OR EQUAL ON EXISTING. DRAINAGE STRUCTURE

LEGEND

- MANHOLE
- HYDRANT
- GATE VALVE
- MANHOLE CATCH BASIN
- UTILITY POLE
- GUY POLE
- GUY WIRE
- EXISTING SANITARY SEWER
- EXISTING SAN. CLEAN OUT
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN

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CIVIL ENGINEERS
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46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.W. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Wimbleton Drive Storm
Outfall Removal & SESC
Plan

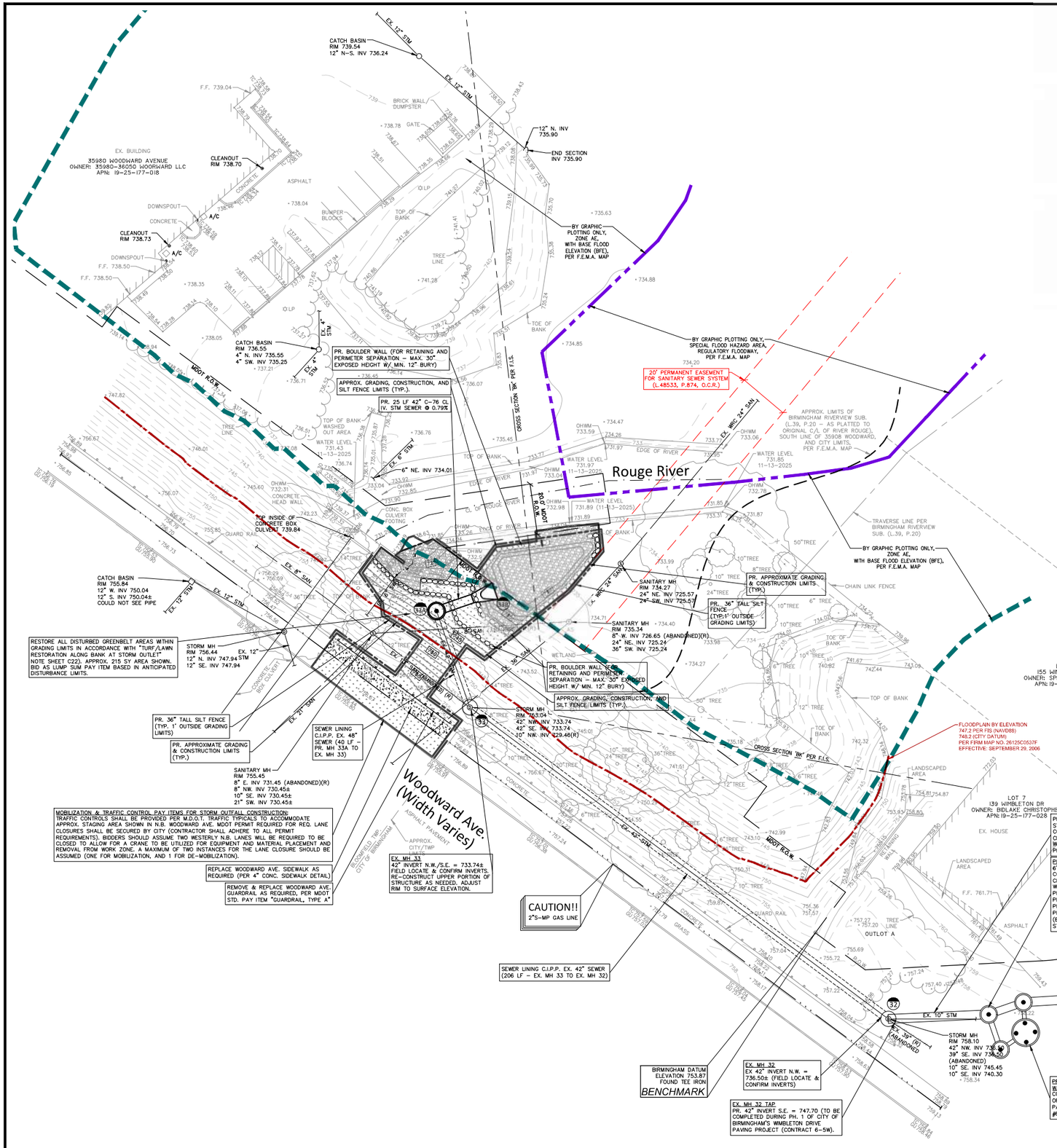
811
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C21

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LOCATION MAP
1" = 1,200'

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE HMA 4E ML;
SURFACE COURSE – MDOT BITUMINOUS MIXTURE HMA 5E ML;
BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

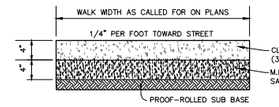
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



CONCRETE SIDEWALK SECTION
N.T.S.

Storm Drainage Structure Schedule

Structure Name	Structure Details
#33A PR. 6' DIA. STORM MH CONSTRUCT ONLINE OF EX. 42" STORM SEWER EX. 42" INV. N/S 733.66± (PER REC-FIELD VERIFY) (MAINTAIN AND C.I.P.P. LINE 42" SOUTH; REMOVE 42" NORTH)	PR. RIM 743.80 PR 42" E. INV. 733.60 EX 42" N. INV. 733.66 EX 42" S. INV. 733.66
#33B PR. 42" PRE-CAST END SECTION W/ BAR-SCREEN (PER DETAIL)	PR 42" W. INV. 733.40

PAVING / RESTORATION LEGEND

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED NATURAL STONE RIP-RAP
- PROPOSED TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET (PER NOTE SHT. C22)
- PROPOSED GUARDRAIL REPLACEMENT
- PROPOSED BOULDER RETAINING WALL

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- HYDRANT, GATE VALVE — SAN. CLEAN OUT
- MANHOLE, CATCH BASIN — EXISTING WATERMAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- UTILITY POLE, GUY POLE, GUY WIRE — EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O., MANHOLE — PR. SANITARY SEWER
- HYDRANT, GATE VALVE — PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE
- TC 600.00 — PR. TOP OF CURB ELEVATION
- GU 600.00 — PR. GUTTER ELEVATION
- TW 600.00 — PR. TOP OF WALK ELEVATION
- TP 600.00 — PR. TOP OF PVMT. ELEVATION
- FG 600.00 — FINISH GRADE ELEVATION
- WT 600.00, WB 600.00 — WALL TOP/BOTTOM ELEVATION

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SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Wimbleton Drive Storm
Outfall Utility Plan

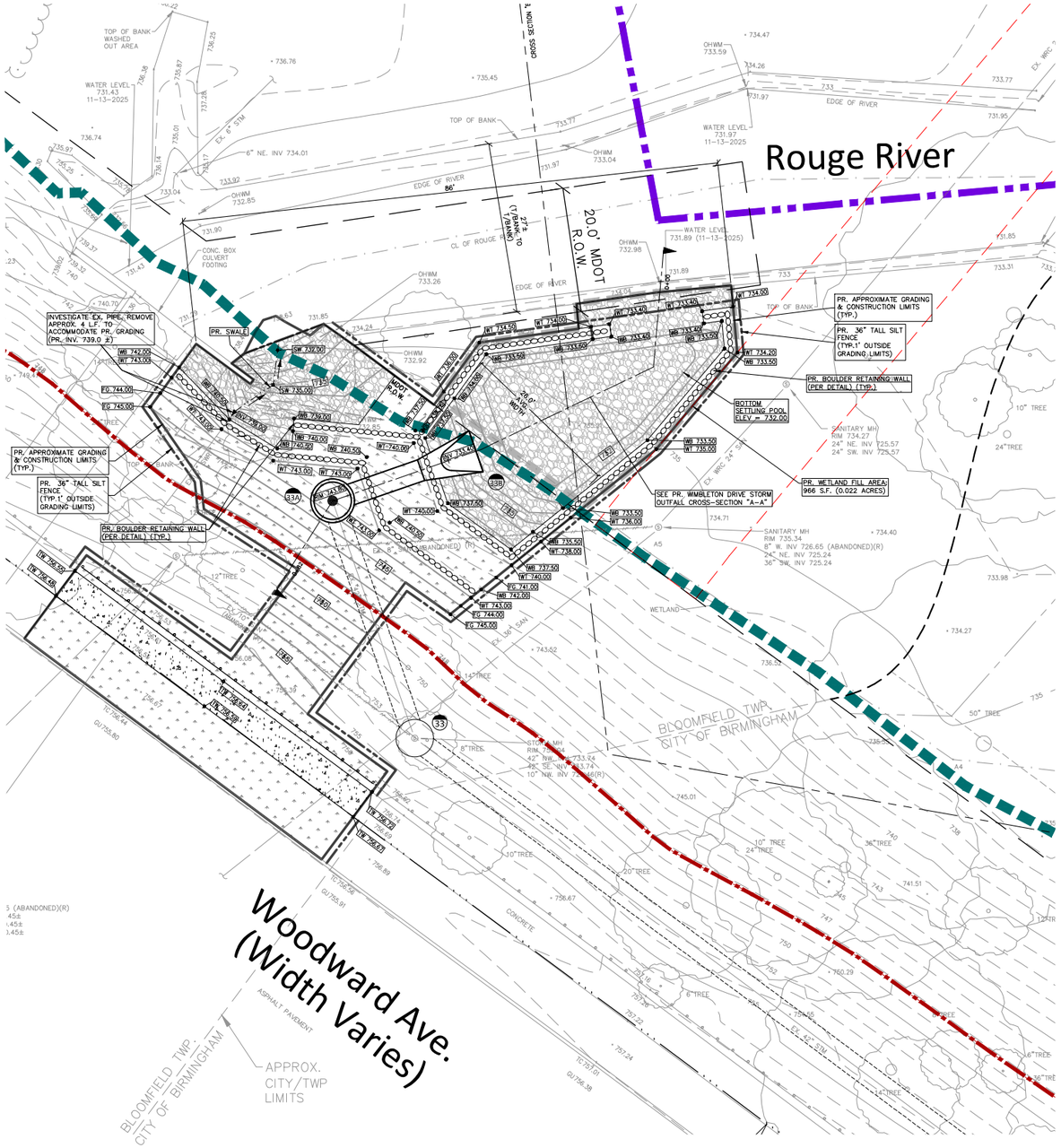
811 Know what's below Call before you dig.

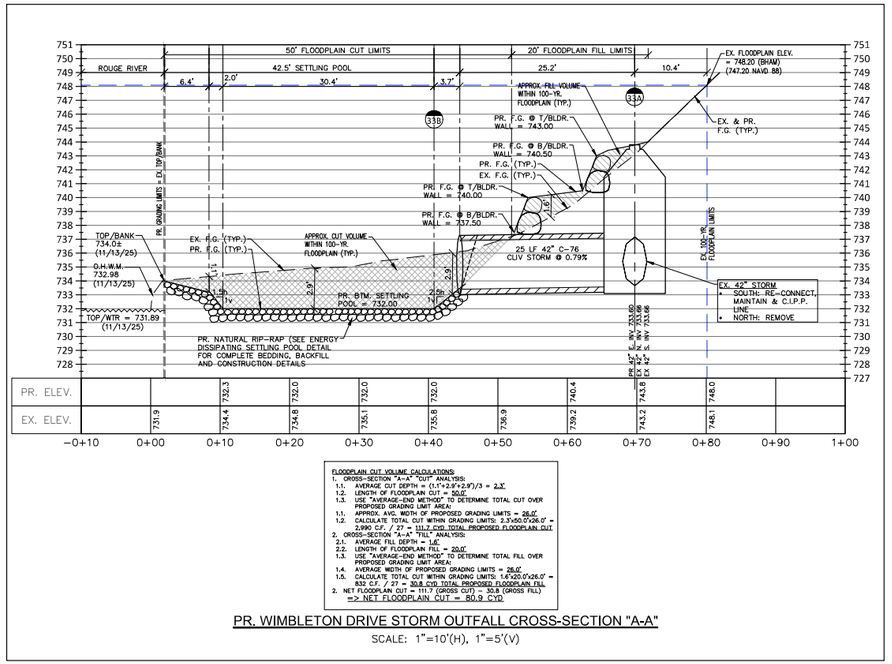
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C22

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PR. WIMBLETON DRIVE STORM OUTFALL CROSS-SECTION "A-A"

SCALE: 1"=10'(H), 1"=5'(V)

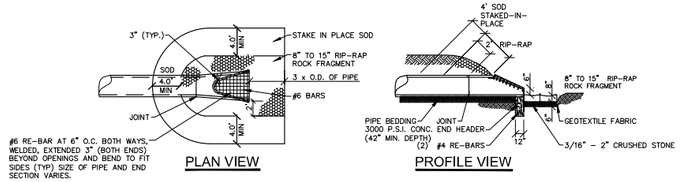
FLOODPLAIN CUT VOLUME CALCULATIONS

1. CROSS-SECTION "A-A" "CUT" ANALYSIS:
   - 1.1. AVERAGE CUT DEPTH = (1.1'+2.0'+2.9')/3 = 2.3'
   - 1.2. LENGTH OF FLOODPLAIN CUT = 50.0'
   - 1.3. USE "AVERAGE-END METHOD" TO DETERMINE TOTAL CUT OVER PROPOSED GRADING LIMIT AREA:
     - 1.1. APPROX. AVG. WIDTH OF PROPOSED GRADING LIMITS = 26.0'
     - 1.2. CALCULATE TOTAL CUT WITHIN GRADING LIMITS: 2.3'x50.0'x26.0' = 2,990 C.F. / 27 = 111.7 CYD TOTAL PROPOSED FLOODPLAIN CUT
2. CROSS-SECTION "A-A" "FILL" ANALYSIS:
   - 2.1. AVERAGE FILL DEPTH = 1.4'
   - 2.2. LENGTH OF FLOODPLAIN FILL = 20.0'
   - 1.3. USE "AVERAGE-END METHOD" TO DETERMINE TOTAL FILL OVER PROPOSED GRADING LIMIT AREA:
     - 1.4. AVERAGE WIDTH OF PROPOSED GRADING LIMITS = 26.0'
     - 1.5. CALCULATE TOTAL CUT WITHIN GRADING LIMITS: 1.4'x25.0'x26.0' = 832 C.F. / 27 = 30.8 CYD TOTAL PROPOSED FLOODPLAIN FILL
2. NET FLOODPLAIN CUT = 111.7 (GROSS CUT) − 30.8 (GROSS FILL) => NET FLOODPLAIN CUT = 80.9 CYD

TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET

ALL DISTURBED AREAS SHALL BE RESTORED USING A MINIMUM OF 4" TOPSOIL, SEED, PERMANENT TURF REINFORCEMENT MAT (VMAX SC250 BY NORTH AMERICAN GREEN, OR EQUAL) AND/OR MULCH BLANKET. TURF REINFORCEMENT MAT SYSTEM SHALL BE INSTALLED SPECIFIC TO AREAS SUSCEPTIBLE TO STREAMBANK EROSION, ON STEEPER SLOPES, AND AREAS ADJACENT TO WATER. ALL OTHER AREAS SHALL RECEIVE MULCH BLANKET STABILIZATION IN ACCORDANCE WITH WRC SPECIFICATIONS (STRAW OR COCONUT BLANKET) AND CAPABLE OF MAINTAINING SOIL STABILITY WHILE PROMOTING FAST AND SUSTAINABLE VEGETATIVE GROWTH. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION SPECIFICATIONS, AND UNDER THE OBSERVATION OF AN ON-SITE GEOTECHNICAL ENGINEER.

SEED MIX SHALL BE A SEDGE BANK GHETTO SEED MIX CAPABLE OF SUSTAINED GROWTH IN ALL AREAS, INCLUDING AREAS SUSCEPTIBLE TO CHEMICAL TREATMENT OF PHRAGMITES AND PERMANENT WATER LEVELS. PROVIDE CUT SHEETS OF PROPOSED SEED MIXES TO ENGINEER FOR REVIEW.



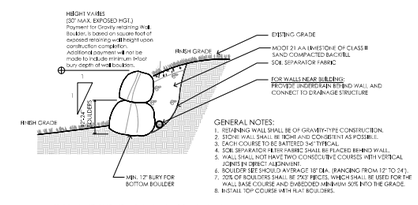
PLAN VIEW

PROFILE VIEW

END SECTION AND BAR SCREEN DETAIL

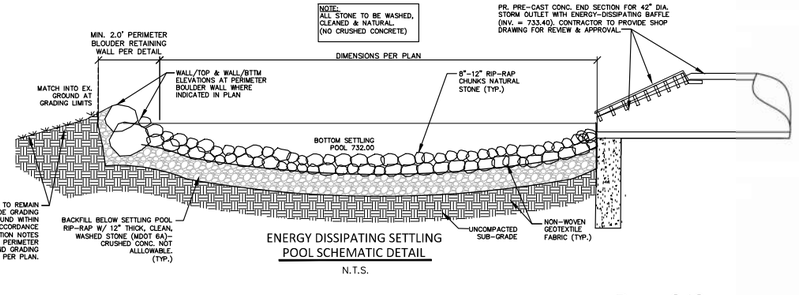
N.T.S.





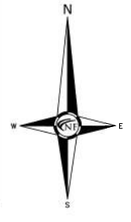
BOULDER RETAINING WALL

NTS



ENERGY DISSIPATING SETTLING POOL SCHEMATIC DETAIL

N.T.S.



Storm Drainage Structure Schedule

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#33B PR. 42" PRE-CAST END SECTION W/ BAR-SCREEN (PER DETAIL)	PR 42" W. INV. 733.40

PAVING / RESTORATION LEGEND

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED NATURAL STONE RIP-RAP
- PROPOSED TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET (PER NOTE SHT. C22)
- PROPOSED GUARDRAIL REPLACEMENT
- PROPOSED BOULDER RETAINING WALL

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- HYDRANT / GATE VALVE — SAN. CLEAN OUT
- MANHOLE / CATCH BASIN — EXISTING WATERMAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
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SEAL

STATE OF MICHIGAN — PAUL TULIKANGAS — ENGINEER NO. 057929 — LICENSED PROFESSIONAL ENGINEER

PROJECT

City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT

BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION

Part of the N.E. ¼ of Section 25, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

SHEET

Wimbleton Drive Storm Outfall Grading Plan & Details

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

NFE JOB NO. O979
SHEET NO. C23

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WIMBLETON CLOSED
NO ACCESS FROM WOODWARD
SEEK ALTERNATE ROUTE

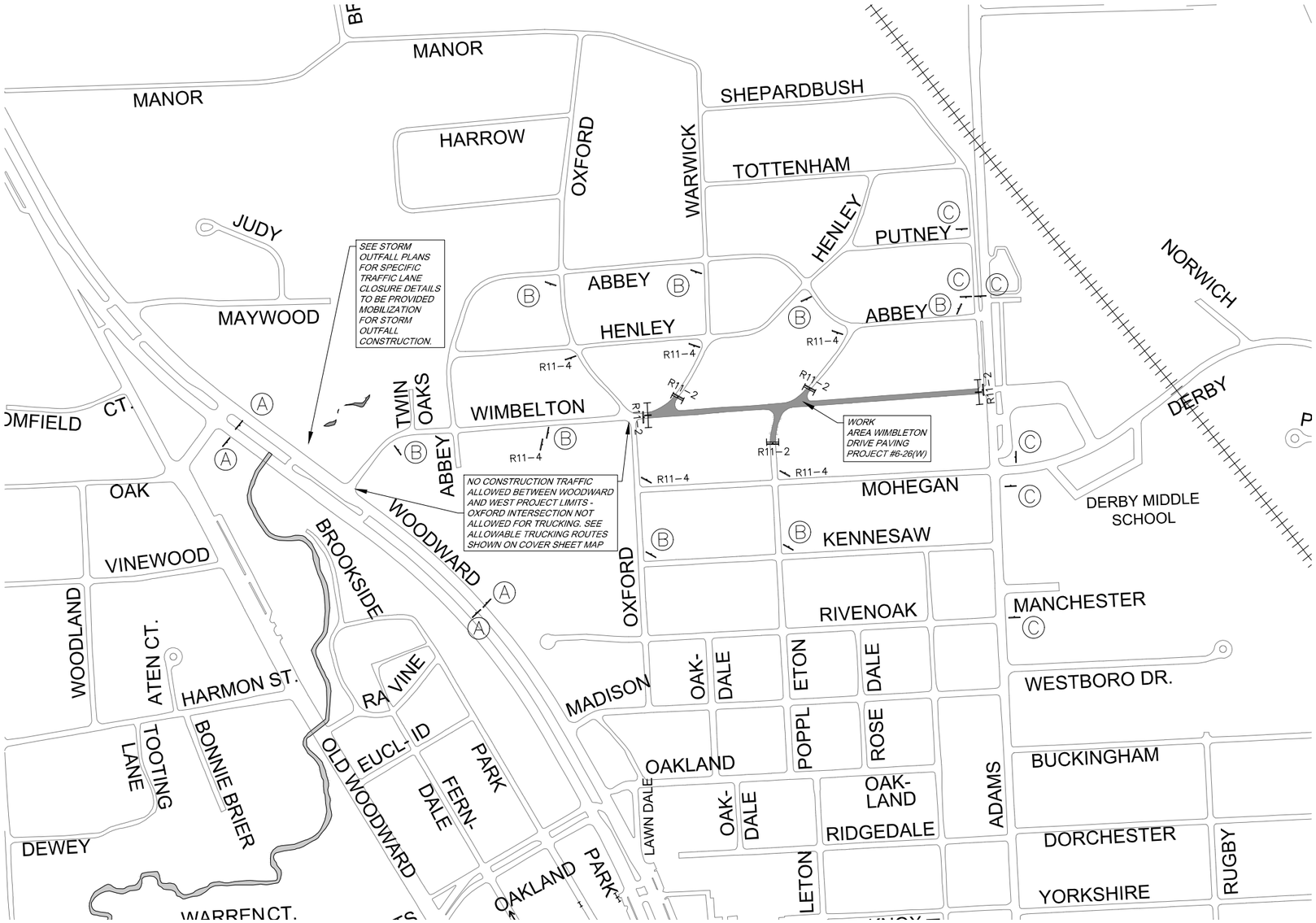
36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED WARWICK TO
ADAMS - SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED
NO ACCESS FROM ADAMS
SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND



ADVANCED WARNING SIGNAGE PLAN: WIMBLETON DRIVE PHASE 2 PROJECT

SYMBOL KEY

⊢	TYPE III BARRICADES
—	ADVANCED WARNING SIGN

SPECIAL ADVANCED WARNING SIGN QUANTITIES

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	WIMBLETON CLOSED - NO ACCESS FROM WOODWARD - SEEK ALTERNATE ROUTE	36"x72"	4
SIGN "B"	WIMBLETON CLOSED WARWICK TO ADAMS - SEEK ALTERNATE ROUTE	36"x72"	8
SIGN "C"	WIMBLETON CLOSED - NO ACCESS FROM ADAMS - SEEK ALTERNATE ROUTE	36"x72"	6

OTHER ADVANCED WARNING SIGN QUANTITIES AS SHOWN

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
R11-2	ROAD CLOSED	60"x30"	5
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	6

NOTES

1. TRAFFIC CONTROL IS A LUMP SUM CONTRACT PAY ITEM, AND SHALL INCLUDE ALL TRAFFIC CONTROL DEVICES, SIGNS, AND MANPOWER LABOR AS REQUIRED TO ADEQUATELY AND SAFELY MAINTAIN TRAFFIC CONTROLS THROUGHOUT THE DURATION OF THE PROJECT. THE DIAGRAM, SIGN DETAILS, AND QUANTITIES PROVIDED HEREIN ARE FOR GENERAL GUIDANCE AND NOT INTENDED TO BE ALL INCLUSIVE OF TRAFFIC CONTROLS WHICH WILL BE REQUIRED TO BE PROVIDED BY THE CONTRACTOR FOR THE ENTIRE PROJECT.
2. PLACE TRAFFIC CONTROL DEVICES AS SPECIFIED, OR AS OTHERWISE DIRECTED BY THE CITY OF BIRMINGHAM, INCLUDING ADVANCE WARNING SIGNS AND BARRICADES NOT SPECIFIED ON THIS DIAGRAM. CONTRACTOR/INSPECTOR MUST ACCOMPANY SIGN SUBCONTRACTOR DURING PLACEMENT OF SIGNS THROUGHOUT VARIOUS TRAFFIC CONTROL CHANGES.
3. ALL SIGNS AND BARRICADING SHALL BE IN ACCORDANCE WITH CURRENT M.M.U.T.C.D. AND M.D.O.T. SPECIFICATIONS AND TRAFFIC TYPICALS, INCLUDING PLACEMENT OF ADDITIONAL REQUIRED SIGNS/BARRICADES NOT DEPICTED ON THESE PLANS TO CONTROL TRAFFIC, LANE CLOSURES, SHIFTS, ETC.
4. ADVANCE WARNING SIGNS AND BARRICADES SHALL REMAIN IN PLACE UNTIL THE NEW ROAD (OR A PORTION THEREOF) IS READY TO BE OPENED FOR TRAFFIC AS DETERMINED BY THE CITY.
5. MAINTAIN SIDEWALKS AND INSTALL & MAINTAIN FENCING & SIGNAGE AS NEEDED TO ENSURE PEDESTRIAN SAFETY. UTILIZE MAINTENANCE AGGREGATE AS REQUIRED.
6. ERECT, REMOVE, AND/OR MAINTAIN ALL ADVANCE WARNING/DETOUR SIGNAGE AS DIRECTED BY THE CITY.
7. TYPE III BARRICADES (LIGHTED) SHALL BE PLACED FOR ALL LANE CLOSURES, AND SHALL INCLUDE A R11-2 OR R11-4 SIGN ON EACH TYPE III BARRICADE WHERE NOTED.
8. ALL SIDEWALK CLOSURES WITHIN CITY LIMITS SHALL HAVE TYPE III BARRICADES AND INCLUDE A SIDEWALK CLOSED SIGN. IF SIDEWALK CLOSURES ARE REQUIRED WITHIN M.D.O.T. RIGHT-OF WAY ON WOODWARD AVENUE (M-1), TYPE II BARRICADES SHALL BE USED.
9. LOCAL RESIDENT TRAFFIC (TWO-WAY) SHALL TYPICALLY BE MAINTAINED DURING CONSTRUCTION.
10. CONTRACTOR SHALL PROVIDE ADDITIONAL ADVANCED WARNING SIGNAGE TO INDICATE WHEN FULL-WIDTH CLOSURES WILL BE REQUIRED IN ISOLATED WORK AREAS.
11. CONTRACTOR SHALL PROVIDE FLAGGING CONTROL AS REQUIRED THROUGHOUT DURATION OF PROJECT TO MAINTAIN SAFETY FOR ALL ROADS OPENED TO TRAFFIC DURING CONSTRUCTION.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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46777 WOODWARD AVE.
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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Advanced Warning
Signage (AWS) Traffic
Diagram

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: N.T.S.

NFE JOB NO. O979
SHEET NO. C24

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BIRMINGHAM CONTRACT #6-26(W) - WIMBLETON DRIVE PHASE 2 PROJECT PAY ITEMS

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C01 Utility Plan	SHEET C02 Utility Plan	SHEET C03 Utility Plan	SHEET C04 Utility Plan	SHEET C05 Utility Plan	SHEET C10 Utility Service Plan	SHEET C11 Utility Service Plan	SHEET C12 P&G Plan	SHEET C13 P&G Plan	SHEET C14 P&G Plan	SHEET C15 P&G Plan	SHEET C16 P&G Plan	SHEET C20 SESC Plan	SHEET C21 Storm Outfall Removal-SESC	SHEET C22 Storm Outfall Utility Plan	SHEET C23 Storm Outfall Grading Plan	TOTAL QUANTITY
	DIVISION 1 - SEWER PAY ITEMS																		
1	15" Combined Sewer, PVC PS 115, Trench A	LF	64	161	246														471
2	12" Combined Sewer, PVC SDR 26, Trench A	LF	234	262	104	200													830
3	36" Storm Sewer, CI76, CL-IV, Trench A	LF	321	360															681
4	30" Storm Sewer, CI76, CL-IV, Trench A	LF		100															100
5	21" Storm Sewer, CI76, CL-IV, Trench A	LF		115	230														345
6	18" Storm Sewer, CI76, CL-IV, Trench A	LF	88																88
7	12" Storm Sewer, CI76, CL-IV, Trench A	LF	100	165	252	227	50												794
8	Sewer Service, 6" PVC SDR 23.5	LF						598	559										1,157
9	6" Perforated Pipe Underdrain (No sock)	LF	120	210	120														450
10	New 4'-0" Diameter Combined Manhole	EA	2	3	1														6
11	New 6'-0" Diameter Storm Manhole	EA	3	3															6
12	New 5'-0" Diameter Storm Manhole	EA		1	1														2
13	New 4'-0" Diameter Storm Manhole	EA	1			1													2
14	New 4'-0" Diameter Storm Catch Basin w/ 4' Sump & Sed. Trap	EA	2	4	2	1													9
15	New 2'-0" Diameter Storm Inlet	EA	2	3	2	1													8
16	Sewer Investigation, Laterals	EA						8	8										16
17	Sewer Senice Tap, 6"	EA						19	18										37
18	Sewer Tap, Combined, 15"	EA	1	1															2
19	Sewer Tap, Storm, 10"	EA			1														1
20	Sewer Stub w/ Capped End, Storm, 30"	EA		1															1
21	Sewer Stub w/ Capped End, Storm, 18"	EA	1																1
22	Sewer Stub w/ Capped End, Storm, 12"	EA					1												1
23	Reconstruct Manhole (if and where needed)	VF																	10
24	Remove & Replace Structure Cover (as directed by City)	EA	1	1															2
25	Remove Ex. Sewer Manhole	EA	2	3															5
26	Remove Ex. Drainage Structure	EA	2	2															4
27	Abandon Ex. 15" Combined Sewer	LF		45															45
28	Abandon Ex. 12" Combined Sewer	LF	290	166	250														706
29	Abandon Ex. 8" Combinad Sewer	LF		197	286														483
30	Remove Ex. 18" Combined Sewer	LF	10																10
31	Remove Ex. 10" Storm Sewer	LF	28	41	53	5													127
32	Bulkhead Structure, 18"	EA	1																1
33	Bulkhead Structure, 12" or Less	EA																	2
34	Bulkhead Pipe, Larger than 8"	EA																	10
35	CCTV Sewer Acceptance Inspection	LS																	1
	SUBTOTAL - DIVISION 1 - SEWER PAY ITEMS																		
	DIVISION 2 - WATER MAIN PAY ITEMS																		
36	Remove Hydrant	EA		1		1													2
37	Remove Gate Valve Well	EA																	1
38	Retrofit Ex. Gate Well w/ 12" Gate Valve	EA				1													1
39	12" Gate Valve & Well	EA	1	2	1	1													5
40	8" Gate Valve & Well	EA	1	1			1												3
41	Fire Hydrant Assembly, Complete	EA	1		1	1	1												4
42	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	314	483	352	327													1,476
43	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	98	132			42												272
44	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	6		10	8	8												32
45	12" Water Main Connection to Ex. 12" Water Main	EA	1			1													2
46	8" Water Main Connection to Ex. 4" Water Main	EA	1	1															2
47	New Water Service, 1", Trench A, Copper	LF						180	137										317
48	New Water Service, 1.5", Trench A, Copper	LF							36										36
49	New Water Service", 1", Private Property (Bored), PEX	LF						45											45
50	Water Senice Connection, 1.5"	EA						1	1										2
51	Water Senice Connection, 1"	EA						14	10										24
52	Water Senice Connection, 1", Connection at Meter, 871 Poppleton	EA						1											1
53	Install Curb Stop & Box, 1"	EA						4	3										7
54	Hydra-Stop, Insta-Valve 250, 6"	EA																	1
55	Hydra-Stop, Line-Stop, 6"	EA																	2
56	Hydra-Stop, Line-Stop, 4"	EA																	2
57	Abandon Existing Water Mains, Entire Project	LS																	1
	SUBTOTAL - DIVISION 2 - WATER MAIN PAY ITEMS																		
	DIVISION 3 - PAVING PAY ITEMS																		
58	Earth Excavation	CY								425	850	415	400						2,090
59	Subgrade Undercutting, 21AA Limestone	CY								40	80	40	40						200
60	Subgrade Undercutting, 1"x 3" Limestone	CY								40	80	40	40						200
61	Subgrade Geogrid Fabric, Tensar Triax TX130S	SY																	1,250
62	Remove and Salvage Brick Pavers	SF										55		85	85				225
63	Removing Concrete Drive Approach	SY								60	170	45	100	25	25				425
64	Removing Asphalt Drive Approach	SY								65	35	120	40						260
65	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY								35	100	35	25						195
66	Pulverize, Remove, Stockpile, Replace, and Re-Shape Existing Bituminous Pavement	SY								1450	1900	1100	990	390	390				6,220
67	Aggregate Base, MDOT 21AA Limestone, 4"	SY								1450	2380	1050	920	415	415				6,630
68	Capeseal Surface	SY								1400	2300	1010	876	400	400				6,386
69	Bituminous Mixture No. 4EML (Handpatching)	TON											300						300
70	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	LF																	20
71	Concrete Drive Approach, 6" Thick on 6" 21AA Limestone	SY								135	205	165	140	35	35				715
72	Concrete Sidewalk, 6" (Includes Ramps)	SF								135	560		70						765
73	Concrete Sidewalk, 4"	SF								145	305	270	145						865
74	Handicap Ramp Truncated Domes	SF								20	80		10						110
75	Adjust Structure Cover	EA	1	1															2
76	Maintenance Aggregate for Entire Project	LS																	1
	SUBTOTAL - DIVISION 3 - PAVING PAY ITEMS																		
	DIVISION 4 - GENERAL PAY ITEMS																		
77	Mobilization (Max. 5% of Bid)	LS																	1
78	Traffic Maintenance & Control	LS																	1
79	Inspector Crew Days	DAYS																	
80	Water and Sewer Allowance	LS																	1
81	Audio Video Route Survey	LS																	1
82	Salvage Existing Signs	LS																	1
83	New Signs	SF																	80
84	Sign Post, U-Channel	LF																	240
85	Tree Protection, 3" Dia. Or Greater	EA																	55
86	Mulch, 3"	SY																	225
87	Topsoil, 3"	SY								780	1220	710	700	230					3,640
88	Sod, Class A	SY								780	1220	710	700	230					3,640
89	Inlet Filter, Silt Sack	EA																	25
	SUBTOTAL - DIVISION 4 - GENERAL PAY ITEMS																		
	DIVISION 5 - STORM OUTFALL PAY ITEMS																		
90	42" Storm Sewer, CI76, CL-IV, Trench A	LF															25		25
91	New 6'-0" Diameter Storm Manhole, Construct Online	EA															1		1
92	New 42" Dia. End Section w/ Bar Screen	EA															1		1
93	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	LF															246		246
94	Sewer Lining, Pre-Liner, 42" RIPI-CIPP	LF															246		246
95	Sewer Lining, 42" RIPI-CIPP	LF															246		246
96	Cut/Grind Protruding Sewer Leads, Any Material	EA															2		2
97	Cut/Grind Root Intrusion	EA															10		5
98	Cut/Grind Mineral Deposit	EA															10		5
99	Remove Ex. Tree	EA														8			8
100	Remove Ex. 42" Storm Headwall	EA														1			1
101	Remove Ex. 42" Storm Sewer	LF														31			31
102	Earth Excavation, Storm Outfall	CY																220	220
103	Remove & Replace Woodward Ave. Sidewalk	SF														300			300
104	Remove & Replace Woodward Ave. Guardrail	LF														60			60
105	Mobilization, Traffic Maintenance & Control, Storm Outfall	LS																	1
106	Inspector Crew Days, Storm Outfall	DAYS																	
107	Silt Fencing, 30" Height	LF														325			325
108	Lawn Restoration Along Bank at Storm Outlet	LS																	1
109	Gravity Retaining Wall, Boulder	FSF																	500
110	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per detail)	SY																	165
	SUBTOTAL - DIVISION 5 - STORM OUTFALL PAY ITEMS																		

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SEAL

STATE OF MICHIGAN
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PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Quantities

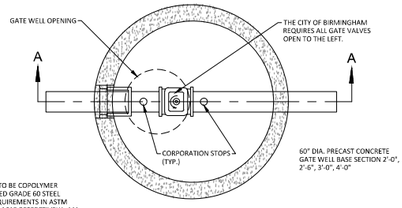
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

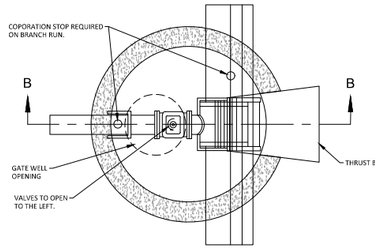
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: N.T.S.

NFE JOB NO. O979
SHEET NO. Q1

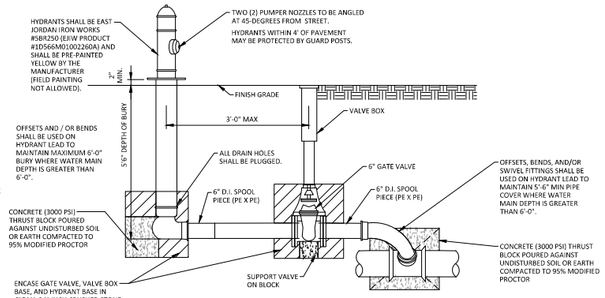
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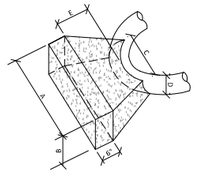
WATER MAIN GATE WELL (TYPICAL), PLAN



WATER MAIN TAPPING SLEEVE, VALVE & WELL (TYPICAL), PLAN

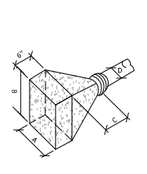


6" HYDRANT SIDE OUTLET



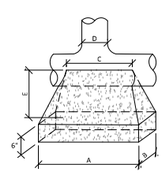
D	A	B	C	E MIN.
20"	8'	6.5'	3.5'	2.5'
16"	6'	4'	2.5'	2'
12"	4'	3'	2'	1.75'
10"	3'	3'	2'	1.75'
8"	3'	2'	2'	1.5'
6"	2'	1.5'	2'	1.25'

FOR 90° BENDS OR SMALLER



D	A	B	C MIN.
20"	7'	5'	2.5'
16"	4'-10"	4'-10"	2'
12"	4'-4"	3'	1'-9"
10"	3'	2'	1.5'
8"	2'-10"	2.5'	1.5'
6"	1.5'	2.5'	1.5'

FOR PLUGS

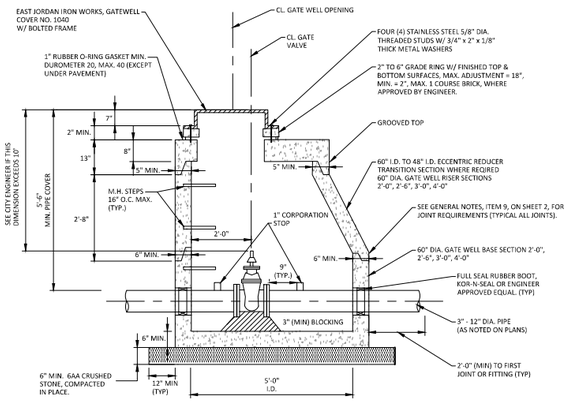


D	A	B	C	E MIN.
20"	6.5'	4.5'	3.5'	3'
16"	4'-8"	4'-8"	2.5'	2.75'
12"	4'	3'	2.5'	2.5'
10"	3'	2'	2'	2.25'
8"	2.5'	2'	2'	2.25'
6"	2'	2'	2'	2.25'

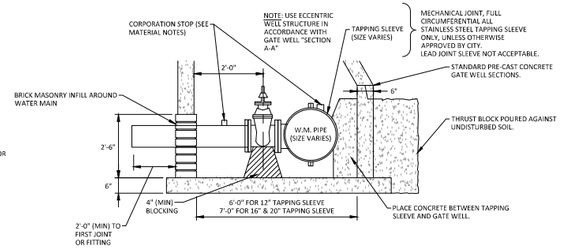
FOR TEES

NOTE:
3000 PSA CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.

THRUST BLOCK DETAILS

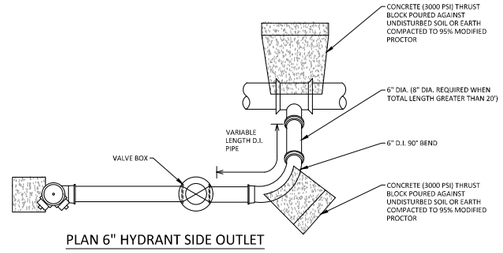


3" THRU 12" GATE WELL ("SECTION A-A")



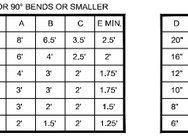
WATER MAIN TAPPING SLEEVE, VALVE & WELL ("SECTION B-B")

NOTES:
1. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP WITH BRONZE SADDLE, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
2. THE CITY OF BIRMINGHAM DOES NOT ALLOW SIZE ON SIZE TAPPING.

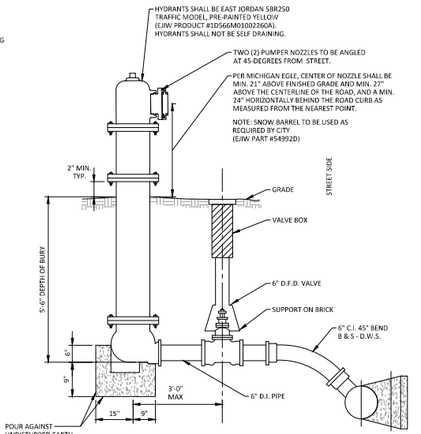


PLAN 6" HYDRANT SIDE OUTLET

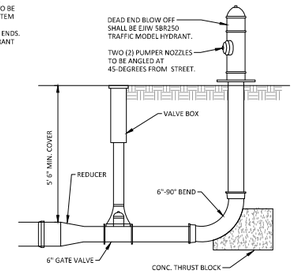
NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES.
2. ALL HYDRANTS, COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA-LUG).
3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS, AND ENDS.
4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR-BLUE.



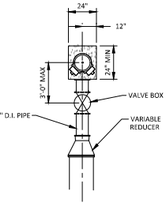
BOTTLE SLEEVE



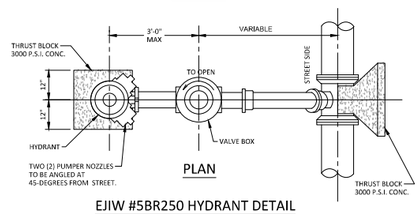
SECTION



DEAD END BLOWOFF CONNECTION

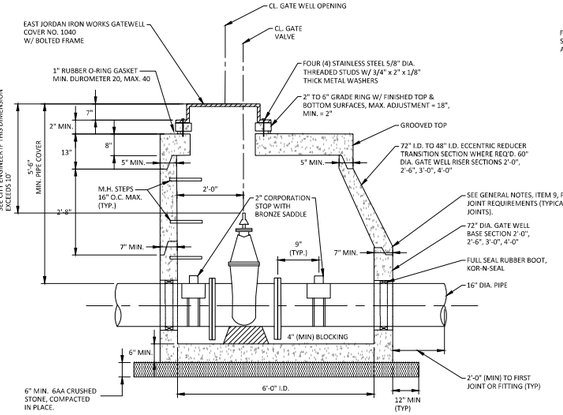


PLAN 6" HYDRANT WATER MAIN END

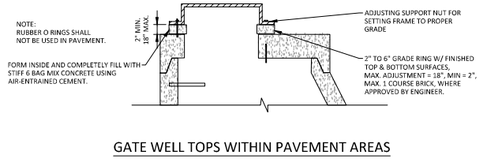


PLAN

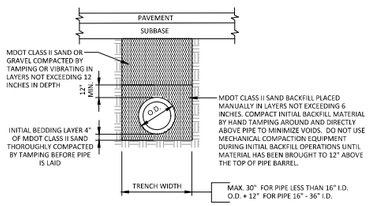
EJIW #5BR250 HYDRANT DETAIL



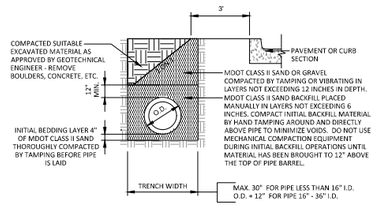
16" GATE WELL ("SECTION A-A")



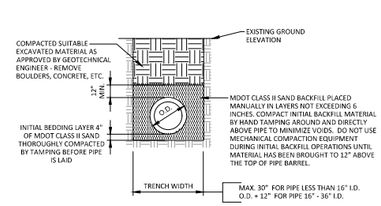
GATE WELL TOPS WITHIN PAVEMENT AREAS



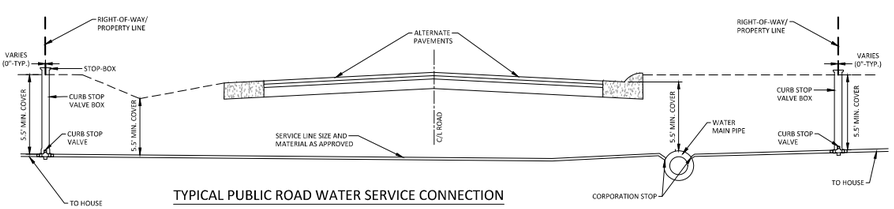
TRENCH DETAIL "A"
WATER MAIN UNDER PAVEMENT



TRENCH DETAIL "A"
WATER MAIN WITHIN INFLUENCE OF PAVEMENT

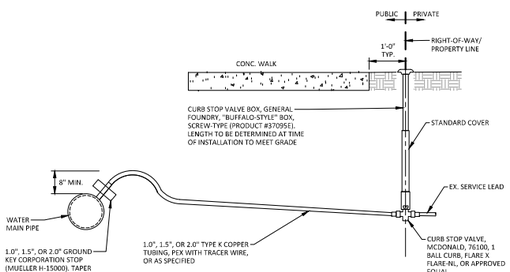


TRENCH DETAIL "B"
WATER MAIN OUTSIDE INFLUENCE OF PAVEMENT

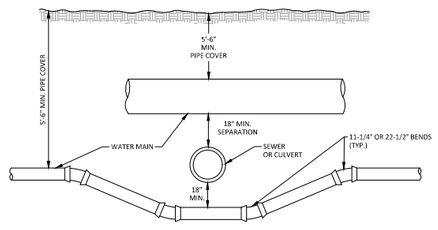


TYPICAL PUBLIC ROAD WATER SERVICE CONNECTION

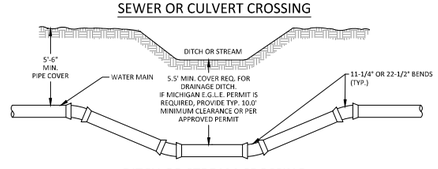
NOTES:
1) WATER SERVICE CURB STOP SHALL BE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.), TYPICALLY DIRECTLY ON THE ON THE PROPERTY/ R.O.W. LINE.
2) FOR NEW RESIDENTIAL CONSTRUCTION, THE LATERAL LOCATION SHALL BE PER THE APPROVED PLAN.
3) FOR LATERAL LINE REPLACEMENT WITHIN THE PUBLIC R.O.W., THE LATERAL LOCATION WILL BE FIELD DETERMINED BASED ON THE CONNECTION LOCATION TO THE EXISTING SERVICE LINE AT THE R.O.W. LINE. THE ALIGNMENT OF THE SERVICE LINE MAY REQUIRE ADJUSTMENT TO AVOID TREES WITHIN THE R.O.W. TO THE MAXIMUM EXTENT PRACTICABLE, AS APPROVED BY THE CITY.
4) SERVICE TAP LOCATION AT THE WATER MAIN SHALL BE AT CLOCK POSITION 10:30 OR 1:30 UNLESS OTHERWISE NOTED PER APPROVED PLAN.



WATER SERVICE CONNECTION (TYPICAL)



SEWER OR CULVERT CROSSING



DITCH OR STREAM CROSSING

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Water Main Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	WM-1

WATER MAIN GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE: 1) CITY OF BIRMINGHAM ENGINEERING AND D.P.S DEPARTMENTS, 2) DESIGN ENGINEER, 3) OWNER / DEVELOPER, 4) OTHER PUBLIC AGENCIES HAVING JURISDICTION, AND 6) FRANCHISE UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER.
3. CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
4. CONTRACTOR SHALL COORDINATE ALL REQUIRED WATER MAIN SHUT-DOWNS WITH THE CITY OF BIRMINGHAM ENGINEERING AND D.P.S. DEPARTMENTS TO ALLOW SUFFICIENT TIME IN ADVANCE OF CONSTRUCTION TO ALLOW FOR RESIDENT AND/OR PROPERTY OWNER NOTIFICATIONS, AND FOR THE CITY TO DEVELOP A SHUT-DOWN PROTOCOL. CONTRACTOR COORDINATION IS REQUIRED TO ASSIST THE CITY IN THE DEVELOPMENT OF THE SHUT-DOWN PROTOCOL TO ENSURE IT ALIGNS WITH THE CONTRACTOR'S PROPOSED MEANS AND METHODS. ANY EXERCISING OF EXISTING VALVES THAT ARE REQUIRED TO PERFORM THE SHUT-DOWN SHALL BE COMPLETED BY THE CITY D.P.S. DEPARTMENT WITH A MINIMUM OF 24-HOUR ADVANCED NOTICE.
5. ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
6. ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
7. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, DRIVEWAYS, AND/OR SIDEWALKS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY).
8. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
9. WHERE WATER MAINS MUST DIP TO PASS OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED.
10. ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AND SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATIONS FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
11. CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON THE DETAIL SHEET (FOR EXAMPLE, PROVIDE 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS OR HER EXPENSE.
12. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF BIRMINGHAM, THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), AND THE DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH.
13. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM (AS INDICATED IN PLANS AND SPECIFICATIONS) IS APPROVED BY THE CITY OF BIRMINGHAM.
14. ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHALL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410.
15. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND OR GRAVEL TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

WATER MAIN MATERIALS NOTES

1. WATER SUPPLY SYSTEM PIPING (3-INCH OR LARGER) SHALL BE DUCTILE IRON UNLESS OTHERWISE APPROVED BY THE CITY OF BIRMINGHAM.
2. ALL FITTINGS AND MATERIALS TO BE LEAD FREE.
3. USE OF HDPE MAY BE ALLOWED IN SOME LIMITED CASES (AS APPROVED BY CITY.) TWO TRACER WIRES WILL BE REQUIRED. OCWRC STANDARDS AND DETAILS SHALL BE USED WHEN HDPE IS APPROVED FOR USE.
4. ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
5. DUCTILE IRON PIPE SHALL BE PRESSURE-CLASS CLASS 52 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER.
6. DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE CEMENT MORTAR LINED AND BITUMINOUS SEAL-COATED, IN ACCORDANCE WITH AWWA C104 (ANSI A21.4), LATEST REVISION.
7. JOINTS SHALL BE MECHANICAL OR PUSH-ON JOINTS FOR DUCTILE IRON WATER MAIN AND SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI AS21.11), LATEST REVISION.
8. FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
9. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED 350 PSI FOR PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
10. WHEN CONNECTING TO EXISTING WATER MAINS, OVERSIZED FITTINGS MAY BE REQUIRED TO MATCH THE OUTER DIAMETER OF THE OLDER WATER MAINS.
11. INSTALL BRASS WEDGES AT ALL PUSH-ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH DIAMETER AND LESS, AND FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
12. ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA CAAA LOW ALLOY STEEL COATED WITH COAL TAR AND POLY-WRAPPED WHEN SPECIFIED.
13. ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER-SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
14. TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE DOUBLE-CHECK VALVE BACKFLOW-PREVENTER WITH CURRENT CERTIFICATION.
15. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA STANDARD C105/A21.5-10. POLYETHYLENE MATERIAL SHALL BE TYPE 1, CLASS A, GRADE E-1, AND HAVE A MINIMUM THICKNESS OF 0.008" (8-MILS). FLOW RATE SHALL BE 0.4 MAXIMUM, TENSILE STRENGTH SHALL BE 1200 PSI MINIMUM, AND ELONGATION SHALL BE 300%.

HYDRANT REQUIREMENTS

1. ALL HYDRANTS SHALL BE EAST JORDAN IRON WORKS 5BR250 TRAFFIC MODEL , TWO-WAY WITH TWO (2) 4-1/2" PUMPER NOZZLE FITTINGS. STANDARD BARREL (EJIW PART NUMBER 54948D) OR SNOW BARREL (EJIW PART NUMBER 54992D) TO BE USED AS REQUIRED BY CITY. ALL HYDRANTS SHALL BE CITY OF BIRMINGHAM STANDARD, AS DETAILED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE. PER MANUFACTURER, "TRAFFIC-MODEL" HYDRANTS WITH WITH BREAKAWAY FLANGE SHALL BE INSTALLED WITH A 6" THICK CONCRETE COLLAR (2' WIDTH x 2' DEPTH), CENTERED AROUND THE FINISHED GRADE OF THE HYDRANT, WHERE HYDRANTS ARE INSTALLED IN SANDY SOILS OR CONNECTED TO PVC OR HDPE WATER MAINS.
2. HYDRANTS SHALL BE RATED FOR 250 PSI WORKING PRESSURE.
3. HYDRANTS SHALL HAVE A MINIMUM 5-1/4" VALVE OPENING.
4. THE OPERATING NUT SHALL BE A ONE-PIECE DESIGN, MANUFACTURED OF ASTM B-584 BRONZE. IT SHALL BE 1-1/8" PENTAGON - POINT TO FLAT IN SIZE/SHAPE.
5. THE DIRECTION OF OPENING SHALL BE LEFT. AN ARROW SHALL BE CAST ON THE TOP TO THE HYDRANT TO INDICATE THE OPENING DIRECTION.
6. HYDRANTS SHALL HAVE A DEPTH OF BURY OF 5'6", UNLESS OTHERWISE NOTED.
7. ALL HYDRANTS SHALL BE PAINTED YELLOW ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF YELLOW PAINT AS FURNISHED FROM THE MANUFACTURER (FIELD PAINTING NOT ALLOWED). HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT.
8. ALL FIRE HYDRANT JOINTS SHALL BE TOTALLY RESTRAINED BY THE USE OF MEG-A-LUGS OR OTHER APPROVED RESTRAINED JOINT. THRUST BLOCKS ARE ALSO REQUIRED.
9. ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

VALVE AND SLEEVE NOTES

1. GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES, SHALL BE RESILIENT SEAT WEDGE TYPE WITH MECHANICAL JOINTS AND NON-RISING STEM.
2. ALL GATE VALVES SHALL BE FURNISHED AND INSTALLED SUCH THAT THEY OPEN WHEN TURNED "LEFT" OR COUNTER-CLOCKWISE.
3. ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED.
4. ALL GATE WELL COVERS SHALL BE CITY OF BIRMINGHAM STANDARD AS DETAILED.
5. ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH AN EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY AN EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
6. BUTTERFLY VALVES MAY BE USED FOR VALVES GREATER THAN 16-INCH DIAMETER AND SHALL BE MODEL 2F11 AS MANUFACTURED BY HENRY PRATT COMPANY OR APPROVED EQUAL.
7. TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EAST JORDAN IRON WORKS WITH RESILIENT SEATED GATE VALVES AS APPROVED BY THE CITY OF BIRMINGHAM.
8. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL.

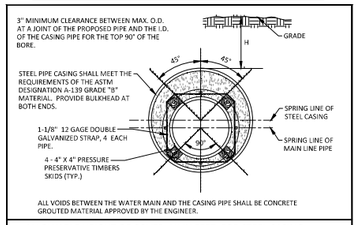
WATER SERVICE (DOMESTIC SUPPLY AND FIRE SUPPRESSION NOTES

14. FOR DOMESTIC SUPPLY AND FIRE SUPPRESSION BUILDING WATER SERVICES: A SINGLE TAP IS ALLOWED ON THE WATER MAIN, WHICH SHALL SPLIT INTO SEPARATE DOMESTIC AND FIRE SUPPRESSION LINES OUTSIDE OF THE BUILDING, SHALL BE USED UNLESS OTHERWISE APPROVED BY CITY.
16. VALVES TO BE INSTALLED ON EACH INDIVIDUAL LEAD ON THE EXTERIOR OF THE BUILDING.
17. EASEMENTS FOR WATER MAIN LEADS REQUIRED UP TO THE EXTERIOR SHUT OFF VALVE.
18. CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000. ALL STOPS SHALL BE CONSTRUCTED OF HEAVY-DUTY BRASS COMPONENTS MEETING THE REQUIREMENT OF ASTM B62. ALL STOPS SHALL HAVE AN AWAA TAPER THREADED INLET WITH COPPER FLARE STRAIGHT CONNECTION OUTLET. CORPORATION STOPS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C800.
19. CURB STOP VALVES SHALL BE MCDONALD, TYPE 76100, 1 BALL CURB, FLARE x FLARE-NL. TYPICAL RESIDENTIAL CURB STOP VALVE BOXES SHALL BE BY GENERAL FOUNDRY, BUFFALO STYLE BOX, SCREW-TYPE (PRODUCT #37095E). WHERE CURB STOP VALVES WILL BE LOCATED WITHIN PAVEMENT, A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX SHALL BE FURNISHED AND INSTALLED TO PROVIDE A RIM ELEVATION FLUSH WITH THE SURROUNDING PAVEMENT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

ACCEPTANCE OF NEW WATER MAINS

1. PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
   - 1.1) PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH CITY OF BIRMINGHAM AND OAKLAND CUNTY REQUIREMENTS
   - 1.2) ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE CITY OF BIRMINGHAM,
   - 1.3) THE CITY OF BIRMINGHAM MUST BE PROVIDED WITH THE BILL OF SALE.
   - 1.4) ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE CITY OF BIRMINGHAM.
   - 1.5) THE CITY OF BIRMINGHAM MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF BIRMINGHAM FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN, AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
3. THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE CITY OF BIRMINGHAM AND OAKLAND COUNTY.
4. THE WATER MAIN SHALL PASS A TEST OF 150 PSI FOR A TWO (2) HOUR PERIOD. WATER LOSS SHALL NOT EXCEED A RATE OF 11.65 U.S. GALLONS PER INCH DIAMETER, PER MILE OF WATERLINE IN TWENTY-FOUR (24) HOURS.
5. WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3 1/2 INCH DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I., OR HIGHER.
6. PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTION TO THE EXISTING WATER SUPPLY SYSTEM.

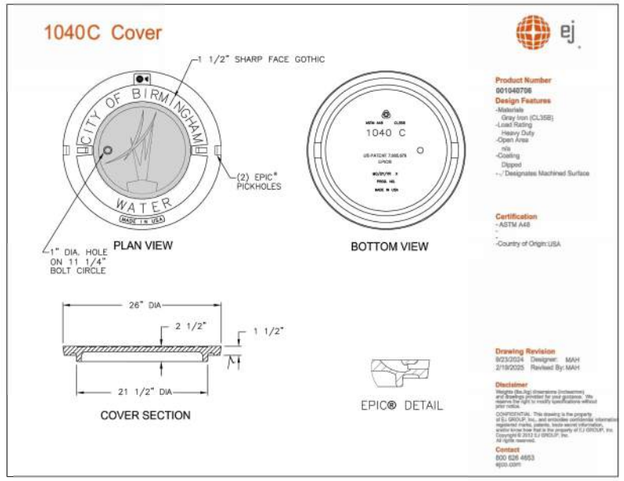
TYPICAL WATER MAIN TUNNEL CASING DETAIL



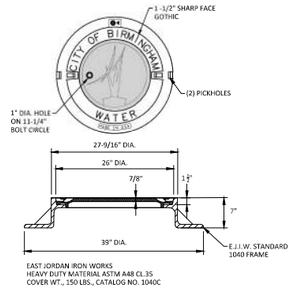
ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

WALL THICKNESS (IN.)		STEEL CASING OUTSIDE DIAMETER (IN.)									
FRACT.	DEC.	12	14	16	18	20	24	28	30	36	42
3/8	0.1875	39	30	24	21	19	17	16			
1/4	0.250	50	50	39	31	27	21	19	18	16	
5/16	0.3125			50	48	39	28	23	21	18	17
3/8	0.375				50	50	39	29	27	22	19
7/16	0.4375						50	39	34	26	21
1/2	0.500							50	44	31	25
9/16	0.5625								50	39	30
5/8	0.625									48	35

1. FOR 36" WATER MAIN PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.



CITY OF BIRMINGHAM - GATE WELL COVER
(FURNISH & INSTALL W/ STANDARD EJIW 1040 FRAME)



CITY OF BIRMINGHAM GATE WELL
COVER & STANDARD FRAME

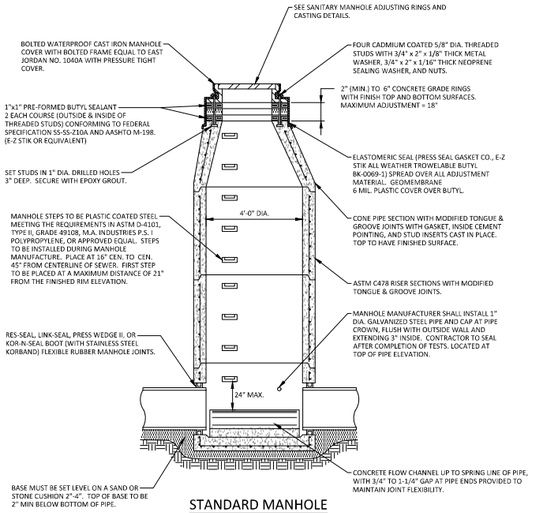
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

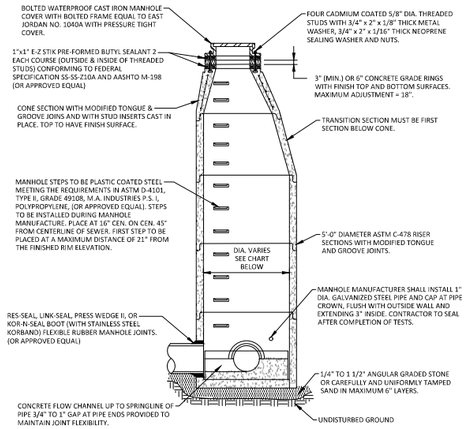
Water Main Standard Notes & Details
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ISSUE DATE:	SCALE:	SHEET NO.
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STANDARD MANHOLE

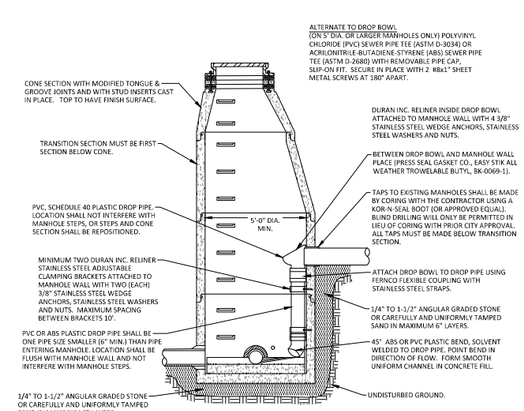
SEWER LESS THAN 20' DEEP -
PIPE DIAMETER 18 INCHES OR LESS



STANDARD OVERSIZED MANHOLE

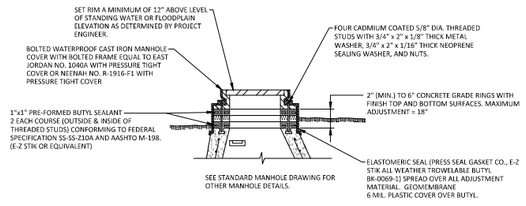
MANHOLE SIZING CHART

MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.	MAX. PIPE SIZE FOR RIGHT ANGLE INST.
5'	36"	24"
6'	42"	36"
7'	60"	42"

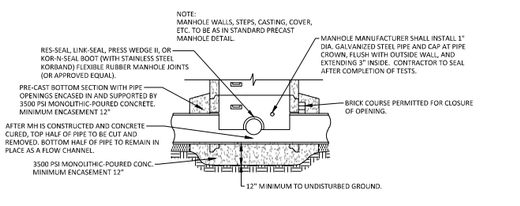


INTERIOR DROP CONNECTION

SEWER SIZE	DROP SIZE	MH SIZE
UP TO 10"	8"	5'
UP TO 18"	10"	5'

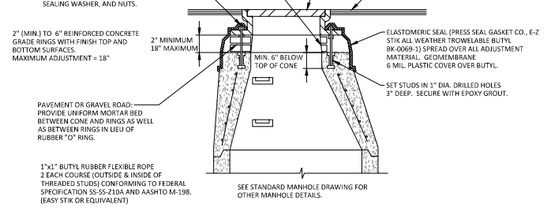


MANHOLE WITHIN FLOOD PRONE AREAS

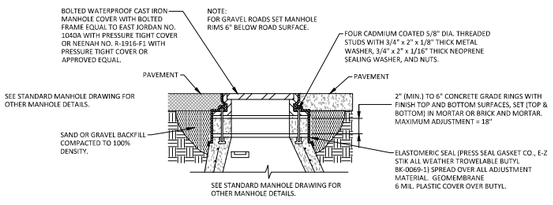


MANHOLE CONSTRUCTED OVER EXISTING SEWER

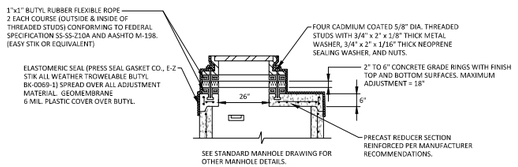
FOR LOCAL SANITARY SEWER EXTENSION CONNECTING
DIRECTLY OR INDIRECTLY TO OCWRC SYSTEMS



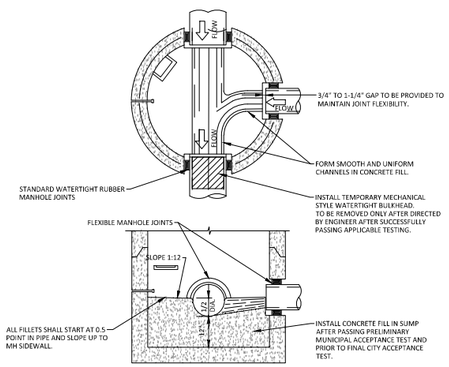
SANITARY MANHOLE ADJUSTING RINGS & CASTING DETAIL



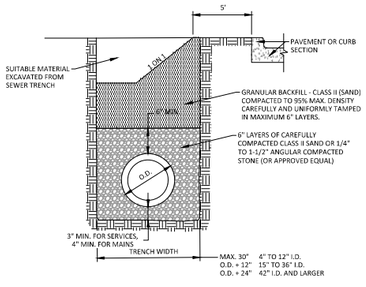
MANHOLE TOPS WITHIN PAVEMENT AREAS



FLAT TOP MANHOLE

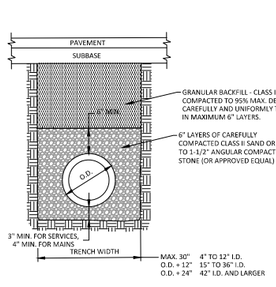


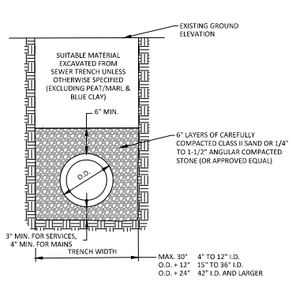
SUMP MANHOLE FOR TESTING, CLEANING AND DEWATERING



TRENCH DETAIL "A"

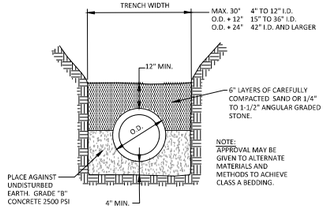
SEWER UNDER ROAD BED OR WITHIN
THE INFLUENCE OF ROAD BED





TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED



CONCRETE CRADLE

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Sanitary & Combined Sewer Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-1

SANITARY & COMBINED SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY & COMBINED SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.

2. AT ALL CONNECTIONS AND BEFORE START OF CONSTRUCTION, THE CONTRACTORS MUST OBTAIN THE REQUIRED CITY OF BIRMINGHAM, WRC SEWER INSPECTION, AND MICHIGAN E.G.L.E. PART 41 PERMITS. THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. FINAL ACCEPTANCE TESTS MUST BE WITNESSED BY CITY PERSONNEL AND MUST BE SCHEDULED IN ADVANCE.

3. NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (OCWRC) STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY THE CITY MAY BE USED FOR SANITARY & COMBINED SEWER CONSTRUCTION.

4. AT ALL CONNECTIONS TO AN EXISTING SEWER, OR EXTENSION THERETO, A WATERTIGHT BULKHEAD WITH A CAPPED ONE INCH DIAMETER PIPE TO PERMIT MEASURING INFILTRATION SHALL BE PROVIDED. A TEMPORARY 12-INCH DEEP SUMP SHALL ALSO BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL.

5. AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.

6. ALL SANITARY & COMBINED SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.

7. ALL SANITARY & COMBINED SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

8. ALL SANITARY & COMBINED SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.

9. SANITARY AND COMBINED SEWER MAIN PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):

   A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
   - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
   - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.

   B. POLYVINYL CHLORIDE PIPE (PVC):
   - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
   - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.)
   - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE) (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
   - PVC COMPOUNDS TO MEET ASTM D-1784.

10. SANITARY AND COMBINED MANHOLE STRUCTURE REQUIREMENTS:
   - ALL NEW MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS, PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - RES-SEAL, LINK-SEAL, PRESS WEDGE II, OR KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.

11. SANITARY SEWER LEAD CONNECTIONS TO TAP INTO MAINLINE, NOT TAP AT MANHOLE. PIPE SHALL BE POLYVINYL CHLORIDE PIPE (PVC) - ASTM D-2241, SDR 23.5, 6" DIAMETER. PVC COMPOUNDS TO MEET ASTM D-1784.

12. SANITARY LEADS ARE PRIVATE, UP TO THE CONNECTION POINT TO THE MAINLINE PUBLIC SEWER, INCLUDING THE CONNECTION.

13. ALL NEW MANHOLES SHALL HAVE CITY APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE- CAST MANHOLE CONE SECTIONS SHALL BE CITY APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS, AS INDICATED.

14. AT ALL CONNECTIONS TO MANHOLES, INTERIOR DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES.

15. TAPS TO EXISTING MANHOLES SHALL BE MADE BY CORING. THE CONTRACTOR SHALL PLACE A KOR-N-SEAL BOOT (OR APPROVED EQUAL) AFTER CORING IS COMPLETED. BLIND DRILLING WILL NOT BE PERMITTED IN LIEU OF CORING.

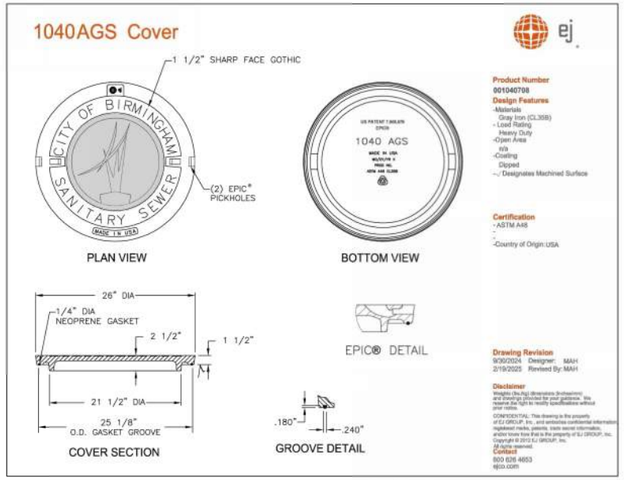
16. NEW MANHOLES CONSTRUCTED DIRECTLY ON CITY OR WRC SEWERS SHALL BE PROVIDED WITH APPROPRIATE LETTERED MANHOLE COVERS. NEW MANHOLES BUILT OVER AN EXISTING SANITARY SEWER SHALL HAVE MONOLITHIC POURED BOTTOMS.

17. NO GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.

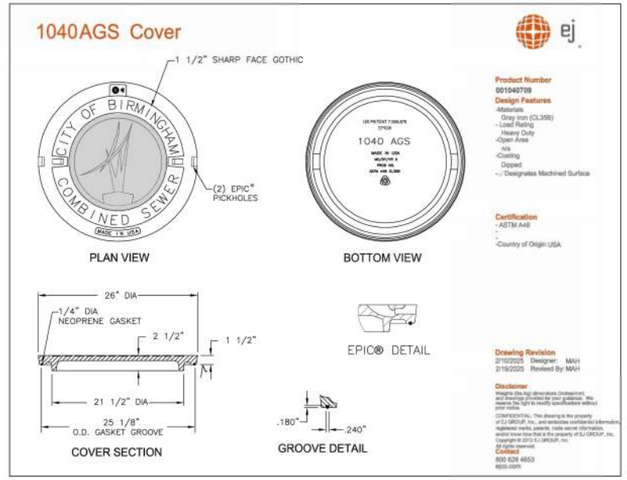
18. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.

19. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY OR COMBINED SEWER AND WATER MAIN.

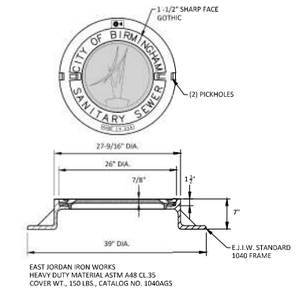
20. CLEANOUTS FOR SANITARY SEWER LEADS WITHIN PAVED SURFACE SHALL HAVE TRAFFIC RATED FRAME AND CASTING.



CITY OF BIRMINGHAM MANHOLE COVER - SANITARY SEWER

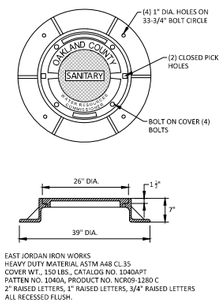


CITY OF BIRMINGHAM MANHOLE COVER - COMBINED SEWER



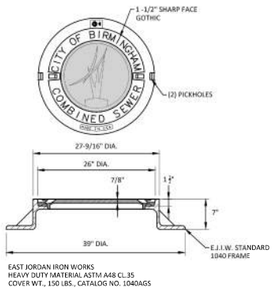
CITY OF BIRMINGHAM SANITARY SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



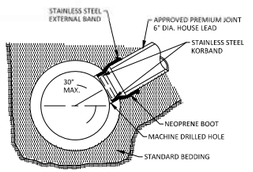
OAKLAND COUNTY WRC SANITARY SEWER MANHOLE COVER

TO BE USED ON COUNTRY DESIGNATED SANITARY SEWER INTERCEPTOR MANHOLES

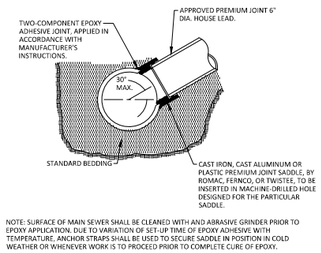


CITY OF BIRMINGHAM COMBINED SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

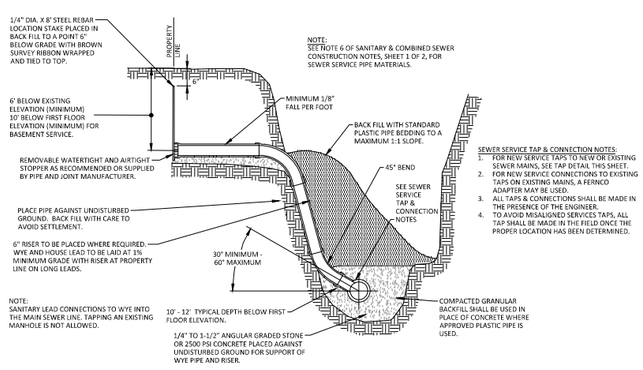


SEWER TAP USING KOR-N-TEE
(ALLOWABLE FOR SEWER MAINS 10" DIA. OR LARGER)

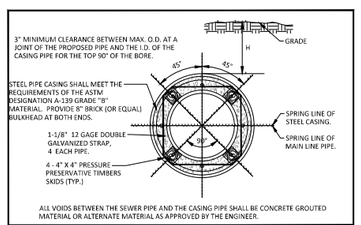


NOTE: SURFACE OF MAIN SEWER SHALL BE CLEANED WITH AND ABRASIVE GRINDER PRIOR TO EPOXY APPLICATION. DUE TO VARIATION OF SET-UP TIME OF EPOXY ADHESIVE WITH TEMPERATURE, ANCHOR STRAPS SHALL BE USED TO SECURE SADDLE IN POSITION IN COLD WEATHER OR WHENEVER WORK IS TO PROCEED PRIOR TO COMPLETE CURE OF EPOXY.

SEWER TAP USING TAPPING SADDLE
(ALLOWABLE FOR ALL SIZES OF MAIN SEWER PIPES)



TYPICAL HOUSE LEAD DETAIL



ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

FRACT.	DEC.	WALL THICKNESS (IN.)	STEEL CASING OUTSIDE DIAMETER (IN.)									
			12	14	16	18	20	24	28	30	36	42
3/16	0.1875		39	30	24	21	19	17	16			
1/4	0.250		50	50	39	31	27	21	19	18	16	
5/16	0.3125				50	48	39	28	23	21	18	17
3/8	0.375					50	50	39	29	27	22	19
7/16	0.4375							50	39	34	26	21
1/2	0.500								50	44	31	25
9/16	0.5625									50	39	30
5/8	0.625										48	35

NOTE:1. FOR 36" SEWER PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.

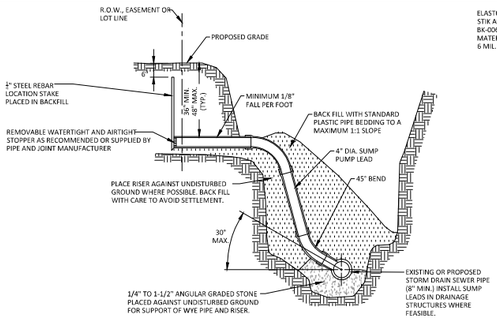
TYPICAL SEWER TUNNEL CASING DETAIL

BIRMINGHAM
A WALKABLE CITY

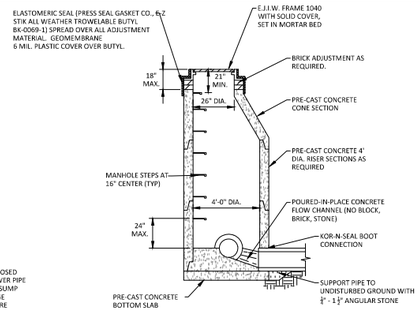
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Sanitary & Combined Sewer
Standard Notes & Details 2 of 2

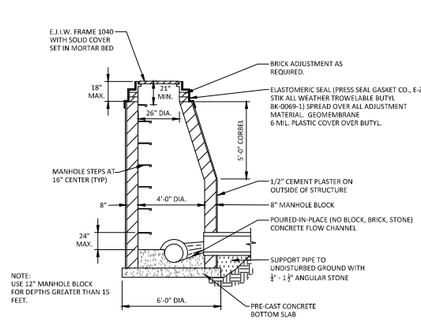
ISSUE DATE:	SCALE:	SHEET NO.
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HOUSE LEAD DETAIL FOR 4" DIA. PLASTIC SUMP PUMP LEADS



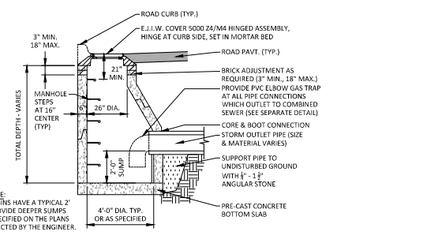
PRE-CAST MANHOLE



NOTE:
USE 12" MANHOLE BLOCK FOR DEPTHS GREATER THAN 15 FEET.

STANDARD MANHOLE DETAILS

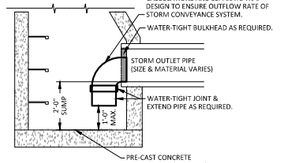
BLOCK MANHOLE



SUMP NOTE:
CATCH BASINS HAVE A TYPICAL 2' SUMP. PROVIDE DEEPER SUMPS WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

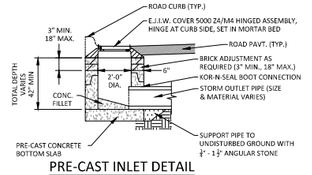
PRE-CAST CATCH BASIN DETAIL (IN ROAD CURB LINE)

SUMP NOTE:
STORM MANHOLES SHALL HAVE 2' SUMP WHERE CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER. WHERE SUMP IS SPECIFIED ON STORM MANHOLES, FLOW CHANNELS WILL NOT BE REQUIRED.

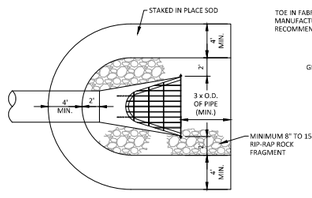


PVC ELBOW GAS TRAP

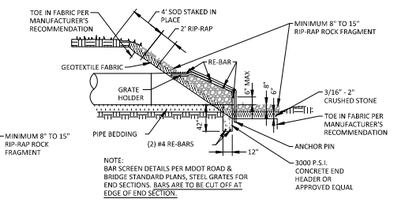
NOTE:
REQUIRED AT ALL STORM PIPE CONNECTIONS WHICH OUTLET TO COMBINED SEWER



PRE-CAST INLET DETAIL (IN ROAD CURB LINE)

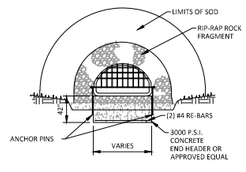


PLAN VIEW



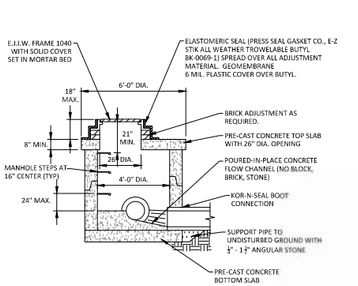
NOTE:
BAR SCREEN DETAILS PER MDOT ROAD & BRIDGE STANDARD PLANS. STEEL GRATES FOR END SECTIONS. BARS ARE TO BE CUT OFF AT EDGE OF END SECTION.

PROFILE VIEW

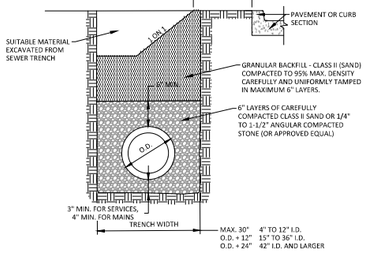


END VIEW

END SECTION AND BAR SCREEN DETAIL

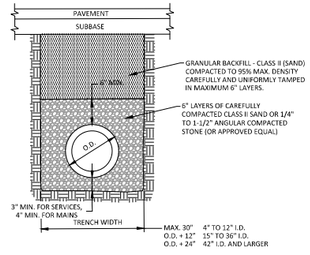


PRE-CAST LOW HEAD MANHOLE DETAIL



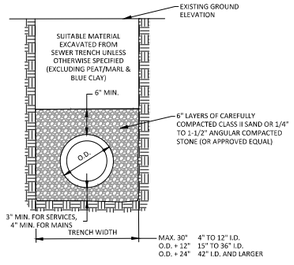
TRENCH DETAIL "A"

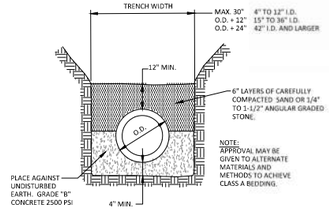
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED



TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED





CONCRETE CRADLE

PIPE SCHEDULE

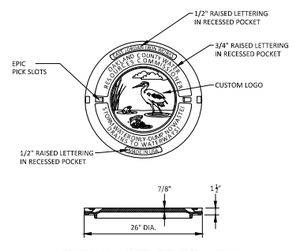
WITHIN 1 ON 1 ZONE OF INFLUENCE OF ROADWAY MEASURED FROM BACK OF CURB.	< 3' COVER 3' - 10' COVER > 10' COVER	C76 - CL V C76 - CL IV C76 - CL V OR APPROVED EQUAL
OUTSIDE ZONE OF INFLUENCE OR ROADWAY, IN REAR YARD OR GREENBELT.	SMOOTH LINED CORRUGATED HDPE, CPVC A 2000, C-76 CL IV OR V, SCH. 40 PVC, SDR 23.5, SDR 26, CSP, OR APPROVED EQUAL	
DRIVE CULVERTS	C-76 CL IV OR CORRUGATED METAL PIPE (CMP)	

NOTES:
1. ALL PIPE TO BE INSTALLED PER MANUFACTURER RECOMMENDED STANDARDS AND AS SHOWN ON PLANS.
2. ALL PIPE SHALL BE FURNISHED WITH PREMIUM JOINTS.

TYPICAL M.H. GRATES

APPLICATION	GRATE ID NUMBER
CURB AND GUTTER	EJIW 5000 Z4/M4 HINGED (SEE DETAIL THIS SHEET)
PAVEMENT	EJIW 1040-M1
GREEN BELT	EJIW 1040-N
DITCH	EJIW 6508 EJIW 6517

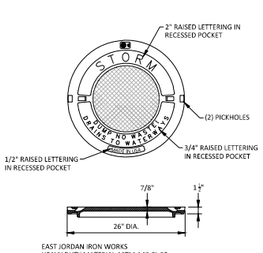
OR APPROVED EQUAL



EAST JORDAN IRON WORKS OR APPROVED EQUAL HEAVY DUTY MATERIAL ASTM A48 CL 35B
CATALOG NO. 1040A PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD. 2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS ALL IN RECESSED POCKET.

OAKLAND COUNTY WRC STORM SEWER MANHOLE COVER

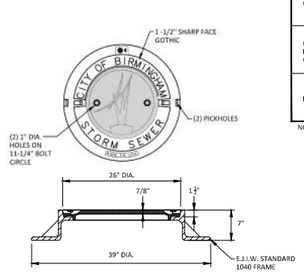
TO BE USED ONLY FOR MANHOLES ON DESIGNATED COUNTRY DRAINS



EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040A
2" HIGH RAISED LETTERS, 3/4" WIDE RAISED LETTERS
ALL RECESSED FLUSH.

PRIVATE STORM SEWER MANHOLE COVER

TO BE USED ON ALL STORM SEWER MANHOLES OTHER THAN COUNTY OR CITY DESIGNATED DRAINS.



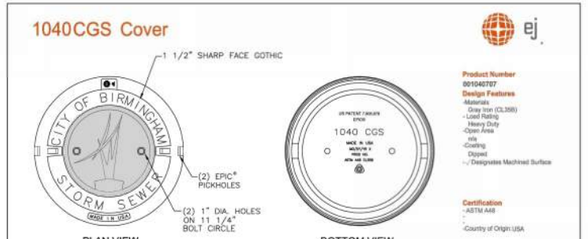
EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040CGS

CITY OF BIRMINGHAM STORM SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



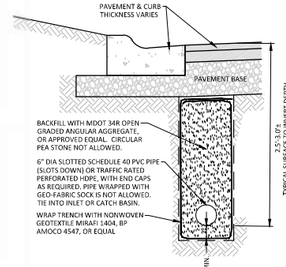
CITY OF BIRMINGHAM CATCH BASIN & INLET FRAME & COVER - STORM SEWER



CITY OF BIRMINGHAM MANHOLE COVER - STORM SEWER

STORM DRAIN SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM. ALL STORM SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.
2. ALL STORM DRAIN SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.
3. ALL STORM DRAIN SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.
4. ALL STORM DRAIN SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.
5. STORM DRAIN SEWER DRAINAGE PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):
   - A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
     - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
     - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.
   - B. POLYVINYL CHLORIDE PIPE (PVC):
     - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
     - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.
     - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
     - PVC COMPOUNDS TO MEET ASTM D-1784
   - C. HIGH-DENSITY POLYETHYLENE PIPE (HDPE):
     - 4" OR 6" DIAMETER ALLOWABLE FOR PAVEMENT UNDERDRAIN APPLICATIONS.
     - SINGLE WALL, CORRUGATED , PERFORATED PIPE SUITABLE TO TRAFFIC LOADING APPLICATIONS.
     - PIPE SHALL MEET AASHTO M252, TYPE C OR CP
     - JOINTS SHALL MEET SOIL-TIGHT REQUIREMENTS PER AASHTO M252 OR M294
   - D. CORRUGATED STEEL PIPE REQUIREMENTS (CSP) (ONLY ALLOWED FOR USE IN SMALL DIAMETER (15" DIA. OF LESS) DRAINAGE CULVERTS):
     - CORRUGATED STEEL PIPE SHALL BE PROVIDED CORRESPONDING TO THE DIAMETER OR ARCH SHAPE (RISE AND SPAN) AS SPECIFIED ON THE PLANS.
     - ALL CORRUGATED STEEL PIPE SHALL BE GALVANIZED AND COATED WITH BITUMINOUS ASPHALT TO RETARD CORROSION. AS AN ALTERNATE TO THIS REQUIREMENT, AN ALUMINIZED STEEL PIPE, OR APPROVED EQUAL, MAY BE SUBSTITUTED.
     - ALL CORRUGATED STEEL PIPE SHALL BE JOINED TOGETHER WITH A WATERTIGHT CIRCUMFERENTIALLY CORRUGATED STEEL COUPLING BAND FURNISHED WITH TWO (2) RUBBER GASKETS.
     - CORRUGATED STEEL PIPE SHALL HAVE WELDED SEAMS WITH HELICAL CORRUGATIONS. EACH END OF THE HELICAL CORRUGATED PIPE SHALL BE RE-ROLLED TO AN ANNULAR CONFIGURATION TO ACCOMMODATE THE WATERTIGHT COUPLING BAND DESCRIBED HEREIN. RIVETED OR LOCK SEAM PIPE IS UNACCEPTABLE.
6. STORM MANHOLE, CATCH BASIN, AND INLET STRUCTURE NOTES AND REQUIREMENTS:
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE, CATCH BASIN, OR INLET STRUCTURE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS AT ALL PIPE CONNECTIONS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.
7. ALL END SECTIONS 18" AND LARGER SHALL BE PROVIDED WITH A GALVANIZED BAR SCREEN.
8. STANDARD RIP-RAP SHALL BE 8"-15" FRAGMENTED NATURAL ROCK. HEAVY RIP-RAP SHALL BE 16"-24" FRAGMENTED NATURAL ROCK. (NO BROKEN CONCRETE SHALL BE ALLOWED)
9. SUMP PUMP LEAD REQUIREMENTS:
   - SUMP PUMP LEADS CONNECTED TO A MANHOLE SHALL BE CORED AND BOOTED.
   - SUMP PUMP MAINS AND LEADS SHALL BE SDR 23.5, SCHEDULE 40, NON PERFORATED, SOLID WALL, ABS TRUSS, PVC TRUSS, ADS N-12 WT, OR APPROVED EQUAL, WITH PREMIUM JOINTS.
   - ENDS OF ALL 4" SUMP PUMP LEADS SHALL BE TEMPORARILY CAPPED AND THEIR LOCATION STAKED, WITNESSED AND RECORDED.
   - ALL SUMP PUMP LEADS TO BE TAKEN TO THE PROPERTY LINE, EASEMENT LINE OR AS INDICATED ON THE PLAN.
   - SUMP PUMP MAINS MUST HAVE A CLEANOUT WITH A MINIMUM INSIDE DIAMETER OF 24", CONSTRUCTED AT CHANGES OF ALIGNMENT, ENDS OF SUMP PUMP MAINS OR AS INDICATED ON THE PLAN.



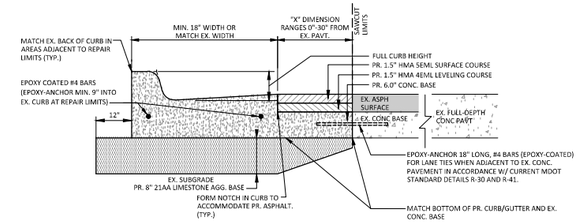
6" PERFORATED UNDERDRAIN TRENCH DETAIL

BIRMINGHAM
A WALKABLE CITY

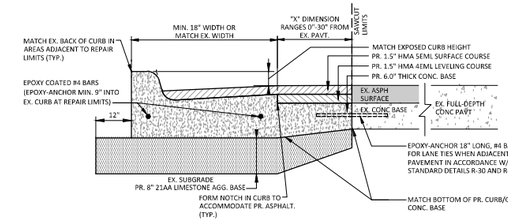
City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Storm Drain Sewer Standard Notes & Details 1 of 1

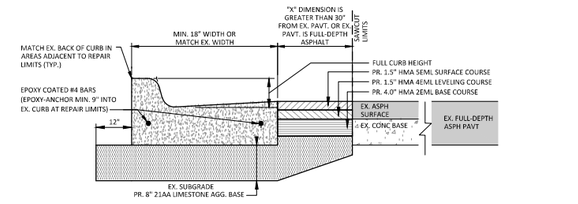
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01-22-26	NTS	SD-1



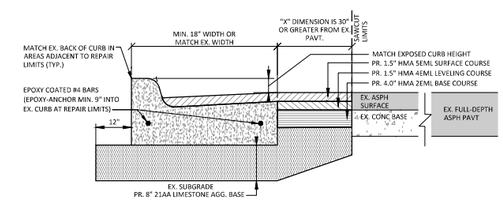
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



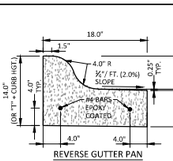
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



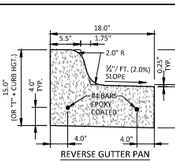
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



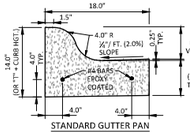
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



REVERSE GUTTER PAN

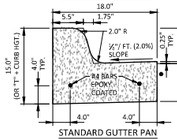


REVERSE GUTTER PAN



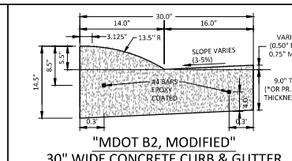
STANDARD GUTTER PAN

"BIRMINGHAM ROLL"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

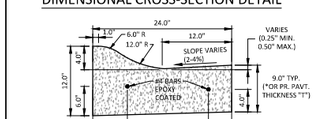


STANDARD GUTTER PAN

"MDOT F2, MODIFIED"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



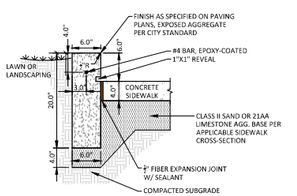
"MDOT B2, MODIFIED"
30" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



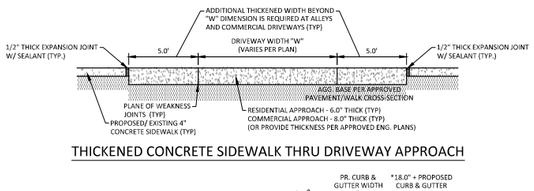
"MDOT D2, MODIFIED"
24" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

CONCRETE CURB & GUTTER NOTES

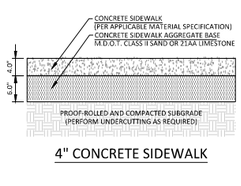
1. REFER TO M.D.O.T. STANDARD PLAN R-30 (CURRENT VERSION) FOR TYPICAL CURB AND GUTTER DETAILS, WHICH SHALL BE USED EXCEPT AS MODIFIED HEREIN, OR UPON DIRECTION BY THE ENGINEER.
2. PER M.D.O.T. STANDARD PLAN R-30, EPOXY-COATED #4 LANE TIES SHALL BE INSTALLED WHEN CONCRETE CURB & GUTTER IS INSTALLED ADJACENT TO EXISTING OR PROPOSED FULL-DEPTH CONCRETE PAVEMENT. LANE TIES MAY BE OMITTED WHEN CURB IS FORMED INTEGRAL TO A CONCRETE PAVEMENT CROSS-SECTION.
3. ALL CONCRETE CURB & GUTTER INSTALLED WITHIN M.D.O.T.- OR ROAD COMMISSION FOR OAKLAND COUNTY (R.C.O.C.) PUBLIC RIGHT-OF-WAYS SHALL ADHERE TO STANDARDS AND SPECIFICATIONS OF APPROVED PERMITS REQUIRED TO COMPLETE THE WORK'S THE GOVERNING AGENCIES.
4. ALL PROPOSED CONCRETE CURB & GUTTER SHALL PROVIDE THE TYPICAL CURB HEIGHTS FOR EACH TYPE OF CURB AS SHOWN IN THE DIMENSIONAL CROSS-SECTION DETAILS, EXCEPT AT LOCATIONS WHERE CURB & GUTTER IS REQUIRED TO MATCH EXISTING OR WHERE ALTERNATE CURB HEIGHTS ARE SPECIFIED ON THE PLANS.
5. PREPARE THE EXISTING AGGREGATE SUBBASE LAYER BELOW CURB AND GUTTER BY CONDITIONING, GRADING, AND/OR RE-SHAPING THE SUBBASE, AND FURNISHING, PLACING, AND COMPACTING SUPPLEMENTAL THICK 21AA AGGREGATE BASE TO ACHIEVE PROPOSED PLAN GRADE. ALL NECESSARY PREPARATION WORK SHALL BE INCLUDED IN APPLICABLE PAY ITEMS FOR CONCRETE CURB & GUTTER.
6. PER THE DIMENSIONAL CROSS-SECTION DETAILS, THE PROPOSED PAVEMENT THICKNESS,"T" IS EQUAL TO THE THICKNESS OF PROPOSED FULL-DEPTH CONCRETE PAVEMENT ADJACENT TO THE CURB & GUTTER, POURED SEPARATELY OR INTEGRAL. THE PROPOSED SLOPE WITHIN THE GUTTER PAN IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.
7. TYPICAL USE OF THE VARIOUS TYPES OF CONCRETE CURB AND GUTTER ARE AS FOLLOWS (OR IN ACCORDANCE WITH THE APPROVED PLANS OR PER DIRECTION BY THE ENGINEER):
   - 7.A. "BIRMINGHAM ROLL" DETAIL: LOCAL RESIDENTIAL STREETS
   - 7.B. "MDOT F2, MODIFIED" DETAIL: RESIDENTIAL, COMMERICAL & INDUSTRIAL COLLECTOR STREETS
   - 7.C. "MDOT D2, MODIFIED" DETAIL: MOUNTABLE CURB APPLICATIONS
   - 7.D. "MDOT B2, MODIFIED" DETAIL: DRIVEWAY OR ROADWAY MEDIANS



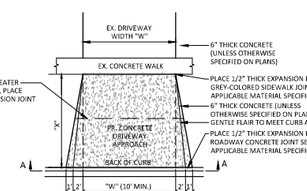
EXPOSED AGGREGATE LANDSCAPE PLANTER CURB



THICKENED CONCRETE SIDEWALK THRU DRIVEWAY APPROACH



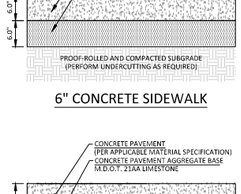
4" CONCRETE SIDEWALK



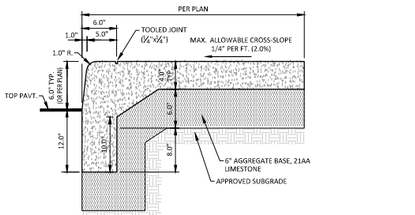
CONCRETE DRIVEWAY APPROACH - DETAIL 'L'



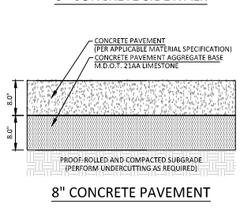
MDOT DRIVEWAY OPENING DETAIL 'M'



6" CONCRETE SIDEWALK



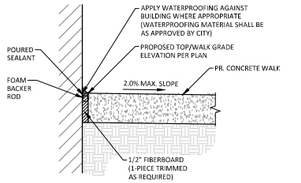
MONOLITHIC CURB AND WALK



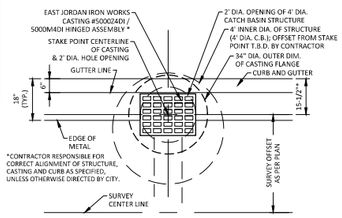
8" CONCRETE PAVEMENT

GENERAL PAVEMENT REMOVAL & CONSTRUCTION NOTES

1. PAVEMENTS SHALL BE OF THE TYPE, THICKNESS, AND CROSS-SECTIONS AS INDICATED HEREIN OR AS PROPOSED ON THE APPROVED ENGINEERING PLANS.
2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT WHERE MODIFIED OR SUPPLEMENTED HEREIN, OR ON THE APPROVED ENGINEERING PLANS.
3. ALL PAVING CONSTRUCTION OCCURRING WITHIN THE CITY OF BIRMINGHAM PUBLIC RIGHT-OF-WAY (R.O.W.) REQUIRES THAT THE DEVELOPER OR CONTRACTOR NOTIFY THE CITY ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE, SO THAT THE CITY MAY PROVIDE INSPECTION IF REQUIRED.
4. CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
5. FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.
6. ALL PAVEMENTS CALLED FOR FULL-DEPTH REMOVAL AND REPLACEMENT SHALL BE SAWCUT FULL-DEPTH THROUGH THE PAVEMENT SECTION PRIOR TO REMOVAL.
7. BRICK PAVER WALKS OR DRIVEWAYS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.) SHALL BE REMOVED AS DIRECTED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER IN ADVANCE TO DETERMINE WHETHER THE REMOVED BRICK PAVER MATERIALS SHALL BE SALVAGED AND RETURNED TO THE OWNER OR DISPOSED OF.
8. IN ANY LOCATIONS WHERE ADJACENT PAVEMENTS ARE DAMAGED BEYOND THE PLANNED REMOVAL LIMITS, THE CONTRACTOR SHALL REPLACE THE PAVEMENTS "IN KIND" TO MATCH EXISTING MATERIAL(S), THICKNESS, UNDERLYING AGGREGATE BASE MATERIAL, AND OVERALL PAVEMENT CROSS-SECTION, AT NO ADDITIONAL COST TO THE CITY OR OWNER.
9. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, AND UPON REVIEW AND APPROVAL BY THE CITY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE. CONTRACTORS SHALL COORDINATE WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (DPS) IN ADVANCE OF CUTTING TREE ROOTS TO DETERMINE IF DPS REQUIRES PERSONNEL TO BE ON SITE TO WITNESS THE TREE CUTTING WORK.
10. SOILS, ROCKS, OR OTHER MISCELLANEOUS DEBRIS WHICH ARE REQUIRED TO BE REMOVED TO COMPLETE THE PROPOSED CONSTRUCTION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, AND LEGALLY DISPOSED OF, UNLESS DIRECTED OTHERWISE FROM THE CITY.
11. PAVEMENT SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
12. EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS (INCLUDED IN PAVING WORK).
13. ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
14. FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



EXPANSION JOINT DETAIL AT BUILDING



CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

AMERICANS WITH DISABILITIES ACT (A.D.A.) SIDEWALK, RAMP & LANDING COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

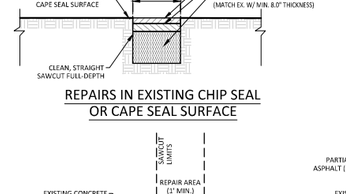
1. THE RUNNING SLOPE OF CONSTRUCTED WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5.0%).
2. THE CROSS-SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48 (2.0%).
3. CHANGES IN LEVEL OF 1/4 INCH (0.02 FEET) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.
4. SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

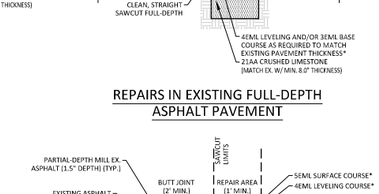
5. CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.
7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 (2.0%).
8. THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12 (8.3%).
9. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 (10.0%).
10. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.
11. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20 (5.0%). THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.
12. CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL
13. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
14. WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').
15. DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.
16. SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.
17. DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.
18. DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.
19. RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING / TURNING SPACE REQUIREMENTS:

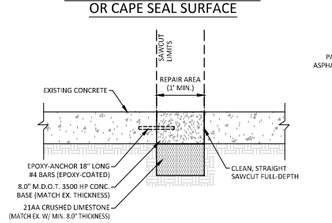
20. LANDINGS SHALL BE REQUIRED AT TOP OF CURB RAMPS AND TOP AND BOTTOM OF CURB RAMPS AND OTHER SIDEWALK RAMPS (SIDEWALKS WITH LONGITUDINAL SLOPE OF 5.0% OR GREATER).
21. LANDINGS SHALL BE PROVIDED WITH SLOPES NOT STEEPER THAN 1:48 (2.0%) IN ALL DIRECTIONS.
22. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.
23. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING AREA WITH DIMENSIONS OF 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.
24. TURNING SPACES, SUCH AS KEY FLAGS WHERE TWO SEPARATE SIDEWALK DIRECTIONAL ALIGNMENTS INTERSECT, SHALL MEET THE SAME REQUIREMENTS AS LANDINGS AS DEFINED ABOVE.



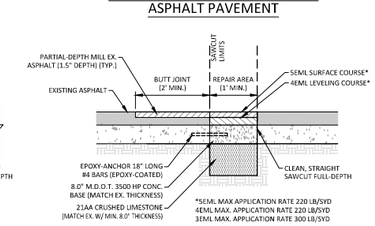
REPAIRS IN EXISTING CHIP SEAL OR CAPE SEAL SURFACE



REPAIRS IN EXISTING FULL-DEPTH ASPHALT PAVEMENT



REPAIRS IN EXISTING FULL-DEPTH CONCRETE PAVEMENT



REPAIRS IN EXISTING COMPOSITE PAVEMENT

PAVEMENT MATERIAL SPECIFICATIONS

AGGREGATE BASE:

1. ROAD PAVEMENTS, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS
   - 1.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 8.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
2. RESIDENTIAL DRIVEWAYS
   - 2.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
3. CONCRETE SIDEWALKS
   - 3.A. PROVIDE CRUSHED LIMESTONE (MDOT 21AA GRADATION) OR MDOT CLASS II SAND (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.

HOT MIX ASPHALT (H.M.A.) MIXTURES:

2. UNLESS OTHERWISE SPECIFIED ON THE APPROVED ENGINEERING PLANS, THE FOLLOWING HOT MIX ASPHALT (H.M.A.) MIXTURES SHALL BE USED FOR NEW ASPHALT PAVEMENT CONSTRUCTION AND ASPHALT ROAD REPAIRS:
   - 2.A. SURFACE COURSE: MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE O

Sidwell Number	Street Address	Total Assessable length (lft)	Road Cost	Driveway Approach Cost	Total
1925255007	541 WIMBLETON DR	80.75	$ 9,125.21	$ 2,141.81	$ 11,267.03
1925255008	921 WARWICK DR	12.50	$ 1,412.57	$ -	$ 1,412.57
1925280008	625 WIMBLETON DR	102.20	$ 11,549.13	$ -	$ 11,549.13
1925280009	647 WIMBLETON DR	55.25	$ 6,243.57	$ 1,415.05	$ 7,658.62
1925280010	669 WIMBLETON DR	55.25	$ 6,243.57	$ -	$ 6,243.57
1925280025	701 WIMBLETON DR	55.25	$ 6,243.57	$ 1,809.46	$ 8,053.03
1925280026	715 WIMBLETON DR	55.25	$ 6,243.57	$ 679.47	$ 6,923.04
1925280027	733 WIMBLETON DR	59.89	$ 6,768.03	$ 849.34	$ 7,617.37
1925280028	777 WIMBLETON DR	63.75	$ 7,204.12	$ 1,403.26	$ 8,607.37
1925280029	921 POPPLETON AVE	59.50	$ 6,723.84	$ 1,329.40	$ 8,053.24
1925280030	939 POPPLETON AVE	13.60	$ 1,536.88	$ -	$ 1,536.88
1925281005	928 POPPLETON AVE	162.09	$ 18,316.71	$ 1,632.75	$ 19,949.46
1925281010	887 WIMBLETON DR	102.00	$ 11,526.59	$ 1,741.60	$ 13,268.19
1925281033	923 WIMBLETON DR	93.50	$ 10,566.04	$ 1,593.27	$ 12,159.30
1925281040	983 WIMBLETON DR	59.50	$ 6,723.84	$ 1,957.17	$ 8,681.01
1925281041	1005 WIMBLETON DR	51.00	$ 5,763.29	$ 1,920.24	$ 7,683.54
1925281031	1054 ABBEY RD	153.02	$ 1,080.74	$ 92.98	$ 1,173.71
1925281030	1064 ABBEY RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281029	1074 ABBEY RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281028	1084 ABBEY RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281027	971 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281026	961 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281025	951 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281024	941 N ADAMS RD UNIT 9		$ 1,080.74	$ 92.98	$ 1,173.71
1925281023	931 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281022	921 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281021	911 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281020	901 N ADAMS RD		$ 1,080.74	$ 92.98	$ 1,173.71
1925281019	1085 WIMBLETON DR		$ 1,080.74	$ 92.98	$ 1,173.71
1925281018	1075 WIMBLETON DR		$ 1,080.74	$ 92.98	$ 1,173.71
1925281017	1065 WIMBLETON DR		$ 1,080.74	$ 92.98	$ 1,173.71
1925281016	1055 WIMBLETON DR		$ 1,080.74	$ 92.98	$ 1,173.71

1925258002	554 WIMBLETON DR	110.50	$ 12,487.13	$ 1,814.17	$ 14,301.30
1925258003	612 WIMBLETON DR	55.25	$ 6,243.57	$ -	$ 6,243.57
1925258004	636 WIMBLETON DR	51.00	$ 5,763.29	$ -	$ 5,763.29
1925258005	652 WIMBLETON DR	51.00	$ 5,763.29	$ 1,124.78	$ 6,888.08
1925258006	680 WIMBLETON DR	51.00	$ 5,763.29	$ 1,124.78	$ 6,888.08
1925258007	700 WIMBLETON DR	51.00	$ 5,763.29	$ 1,144.76	$ 6,908.05
1925258008	871 POPPLETON AVE	91.66	$ 10,358.16	$ 922.34	$ 11,280.51
1925282001	812 WIMBLETON DR	55.44	$ 6,264.53	$ 1,019.21	$ 7,283.74
1925282002	824 WIMBLETON DR	51.00	$ 5,763.29	$ 2,215.67	$ 7,978.96
1925282003	840 WIMBLETON DR	68.00	$ 7,684.39	$ -	$ 7,684.39
1925282004	868 WIMBLETON DR	68.00	$ 7,684.39	$ 4,354.00	$ 12,038.39
1925282015	886 WIMBLETON DR	85.00	$ 9,605.49	$ -	$ 9,605.49
1925282008	900 WIMBLETON DR	68.00	$ 7,684.39	$ 1,144.76	$ 8,829.15
1925282024	930 WIMBLETON DR	68.00	$ 7,684.39	$ 1,624.82	$ 9,309.21
1925282025	980 WIMBLETON DR	51.00	$ 5,763.29	$ 1,306.20	$ 7,069.49
1925282012	1004 WIMBLETON DR	54.19	$ 6,123.50	$ 1,550.97	$ 7,674.47
1925282013	1038 WIMBLETON DR	47.81	$ 5,403.09	$ -	$ 5,403.09
1925282017	1078 WIMBLETON DR	107.95	$ 1,742.71	$ 158.26	$ 1,900.97
1925282023	1050 WIMBLETON DR		$ 1,742.71	$ 158.26	$ 1,900.97
1925282022	1060 WIMBLETON DR		$ 1,742.71	$ 158.26	$ 1,900.97
1925282021	1064 WIMBLETON DR		$ 1,742.71	$ 158.26	$ 1,900.97
1925282020	1070 WIMBLETON DR		$ 1,742.71	$ 158.26	$ 1,900.97
1925282019	1072 WIMBLETON DR		$ 1,742.71	$ 158.26	$ 1,900.97
1925282018	1076 WIMBLETON DR		$ 1,742.71	$ 158.26	$ 1,900.97

MEMORANDUM

City Clerk's Office

DATE: April 21, 2026

TO: Melissa Coatta, City Engineer

FROM: Mya Brown, Deputy City Clerk

SUBJECT: Clerk's Confirmation of Public Hearing Notice: Wimbleton Phase 2 Paving Project Paving Special Assessment District (SAD)

INTRODUCTION:
The public hearing notice process has been completed for Installation of cape seal treatment for all properties within the project are on Wimbleton Drive from Oxford Road to Adams Road (SAD). Please see attachments for further confirmation.

PUBLIC COMMUNICATIONS:
Mailing Date: 04/16/2026
Test Mail Return Date: 04/20/2026
Publishing Dates in the Oakland Press: 04/19/2026
Posted in www.bhamgov/publicnotices

ATTACHMENTS:

1. Public Hearing Notice
2. Addresses
3. Map
4. Mailing Letter
5. Mail Machine Counter Repot
6. Proof of Publishing

NOTICE OF PUBLIC HEARING

BIRMINGHAM CITY COMMISSION

PUBLIC HEARING OF NECESSITY &
PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, May 4, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, May 18, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton Drive from Oxford Road to Adams Road
Nature of Improvement:	This work will include the installation of cape seal treatment for all properties within the project area on Wimbleton Drive from Oxford Road to Adams Road
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 4/19/2026 & 05/03/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012.

The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.

All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Parcel Identification Number	Postal Address
1925255008	921 WARWICK DR
1925255007	541 WIMBLETON DR
1925280008	625 WIMBLETON DR
1925280009	647 WIMBLETON DR
1925280010	669 WIMBLETON DR
1925280025	701 WIMBLETON DR
1925280026	715 WIMBLETON DR
1925280027	733 WIMBLETON DR
1925280028	777 WIMBLETON DR
1925280029	921 POPPLETON AVE
1925280030	939 POPPLETON AVE
1925281005	928 POPPLETON AVE
1925281010	1917 MIDCHESTER DR
1925281033	923 WIMBLETON DR
1925281040	983 WIMBLETON DR
1925281041	1005 WIMBLETON DR
1925281030	1064 ABBEY RD
1925279017	1001 N ADAMS RD
1925279018	1013 N ADAMS RD
1925279019	980 WORTHINGTON RD
1925279021	1049 N ADAMS RD
1925279020	1037 N ADAMS RD
1925279022	PO BOX 1628
1925279023	1063 N ADAMS RD
1925279024	1075 N ADAMS RD
1925279025	33 N MAIN ST
1925279026	410 EVERNIA ST APT 515
1925281016	1055 WIMBLETON DR
1925281017	2820 WOODSLEE DR
1925281018	19091 BEDFORD ST
1925281019	1085 WIMBLETON DR
1925281020	901 N ADAMS RD
1925281021	705 DAVIS AVE
1925281023	1039 N OLD WOODWARD AVE UNIT 5
1925281022	921 N ADAMS RD
1925281024	5823 WELLWOOD DR
1925281025	951 N ADAMS RD
1925281026	1407 WOODGLEN LN
1925281027	971 N ADAMS RD
1925281028	316 SHELL GATE RD
1925281029	1170 ARDEN LN
1925281031	5598 WHITE HALL CIR
1925258002	554 WIMBLETON DR
1925258003	612 WIMBLETON DR
1925258004	636 WIMBLETON DR

1925258005	652 WIMBLETON DR
1925258006	680 WIMBLETON DR
1925258007	700 WIMBLETON DR
1925258008	871 POPPLETON AVE
1925282001	812 WIMBLETON DR
1925282002	824 WIMBLETON DR
1925282003	840 WIMBLETON DR
1925282004	868 WIMBLETON DR
1925282015	886 WIMBLETON DR
1925282008	900 WIMBLETON DR
1925282024	930 WIMBLETON DR
1925282025	980 WIMBLETON DR
1925282012	1004 WIMBLETON DR
1925282013	1038 WIMBLETON DR
1925282023	1050 WIMBLETON DR
1925282017	5964 PELICAN BAY BLVD APT 435
1925282018	1076 WIMBLETON DR
1925282019	1072 WIMBLETON DR
1925282020	1070 WIMBLETON DR
1925282021	1064 WIMBLETON DR
1925282022	1060 WIMBLETON DR

151 Martin St

First Owner Name	POSTALCITY	POSTALSTAT	POSTALZIP5
CATHERINE D DEVOR	BIRMINGHAM	MI	48009
CLIFFORD RAGER	BIRMINGHAM	MI	48009
RICHARD M BRODSKY	BIRMINGHAM	MI	48009
JANE E GREENING	BIRMINGHAM	MI	48009
CAROL JIZMEJIAN	BIRMINGHAM	MI	48009
ROHIT ARORA	BIRMINGHAM	MI	48009
JACLYN BOUCHARD	BIRMINGHAM	MI	48009
MEIXUAN LIM	BIRMINGHAM	MI	48009
BRANDON JACOBS	BIRMINGHAM	MI	48009
SAMUEL G SCHWARTZ	BIRMINGHAM	MI	48009
JULIA DOYLE	BIRMINGHAM	MI	48009
MELINDA RANDICK SMART	BIRMINGHAM	MI	48009
GUERO PROPERTIES LLC	BIRMINGHAM	MI	48009
FRANK JAMES TAYLOR III	BIRMINGHAM	MI	48009
DAVID C HAMILTON	BIRMINGHAM	MI	48009
RONALD RISINGER	BIRMINGHAM	MI	48009
MONIQUE CLARK	BIRMINGHAM	MI	48009
ALLISON GREENE LVNG TRUST	BIRMINGHAM	MI	48009
SHANTHI LAKSHMI SIVANANDHAM	BIRMINGHAM	MI	48009
WALTER PALAMARCHUK	BIRMINGHAM	MI	48009
SHARON N MURPHY	BIRMINGHAM	MI	48009
SABAH KEER	BIRMINGHAM	MI	48009
SONESCOTT REALTY LLC	BIRMINGHAM	MI	48009
SHARON SUE SPEYER TRUST	BIRMINGHAM	MI	48009
PAMELA A MEEK	BIRMINGHAM	MI	48009
HARRY S RADCLIFF JR REVOC TRUST	BIRMINGHAM	MI	48009
JOEL J REMY	BIRMINGHAM	MI	48009
JOSEPH PARADISO	BIRMINGHAM	MI	48009
JOSEPH LEIDER	BIRMINGHAM	MI	48009
AMD HOLDINGS LLC	BIRMINGHAM	MI	48009
RICHARD HEGGIE	BIRMINGHAM	MI	48009
DANIEL JEMINI	BIRMINGHAM	MI	48009
TITAS LAURINAITIS	BIRMINGHAM	MI	48009
FRANK MONAGHAN	BIRMINGHAM	MI	48009
THOMAS J DECEMBER	BIRMINGHAM	MI	48009
PENSCO TRUST COMPANY	BIRMINGHAM	MI	48009
MARK FLESZAR	BIRMINGHAM	MI	48009
AI HOME PROPERTIES LLC	BIRMINGHAM	MI	48009
JANET K TALBOYS INTER VIVOS TRUST	BIRMINGHAM	MI	48009
YVONNE CHAN	BIRMINGHAM	MI	48009
KATHLEEN C RAFFERTY	BIRMINGHAM	MI	48009
MAJID PEZHMAN	BIRMINGHAM	MI	48009
KIM F KEZLARIAN	BIRMINGHAM	MI	48009
ANDREW T BARAN	BIRMINGHAM	MI	48009
MELITA MEDICO- REUBER	BIRMINGHAM	MI	48009

JACQUELINE L GIERER	BIRMINGHAM	MI	48009
TIM ERWIN HERTZLER	BIRMINGHAM	MI	48009
BRIAN P DUFFY	BIRMINGHAM	MI	48009
EARL EDWIN MEITZ	BIRMINGHAM	MI	48009
NIKOLA POPOVIC	BIRMINGHAM	MI	48009
JORDYN VINISH	BIRMINGHAM	MI	48009
ROBERT M BOYLE TRUST	BIRMINGHAM	MI	48009
DAVID S COSGROVE JR	BIRMINGHAM	MI	48009
CHARLES P WHITE	BIRMINGHAM	MI	48009
WILLIAM R CONNOLLY TRUST	BIRMINGHAM	MI	48009
MICHAEL O PEREZ	BIRMINGHAM	MI	48009
SHEALYN SHALHOUB	BIRMINGHAM	MI	48009
BRUCE E PEARCE	BIRMINGHAM	MI	48009
VICENTE ZAID GRANDE ESPINOSA	BIRMINGHAM	MI	48009
LISA BURK	BIRMINGHAM	MI	48009
CAROLYN NESBITT TRUST	BIRMINGHAM	MI	48009
JOLENE B SCAVONE LVNG TRUST	BIRMINGHAM	MI	48009
ROBERT BROWN JR	BIRMINGHAM	MI	48009
ROBERT GEENENS	BIRMINGHAM	MI	48009
SANDRA COLDEN	BIRMINGHAM	MI	48009
DEBORAH UNDERWOOD	BIRMINGHAM	MI	48009
City of Birmingham	BIRMINGHAM	MI	48009

PNUM	Postal City Postal State Postal Zip 5
08-19-25-255-008	BIRMINGHAM, MI 48009
08-19-25-255-007	BIRMINGHAM, MI 48009
08-19-25-280-008	BIRMINGHAM, MI 48009
08-19-25-280-009	BIRMINGHAM, MI 48009
08-19-25-280-010	BIRMINGHAM, MI 48009
08-19-25-280-025	BIRMINGHAM, MI 48009
08-19-25-280-026	BIRMINGHAM, MI 48009
08-19-25-280-027	BIRMINGHAM, MI 48009
08-19-25-280-028	BIRMINGHAM, MI 48009
08-19-25-280-029	BIRMINGHAM, MI 48009
08-19-25-280-030	BIRMINGHAM, MI 48009
08-19-25-281-005	BIRMINGHAM, MI 48009
08-19-25-281-010	WEST BLOOMFIELD, MI 48324
08-19-25-281-033	BIRMINGHAM, MI 48009
08-19-25-281-040	BIRMINGHAM, MI 48009
08-19-25-281-041	BIRMINGHAM, MI 48009
08-19-25-281-030	BIRMINGHAM, MI 48009
08-19-25-279-017	BIRMINGHAM, MI 48009
08-19-25-279-018	BIRMINGHAM, MI 48009
08-19-25-279-019	BIRMINGHAM, MI 48009
08-19-25-279-021	BIRMINGHAM, MI 48009
08-19-25-279-020	BIRMINGHAM, MI 48009
08-19-25-279-022	BIRMINGHAM, MI 48012
08-19-25-279-023	BIRMINGHAM, MI 48009
08-19-25-279-024	BIRMINGHAM, MI 48009
08-19-25-279-025	CLARKSTON, MI 48346
08-19-25-279-026	WEST PALM BEACH, FL 33401
08-19-25-281-016	BIRMINGHAM, MI 48009
08-19-25-281-017	ROYAL OAK, MI 48073
08-19-25-281-018	BEVERLY HILLS, MI 48025
08-19-25-281-019	BIRMINGHAM, MI 48009
08-19-25-281-020	BIRMINGHAM, MI 48009
08-19-25-281-021	BIRMINGHAM, MI 48009
08-19-25-281-023	BIRMINGHAM, MI 48009
08-19-25-281-022	BIRMINGHAM, MI 48009
08-19-25-281-024	ROCHESTER, MI 48306
08-19-25-281-025	BIRMINGHAM, MI 48009
08-19-25-281-026	BLOOMFIELD, MI 48304
08-19-25-281-027	BIRMINGHAM, MI 48009
08-19-25-281-028	ALAMEDA, CA 94501
08-19-25-281-029	BIRMINGHAM, MI 48009
08-19-25-281-031	WEST BLOOMFIELD, MI 48323
08-19-25-258-002	BIRMINGHAM, MI 48009
08-19-25-258-003	BIRMINGHAM, MI 48009
08-19-25-258-004	BIRMINGHAM, MI 48009

08-19-25-258-005	BIRMINGHAM, MI 48009
08-19-25-258-006	BIRMINGHAM, MI 48009
08-19-25-258-007	BIRMINGHAM, MI 48009
08-19-25-258-008	BIRMINGHAM, MI 48009
08-19-25-282-001	BIRMINGHAM, MI 48009
08-19-25-282-002	BIRMINGHAM, MI 48009
08-19-25-282-003	BIRMINGHAM, MI 48009
08-19-25-282-004	BIRMINGHAM, MI 48009
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08-19-25-282-013	BIRMINGHAM, MI 48009
08-19-25-282-023	BIRMINGHAM, MI 48009
08-19-25-282-017	NAPLES, FL 34108
08-19-25-282-018	BIRMINGHAM, MI 48009
08-19-25-282-019	BIRMINGHAM, MI 48009
08-19-25-282-020	BIRMINGHAM, MI 48009
08-19-25-282-021	BIRMINGHAM, MI 48009
08-19-25-282-022	BIRMINGHAM, MI 48009


ABBEY ST
HENLEY ST
PUTNEY ST
SHEPARDBUSH ST
N ADAMS RD
WARWICK DR
POPPLETON ST
WIMBLETON DR
OXFORD ST
MOHEGAN ST

BIRMINGHAM
A WALKABLE CITY

April 14, 2026

TO: parcel #
NAME
ADDRESS
CITY/STATE/ZIP

Re: Wimbleton Phase 2 Paving Project, Contract #6-26(W)
Paving Special Assessment District (SAD)

To whom it may concern,

The City of Birmingham Wimbleton Phase 2 Project will begin in Spring 2026. The project includes the replacement of the water main, sewer along with a cape seal treatment of the roadway surface.

As part of the project, the existing unimproved streets will be surfaced with a cape seal treatment. To fund a portion of these roadway improvements, the City is proposing the establishment of a Paving Special Assessment District (SAD). A map identifying the properties included in the proposed Paving SAD is enclosed.

This letter serves as notice of two upcoming public hearings regarding the proposed Paving Special Assessment District:

- The Public Hearing of the Necessity to form a Special Assessment District for the road project meeting the requirements as part of the Wimbleton Phase 2 Project is **Monday, May 4, 2026**, during the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin St.

- If necessity is determined at the May 4 hearing, a Public Hearing of Confirmation to confirm the Special Assessment District will follow on **Monday, May 18, 2026**, during the regularly scheduled City Commission meeting at 7:00 p.m. in City Hall at 151 Martin St.

Consistent with previous projects of this nature, it has been the City's policy to assess the following:

- 85% of the short-foot costs for improvement are assessed on all properties fronting on the improvement.
- 25% of the long-foot costs for improvement are assessed on all residential properties siding on the improvement.
- 85% of the long-foot costs for improvement are assessed on improved business properties siding on the improvement.

- 25% of the long-foot costs for improvement are assessed on vacant business properties siding on the improvement.

The City is responsible for the remaining share of project costs, which equates to 15% of the short-foot costs and 75% of the long-foot costs.

The cost per property will be assessed based on an average cost associated with the proposed work on each street in the cape seal program, multiplied by the linear foot measurement of the property line fronting the street, and/or the side property line for corner lots, and then reduced by multiplying again by 85% for the short footage measurement, and/or 25% or 85% for the long footage measurement.

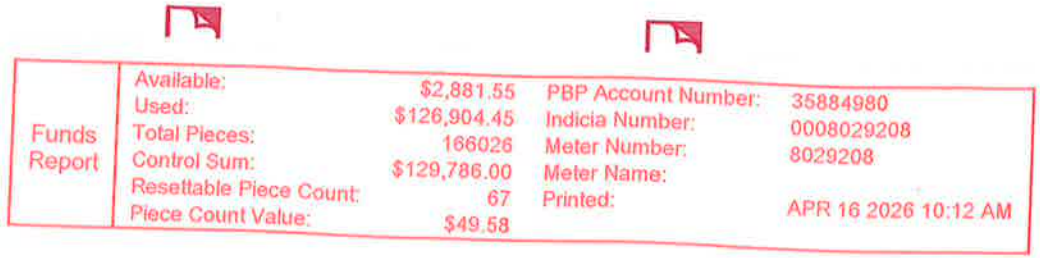
Upon completion of the work, an invoice will be issued to the property owner of record. Payment in full will be due within 30 days of receipt. The assessment may also be spread over a period of up to 10 annual installments. Any unpaid balance will accrue interest at a rate currently estimated at approximately 8.50%. Preliminary cost estimates will be presented at the Public Hearing of Necessity.

The Engineering Department will have a resident meeting on **Wednesday April 29, 2026**, from 5:30 p.m. – 6:30 p.m. at City Hall in the City Commission room to discuss the project and answer any questions about the SAD process and construction.

If you have any questions about the project, please contact the Engineering Office at (248) 530-1850. You will also have the opportunity to ask questions and speak directly to the City Commission at the Public Hearing of Necessity and at the Confirmation of the Roll.

Sincerely,

Melissa A. Coatta, P.E.
City Engineer


Funds Report
Available: $2,881.55
Used: $126,904.45
Total Pieces: 166026
Control Sum: $129,786.00
Resettable Piece Count: 67
Piece Count Value: $49.58
PBP Account Number: 35884980
Indicia Number: 0008029208
Meter Number: 8029208
Meter Name:
Printed: APR 16 2026 10:12 AM

DIY

From Page 1

That's why Finn started a lifestyle blog in 2013 titled "The DIY Playbook," which became a destination for beginners who wanted to tackle some of projects she did. Her early DIY work was to help decorate her apartment. Her ability and comfort using tools increased over time, especially since moving into a house that is over 100 years old.

"It has made me a more confident person in my life. If I can do or build that, I can handle anything," she said.

Being independent also taught 30-year-old Deyana Walker a lot about herself. Walker, who teaches remotely from Dallas, has built tables and floating shelves, and also turned a short school bus into a tiny home that she lived, worked and traveled in for more than a year.

Walker says she always wanted to travel, but it was not an option for her to pay someone hundreds of thousands of dollars for a newly built campervan. Converting the bus herself, including installing an electrical system for power and lights, and running water for the small shower and kitchenette, cost a fraction of that amount.

"Through the process of DIY, I figured out a lot about who I was and built myself up from a low point," Walker said, referencing a bad breakup that pushed her to build the first of two tiny homes on wheels. She is now applying the skills she acquired to home improvement projects in her Texas apartment.



Felicia Fonseca uses a jigsaw to cut slits into a piece of plywood for a wedding sign at a do-it-yourself party at an apartment in Flagstaff, Ariz., Sunday, February 15, 2026. **CHEYANNE MUMPHREY — THE ASSOCIATED PRESS**

WEIGHING THE PROS AND CONS

For beginners, taking on a project can seem daunting and some people don't know who or where to turn to. There are lots of people online saying, "If I can do it, so can you." There also are a lot of certified professionals warning of safety risks and the possibility of DIYers causing damage or encountering unexpected costs.

"You have to weigh the good and the bad: Am I willing to try, with the 50/50 chance I figure it out?" Walker said.

She also does extensive research before starting on a new project motivated by her desire to learn. Walker said she cross-references online tutorials, checks out library books and asks other amateur and professional builders for advice. She also takes safety precautions, such as wearing eye goggles, gloves and closed-toed shoes when cutting wood, working with sealants or lifting heavy things.

"When I first started, perfection was something I really strived for. After a while you find the beauty in the imperfections," Walker said.

She said she prefers to do most of her own projects and repairs but also gives herself permission to ask for or hire help.

BALANCING CONFIDENCE WITH CAUTION

Home repair experts say a nonnegotiable consideration should be safety, and many DIY advocates agree.

"When it comes to structural changes, electrical work beyond swapping out a light fixture, or plumbing changes that involve moving lines or opening up walls, that is best left to the professionals," Finn said. She hires professionals for jobs requiring inspections and permits, or when she is not comfortable with the level of expertise needed.

Finding professional help was not always possible while driving through remote areas in her remodeled bus, so Walker often sought guidance online. She recommends being cautious before relying on advice found on the internet.

"If I'm watching YouTube videos, I watch from a bunch of different creators and compare and contrast their work," Walker said. "Doing your due diligence of fact-checking and comparing resources is the best way to avoid getting false information on something that could be detrimental."

While safety and cost are important to consider, Lautz, of the National Association of Realtors, recommends evaluating the long-term durability and value of any home projects, especially as the U.S. housing stock ages. Doors and windows are projects that pay for themselves over time, and fresh paint and shiny wood floors are going to increase curb appeal, she said.

CARDS

From Page 1

partnerships with various merchants that give you money back for shopping with their brand. My Chase credit card regularly has offers for gas stations ranging from 3%-5% cash back. Simply click on an offer to activate it. Savings usually appear in the form of a statement credit or extra rewards.

Grocery rewards. Some grocery stores have teamed up with gas companies to offer additional savings. By spending at a particular grocery chain, you can earn discounts at the pump. Of course, the more you spend with the grocery store, the bigger your discount will be on gas.

Gas station loyalty programs. Most gas companies have them, and they're free to join. Be sure to enter your loyalty number or scan your rewards card in order to get the savings, which is usually a cents-per-gallon discount.

Upside app. Of the multiple cash-back apps out there, Upside is what NerdWallet recommends for gas station savings. When I checked my Upside app while writing this article, I saw an offer for 15 cents back per gallon at multiple gas stations near me. To snag the discount, claim an offer within the app, make a purchase, then upload your receipt before the offer expires. (In some cases, you may not even need to upload a paper receipt if you've linked your card in the app.)

Other money-saving apps. Apps like Fetch Rewards and Ibotta work similarly to Upside. After taking a picture of your receipt to verify a purchase, you'll earn rewards that can be redeemed for cash or gift cards. And apps like GasBuddy can help you find the cheapest gas prices in your area.

3. KNOW WHEN CREDIT CARDS DON'T MAKE FINANCIAL SENSE

Credit cards certainly save you money on gas, but in some situations, paying with cash or debit card is better. Some gas stations offer discounts for paying in cash, which may be superior to your credit card's rewards rate on gas.

For example, say your local gas station offers a 20-cents-per-gallon discount for cash-paying customers. If you get 10 gallons of gas at $4 per gallon, you'll save $2 by paying with cash. That same fill-up paid with a credit card that earns 2% back on gas would result in only 80 cents of savings. Doing some quick math at the pump can put a few dollars back in your pocket.

And cash or debit is always going to be the smarter choice if you tend to carry a balance on your credit card. The average APR charged for credit card accounts that incurred interest was , according to the Federal Reserve. And rewards-earning cards tend to charge even higher rates than that. If you're carrying a balance at those rates, any rewards you might earn by paying with plastic would likely be overshadowed by the interest you'd rack up in just a single billing cycle.

NOTICE OF PUBLIC HEARING

WATERFORD TOWNSHIP'S PRELIMINARY 2026/2027 ACTION PLAN INTRODUCTION FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM

In accordance with the Housing and Community Development Act and related regulatory requirements, the Charter Township of Waterford will conduct a public hearing for all interested residents during the regularly scheduled meeting of the Waterford Township Board of Trustees on Monday, May 11, 2026, beginning at 6:00 p.m. in the Waterford Township Hall Auditorium, 5200 Civic Center Drive, Waterford, Michigan.

The purpose of the hearing, among other requirements, will be to finalize and adopt the proposed activities for the 2026/2027 CDBG Program Year (Waterford's 52nd CDBG Year) Annual Action Plan and to obtain citizens' views on housing and community development needs and program performance. Following the public hearing, the Township will submit the finalized Annual Action Plan to HUD.

The 2026/2027 CDBG Program Year, which is funded by the U.S. Department of Housing and Urban Development (HUD), will begin on July 1, 2026. Waterford Township's entitlement amount for the 2026/2027 CDBG Program Year is estimated to be $347,793. The Township also projects receiving approximately $20,000 in program income from Housing Rehabilitation Loan repayments during the 52nd Program Year and a Line of Credit balance of $40,000 bringing the total available funding to $414,512.

The draft application may be found on the Township's website at:
https://www.waterfordmi.gov/287/Community-Development
or can be viewed, in person, at the Township Library and Development Services Department counters.

The following activities are identified in the 2026/2027 CDBG Annual Action Plan, which will primarily benefit low- and moderate-income persons, are as follows:

(1) PROGRAM ADMINISTRATION - Providing for administrative, management, and fair housing costs necessary for CDBG program operation. These funds will be implemented directly through the Township. These funds are eligible in accordance with 24CFR570.206.

(2) HOUSING REHABILITATION - Township Wide - Providing minor home and emergency repair services to income-qualified single-family homeowners. For applicants who receive assistance, the amount is contingent upon three factors: the number of necessary improvement items determined by the Township and the availability of program funds. Applications are accepted on a first-come, first-served basis on an ongoing basis. The program will be implemented directly through the Township. This program is eligible in accordance with 24CFR570.202(b) and meets the national objective as described in 24CFR570.208(a)(3)

(3) CODE ENFORCEMENT - Township CDBG Target Areas - Payment of a portion of the costs necessary to enforce the Township's codes in the CDBG Target Areas. This project shall be implemented directly through the Township. This project is eligible in accordance with 24CFR570.202(c) and meets the national objective as described in 24CFR570.208(a)(1).

(4) SPECIAL ECONOMIC DEVELOPMENT ASSISTANCE - Financial and technical assistance to small business to support economic growth, job creation, and job training opportunities for low- and moderate-income individuals as permitted under 24CFR570.201(o) and 24CFR570.203.

PROJECT	PROPOSED BUDGET
(1) PROGRAM ADMINISTRATION	$70,900
(2) HOUSING REHABILITATION	$169,916
(3) CODE ENFORCEMENT AND BLIGHT REMEDIATION AND DEMOLITION	$173,693
TOTAL:	**$414,512**
(4) SPECIAL ECONOMIC DEVELOPMENT ASSISTANCE	$1,738,965*

NOTES:

*Economic development assistance is intended to be provided through the implementation of Section 108 loans up to five (5) times the annual allocation amount to eligible businesses and will not be addressed with the Township's annual allocation or program income.

DISPLACEMENT PLAN

The Charter Township of Waterford's proposed 52nd-Year CDBG Program does not include any projects that would result in displacement of low-and moderate-income persons. However, if displacement does occur due to a federally funded Community Development project, eligible displaced individuals (in accordance with 24CFR570.606(b), Section 104(d) of the Community Development Act, the Uniform Relocation Act, and the Township's CDBG Displacement Policy) will be provided with moving expenses and, where required, replacement housing financial and technical assistance. This will be accomplished by working closely with Realtors, the U.S. Department of Housing and Urban Development, and/or other appropriate agencies available to find suitable housing for those displaced.

Interested persons are encouraged to express their views at the public hearing or through written comments that will be accepted by mail to the Development Services Department, 5200 Civic Center Drive, Waterford, MI 48329. Persons requiring information in alternative formats should contact the Department at (248) 674-6238. All comments received by March 24, 2026, will be considered.

Members of the public will only be able to speak during the public comment period and at the end of the meeting and such comments will be limited to three minutes per person. To provide for orderly public participation, a person wishing to speak must first state their name and request to be recognized by the Chairperson of the meeting. The Chairperson will recognize all persons wishing to speak during the public comment period. Prior to the meeting, members of the public may contact the members of the Township Board to provide input or ask questions by email or mail to the Township employee/official and at the addresses listed below. Persons with disabilities in need of accommodations to be able to participate in the meeting should provide at least 24-hour advance notice to the listed Township employee by phone, email, or mail and an attempt will be made to provide reasonable accommodations.

Kim Markee, Township Clerk Charter Township of Waterford
5200 Civic Center Drive, Waterford, Michigan 48329
Phone (248) 674-6266 or Email: publiccomments@waterfordmi.gov

NOTICE OF PUBLIC HEARING

WATERFORD TOWNSHIP'S
NOTICE OF PUBLIC HEARING FOR A PROPOSED APPLICATION FOR A LOAN GUARANTEE FUND PROGRAM UNDER THE SECTION 108 LOAN GUARANTEE PROGRAM

FOR THE

DRAYTON PLAINS BUSINESS AND ECONOMIC DEVELOPMENT LOAN FUND PROGRAM

In accordance with the Housing and Community Development Act and related regulatory requirements, the Charter Township of Waterford will conduct a public hearing for all interested residents during the regularly scheduled meeting of the Waterford Township Board of Trustees on Monday, May 11, 2026, beginning at 6:00 p.m. in the Waterford Township Hall Auditorium, 5200 Civic Center Drive, Waterford, Michigan.

The purpose of the meeting is to finalize the proposed application for Drayton Plains Business and Economic Development Loan Fund Program application. Following the public hearing, the Township will submit the proposed application to HUD for approval.

The proposed loan program will utilize the Section 108 Loan Guarantee Program to provide advantageous financing options to stimulate economic development and small and mid-sized business support and growth within the Drayton Plains subarea of the Township, generally located at Dixie Highway and Frembes Road.

The draft application may be found on the Township's website at:
https://www.waterfordmi.gov/287/Community-Development
or can be viewed, in person, at the Township Library and Development Services Department counters

Additional information regarding the Section 108 Loan Guarantee program can be found at:
https://www.hud.gov/hud-partners/community-section108

The Township anticipates five times the annual CDBG allocation received, or approximately $1.73 million, in loans funds will be made available through this program in the form of small loans (up to $50,000) to large loans (up to $500,000). These loan funds will leverage the annual allocation to provide small and midsized business loans to companies seeking to operate or expand within the Drayton Plains Subarea to support economic development and business growth with a focus on supporting low and moderate income residents, workers, and business owners. At least 70% of all funds issued will be required to directly support low- and moderate-income individuals.

Funds loaned to business will be repaid by the organizations receiving the funds. In addition to collateral obtained, the Township's annual CDBG allocation may be leveraged to cover unpaid debt services.

Eligible activities are governed by 24CFR570.703 and are specified in the draft application but generally include:

- Acquire, fix-up, improve, or prepare property for use
- Build or improve public infrastructure (streets, utilities, facilities)
- Support economic and community development projects
- Provide technical support, and supply operational, and equipment costs
- Rehabilitate or build housing, including nonprofit homeownership housing
- Cover relocation and environmental cleanup costs
- Pay loan interest, reserves, and financing-related expenses
- Pay required HUD fees

DISPLACEMENT PLAN

The Charter Township of Waterford's proposed Loan Guaranty Program does not include any projects that would result in displacement of low- and moderate-income persons. However, if displacement does occur due to a federally funded Community Development project, eligible displaced individuals (in accordance with 24CFR570.606(b), Section 104(d) of the Community Development Act, the Uniform Relocation Act, and the Township's CDBG Displacement Policy) will be provided with moving expenses and, where required, replacement housing financial and technical assistance. This will be accomplished by working closely with Realtors, the U.S. Department of Housing and Urban Development, and/or other appropriate agencies available to find suitable housing for those displaced.

Interested persons are encouraged to express their views at the public hearing or through written comments that will be accepted by mail to the Development Services Department, 5200 Civic Center Drive, Waterford, MI 48329. Persons requiring information in alternative formats should contact the Department at (248) 674-6238. All comments received by March 24, 2026, will be considered.

Members of the public will only be able to speak during the public comment period and at the end of the meeting and such comments will be limited to three minutes per person. To provide for orderly public participation, a person wishing to speak must first state their name and request to be recognized by the Chairperson of the meeting. The Chairperson will recognize all persons wishing to speak during the public comment period. Prior to the meeting, members of the public may contact the members of the Township Board to provide input or ask questions by email or mail to the Township employee/official and at the addresses listed below. Persons with disabilities in need of accommodations to be able to participate in the meeting should provide at least 24-hour advance notice to the listed Township employee by phone, email, or mail and an attempt will be made to provide reasonable accommodations.

Kim Markee, Township Clerk Charter Township of Waterford 5200 Civic Center Drive, Waterford, Michigan 48329 Phone (248) 674-6266 or Email: publiccomments@waterfordmi.gov

NOTICE OF PUBLIC HEARING

BIRMINGHAM PLANNING BOARD

SPECIAL LAND USE PERMIT – FINAL SITE PLAN & DESIGN REVIEW

Meeting Date, Time, Location:	Monday, May 4, 2026 at 7:00 PM Municipal Building, 151 Martin Birmingham, MI 48009
Location of Request:	**126 S. Old Woodward – Snap Taco**
Nature of Hearing:	Consider the Special Land Use Permit, Final Site Plan & Design Review application for 126 S. Old Woodward, Snap Taco
City Staff Contact:	Nick Dupuis, Planning Director, 248 530 1856 ndupuis@bhamgov.org
Notice Requirements:	Mailed to all property owners and occupants within 300 feet. Published 04/19/2026
Approved minutes may be viewed at:	City Clerk's Office or online at bhamgov.org/commission

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760** Meeting ID: **655 079 760**
You may also present your written statement to the City Commission, City of Birmingham, 151 Martin Street, P.O. Box 3001, Birmingham, Michigan 48012-3001 prior to the hearing.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at (248) 530-1880 (voice) or (248) 644-3405 (TDD) at least one day in advance to request to request mobility, visual, hearing or other assistance.

NOTICE OF PUBLIC HEARING

BIRMINGHAM CITY COMMISSION

PUBLIC HEARING OF NECESSITY & PUBLIC HEARING FOR CONFIRMATION OF THE ROLL

Meeting Date, Time, Location:	HEARING OF NECESSITY FOR SPECIAL ASSESSMENT DISTRICT Monday, May 4, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, May 18, 2026 7:00 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton Drive from Oxford Road to Adams Road. Below are the assessed addresses; 1054 Abby, 1064 Abby, 1074 Abby, 1084 Abby, 901 Adams, 911 Adams 871 Poppleton, 921 Poppleton, 928 Poppleton, 939 Poppleton, 931 Adams, 941 Adams 951 Adams, 961 Adams, 971 Adams, 1001 Adams, 1013 Adams, 1025 Adams 1037 Adams, 1049 Adams, 1051 Adams, 1063 Adams, 1075 Adams, 1087 Adams 921 Warwick, 541 Wimbleton, 554 Wimbleton, 612 Wimbleton, 625 Wimbleton, 636 Wimbleton 647 Wimbleton, 652 Wimbleton, 669 Wimbleton, 680 Wimbleton, 700 Wimbleton, 701 Wimbleton 715 Wimbleton, 733 Wimbleton, 777 Wimbleton, 812 Wimbleton, 824 Wimbleton, 840 Wimbleton 868 Wimbleton, 887 Wimbleton, 900 Wimbleton, 923 Wimbleton, 930 Wimbleton, 980 Wimbleton 983 Wimbleton, 1004 Wimbleton, 1005 Wimbleton, 1038 Wimbleton, 1050 Wimbleton, 1055 Wimbleton 1060 Wimbleton, 1064 Wimbleton, 1065 Wimbleton, 1070 Wimbleton, 1072 Wimbleton, 1075 Wimbleton 1076 Wimbleton, 1078 Wimbleton, 1085 Wimbleton
Nature of Improvement:	This work will include the installation of cape seal treatment for all properties within the project area on Wimbleton Drive from Oxford Road to Adams Road
City Staff Contact:	Melissa Coatta, City Engineer mcoatta@bhamgov.org, (248)530-1839
Notice Requirements:	Newspaper Notice and First Class Mail to affected property owners 10 days prior. Publish 4/19/2026 & 05/03/2026
Approved minutes may be reviewed at:	City Clerk's Office or www.bhamgov.org/commissionagendas

Should you have any statement regarding the above, you are invited to attend the meeting in person or virtually through ZOOM: **https://zoom.us/j/655079760 Meeting ID: 655 079 760**

You or your agent may appear at the hearings to express your views; however, if you fail to protest either in person or by letter received on or before the date of the hearing, you cannot appeal the amount of the special assessment to the Michigan Tax Tribunal. Mail any correspondence to: City Clerk, P.O. Box 3001, Birmingham, MI 48012. The property owner may file a written appeal of the special assessment with the State Tax Tribunal within 30 days after the confirmation of the special assessment roll if that special assessment was protested at the hearing held for the purpose of confirming the roll.
All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.

Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk's Office at 248.530.1880 (voice) or 248.644.3405 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

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Wimbleton Drive Phase Two Project

Hearing of Necessity for Paving Special Assessment District (SAD)

Engineering Department

Date: May 4, 2026

Wimbleton Drive Phase Two Project
Paving Special Assessment District

➢Overview

- Limits of Wimbleton Drive Phase 2 Project are Wimbleton Drive from Oxford Road to Adams Road.
- Project includes:
  - New Water Main
  - Sewer Improvements
  - Installation of cape seal treatment
- Special Assessment District (SAD) for Paving:
  - Roadway with cape seal treatment and driveway approaches

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

➢General Information: Road

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Understanding Improved and Unimproved Roads

Improved Road

Improved Road – An improved road is a road with curb and gutters which has a surface of concrete or asphalt.

Benefits:
- It is professionally engineered and constructed as a durable roadway.
- Provides for adequate drainage from the roadway.
- Once improved, an improved road is maintained by the City for any future road repairs.
- Improved streets with curbs are provided routine street sweeping and leaf pick-up each Fall, which allows residents to rake their leaves into the street at the curb.
- The average life span is 20 to 30 years.

Disadvantages:
- Initial one time higher cost for installation.

Unimproved Road

Unimproved Road – An unimproved road is a gravel road with or without curbs that has been treated with cape seal to provide a relatively smooth and dust free driving surface.

Benefits:
- Enhances rural neighborhood characteristics.

Disadvantages:
- The roadway is not professionally engineered and does not have a durable foundation.
- Unimproved roads without curbs do not provide adequate drainage from the roadway.
- Unimproved roads without curbs do not receive street sweeping and must bag their leaves.
- The average life span is 7 to 10 years and the need for repairs is more frequent.
- The cost for road repair and replacement is the responsibility of the homeowners on the street.

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- General Information: Road


Improved Road


Unimproved Road

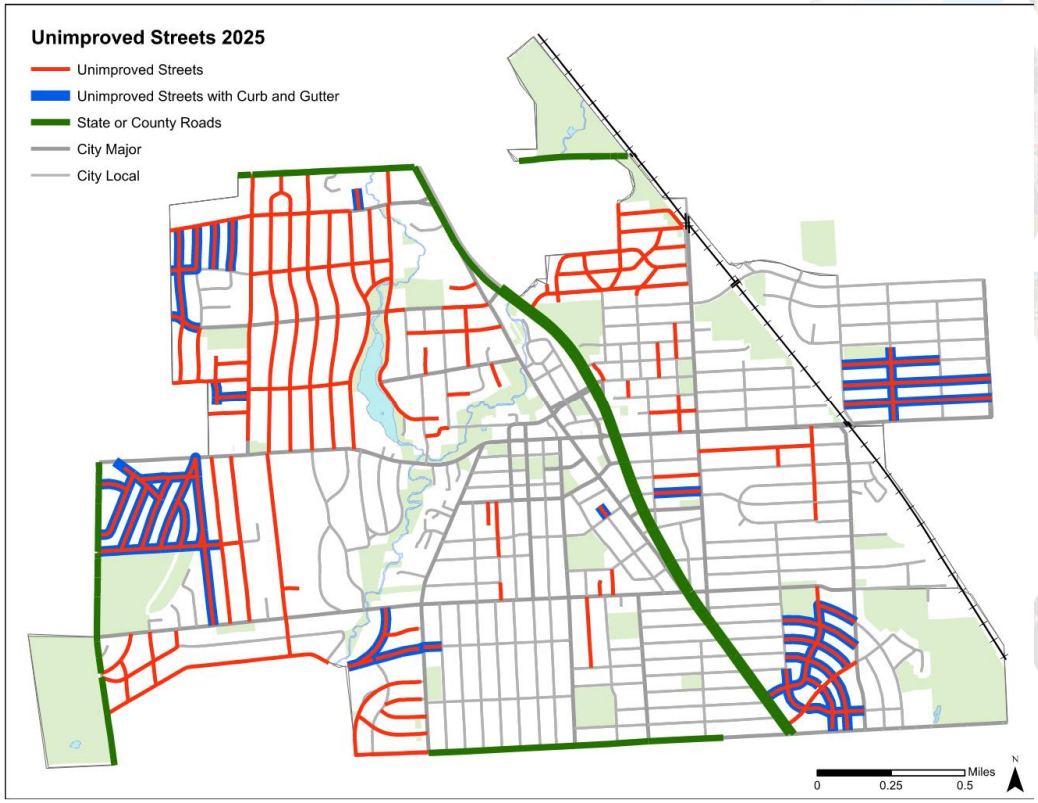

Unimproved Road with Curbs


Unimproved Road with Gutter

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- General Information: Road



City of Birmingham's 2025 Unimproved Roads Map

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

➢General Information: Road

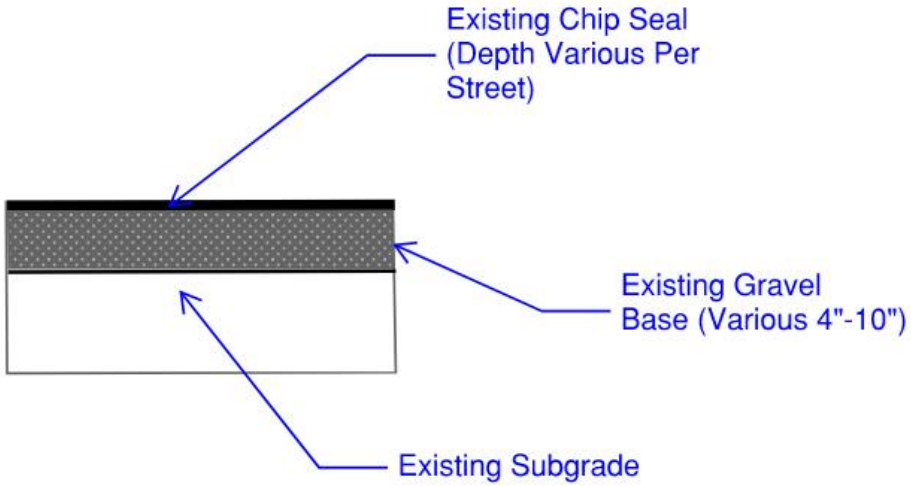
Unimproved Roads

- The City's unimproved roads are gravel roads, with or without curbs and gutters, that have been maintained with a chip or cape seal treatment to provide a relatively smooth driving surface.
  - Cape sealed roads appear similar to asphalt.
  - Cape seal is a "crust topping" on gravel roads that reduces dust, and inhibits moisture penetration for rutting.
  - Some of the City's unimproved roads have catch basins and storm sewers and some do not.
- History:
  - In the 1930's when many subdivisions were developed, local streets were built as gravel roads.
  - Streets were constructed with engineered pavement and drainage only when majority of the residents petitioned the City for the improvement, and the costs were paid through a Special Assessment District (SAD) on adjacent properties.
  - Neighborhoods that opted to retain gravel roads initially coordinated and assessed for maintenance through their respective neighborhood association. Later, the City began initiation, coordination, and assessing the maintenance on behalf of the property owners.

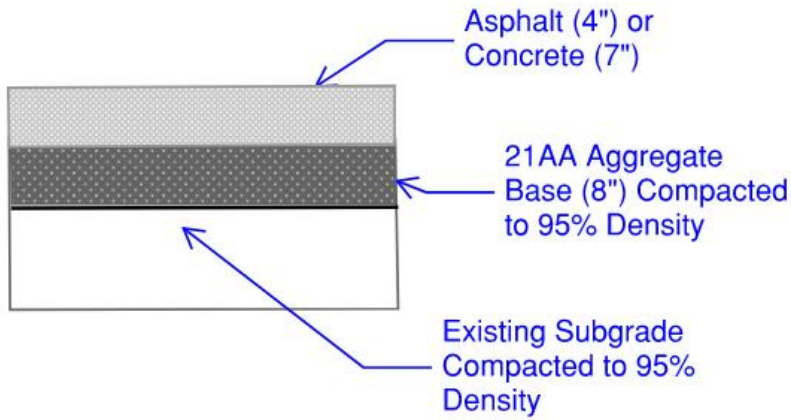
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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- General Information: Road



Unimproved Road Cross Section



Improved Road Cross Section

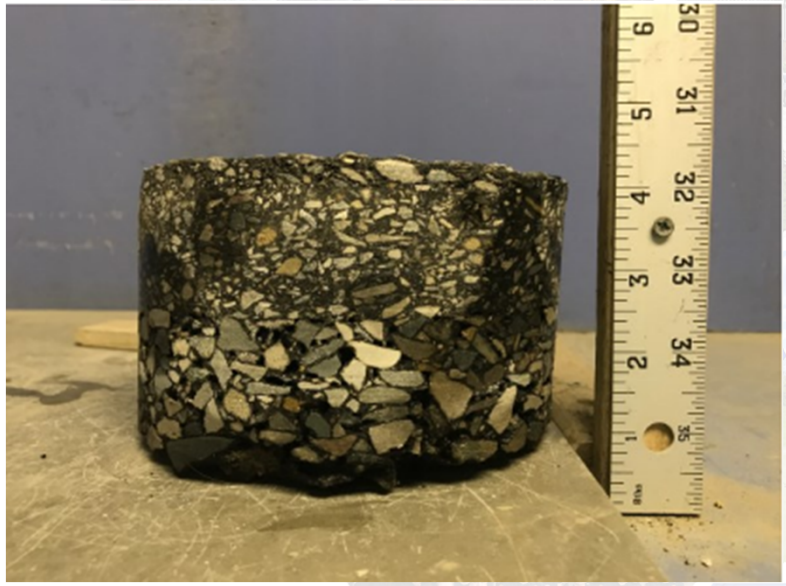
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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- General Information: Road



Cape Seal Cross Section (on gravel road)



Asphalt Cross Section (on aggregate base)

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- General Construction Information: Road
  - Last Cape Seal Treatments:
    - Wimbleton Drive in 2019
  - Previous SAD's:
    - Wimbleton Drive: 1987 (SAD 723 – Cape Seal), 1980 (SAD 686 – Cape Seal), 1975 (SAD 656 – Road Oil), 1972 (SAD 644 – Road Oil)

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- Policy
  - Maintenance on Unimproved Roads
    - First Special Assessment District for "dustproofing": 1948
    - 85% of short-foot costs for all property fronting the improvement;
    - 25% of long-foot costs for all residential property siding the improvement;
    - 85% of long-foot costs for all improved business property siding the improvement and;
    - 25% of long-foot costs for all unimproved business property siding the improvement.

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- Paving Costs:
  - 85% of short-foot costs for all property fronting the improvement;
  - 25% of long-foot costs for all residential property siding the improvement;
- Approach Costs:
  - 100% of costs paid by adjacent property owner

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Wimbleton Drive Phase Two Project
Paving Special Assessment District

- SAD:
  - Received bids for project on April 9, 2026
  - Paving costs: $113.01 per front footage
  - Approach costs:
    - Removing and salvaging brick pavers: $3.90 per square foot
    - Remove concrete approach and install concrete approach: $66.47 per square yard
    - Remove asphalt approach and install concrete approach: $65.31 per square yard

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Wimbleton Drive Phase Two Project
Paving Special Assessment District



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Paving SAD Project Limits

Wimbleton Drive Phase Two Project
Paving Special Assessment District



Paving SAD Project Limits

Wimbleton Drive Phase Two Project
Paving Special Assessment District



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Paving SAD Project Limits

Wimbleton Drive Phase Two Project
Paving Special Assessment District

➢PROPERTIES LOCATED IN PAVING SAD:

Sidwell Number	Street Address
1925255007	541 WIMBLETON DR
1925255008	921 WARWICK DR
1925280008	625 WIMBLETON DR
1925280009	647 WIMBLETON DR
1925280010	669 WIMBLETON DR
1925280025	701 WIMBLETON DR
1925280026	715 WIMBLETON DR
1925280027	733 WIMBLETON DR
1925280028	777 WIMBLETON DR
1925280029	921 POPPLETON AVE
1925280030	939 POPPLETON AVE
1925281005	928 POPPLETON AVE
1925281010	887 WIMBLETON DR
1925281033	923 WIMBLETON DR
1925281040	983 WIMBLETON DR
1925281041	1005 WIMBLETON DR

Sidwell Number	Street Address
1925281031	1054 ABBEY RD
1925281030	1064 ABBEY RD
1925281029	1074 ABBEY RD
1925281028	1084 ABBEY RD
1925281027	971 N ADAMS RD
1925281026	961 N ADAMS RD
1925281025	951 N ADAMS RD
1925281024	941 N ADAMS RD UNIT 9
1925281023	931 N ADAMS RD
1925281022	921 N ADAMS RD
1925281021	911 N ADAMS RD
1925281020	901 N ADAMS RD
1925281019	1085 WIMBLETON DR
1925281018	1075 WIMBLETON DR
1925281017	1065 WIMBLETON DR
1925281016	1055 WIMBLETON DR

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Paving SAD

Wimbleton Drive Phase Two Project
Paving Special Assessment District

➢PROPERTIES LOCATED IN PAVING SAD:

Sidwell Number	Street Address
1925282017	1078 WIMBLETON DR
1925282023	1050 WIMBLETON DR
1925282022	1060 WIMBLETON DR
1925282021	1064 WIMBLETON DR
1925282020	1070 WIMBLETON DR
1925282019	1072 WIMBLETON DR
1925282018	1076 WIMBLETON DR

Sidwell Number	Street Address
1925258002	554 WIMBLETON DR
1925258003	612 WIMBLETON DR
1925258004	636 WIMBLETON DR
1925258005	652 WIMBLETON DR
1925258006	680 WIMBLETON DR
1925258007	700 WIMBLETON DR
1925258008	871 POPPLETON AVE
1925282001	812 WIMBLETON DR
1925282002	824 WIMBLETON DR
1925282003	840 WIMBLETON DR
1925282004	868 WIMBLETON DR
1925282015	886 WIMBLETON DR
1925282008	900 WIMBLETON DR
1925282024	930 WIMBLETON DR
1925282025	980 WIMBLETON DR
1925282012	1004 WIMBLETON DR
1925282013	1038 WIMBLETON DR

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Paving SAD

Wimbleton Drive Phase Two Project Assessment District

➢Summary

- The Engineering Department recommends the City Commission declare a necessity and approve the SAD for Wimbleton Drive Phase Two Project for paving
- Should the Commission approve the SAD, a public hearing for confirmation of the roll will be held on May 18, 2026

BIRMINGHAM
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MEMORANDUM

Engineering Department

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: Wimbleton Phase 2 Project
Contract #6-26 (W) Contract Award

INTRODUCTION:
The City received and opened bids for the Wimbleton Phase 2 Project Contract #6-26 (W). Seven (7) bids were received for consideration. Following the evaluation of the bids, the Engineering Department recommends awarding this contract to Anglin Civil.

BACKGROUND:
The Wimbleton Phase 2 Project includes utility improvements on Wimbleton Drive from Oxford Street to Adams Road. The proposed infrastructure improvements were reviewed by the City Commission at the October 27, 2025 (Agenda – Video), and May 4, 2026 (Agenda – Video), City Commission meetings.

The existing 6-inch water main on Wimbleton Drive was originally installed in 1925. It will be replaced with a new 12-inch water main. Wimbleton Drive is currently served by a combined sewer system ranging from 8 to 12 inches in diameter that was originally installed in 1925 and 1926. As part of this project, the City will replace the existing sanitary sewer and install a new storm sewer to extend the relief sewer constructed during Phase 1. This improvement will separate a portion of the stormwater runoff in the area and connect it to Wimbleton Phase 1 storm sewer that drains directly into the Rouge River, located north of Wimbleton Drive and east of Woodward Avenue.

The Engineering Department opened bids on April 9, 2026, and received seven (7) bids, as listed in the attached summary. The lowest bid was from Anglin Civil for $2,502,731.16. Anglin Civil has not recently completed work in the City of Birmingham, but Nowak & Fraus Engineers have worked with the contractors on projects in other cities and provided favorable references.

As is required for all City construction projects, Anglin Civil has submitted a 5% bid security, which will be forfeited if they do not provide signed contracts, bonds, and the insurance required by the contract.

LEGAL REVIEW:
The City Attorney reviewed and approved the standard RFP and contract language used for bidding this project. The City Attorney has no objections to the suggested Commission action.

FISCAL IMPACT:
The total construction cost for the project is estimated to be $2,753,004.28 which includes Anglin Civil's bid amount of $2,502,731.16 and a 10% construction contingency. The project award will be funded by the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Major Street Fund	202.0-449.001-981.0100	$542,627.26	$54,262.73	$596,889.99
Sewer Fund	590.0-537.000-981.0100	$1,225,674.38	$122,567.44	$1,348,241.82
Water Fund	591.0-544.000-981.0100	$734,429.52	$73,442.95	$807,872.47

Enclosed is the recommendation letter from Nowak & Fraus which includes bid pricing for similar construction items in other communities.

SUSTAINABILITY:
This project will install a portion of a separated storm sewer that will drain to the Rouge River. The sewer and water laterals will also be replaced prior to the new road placement, which will protect the new road during future construction projects that would typically require sewer and water lateral replacement.

DESIGN CONSIDERATIONS:
On October 27, 2025, the City Commission passed a resolution to design Wimbleton Phase 2 with cape seal treatment on the roadway. ADA requirements are also incorporated into the project.

PUBLIC COMMUNICATIONS:
Property owners received notification during the sewer and water lateral and paving special assessment district process. A property owners meeting was held on April 29, 2026, and communication methods for property owners in the project area will be included in the general project announcement.

SUMMARY:
The Engineering Department recommends the Wimbleton Phase 2 Project Contract #6-26 (W) be awarded to Anglin Civil.

ATTACHMENTS:
1. Project Area Map
2. Bid Summary
3. Nowak and Fraus Recommendation Letter
4. Plans
5. Contract Book

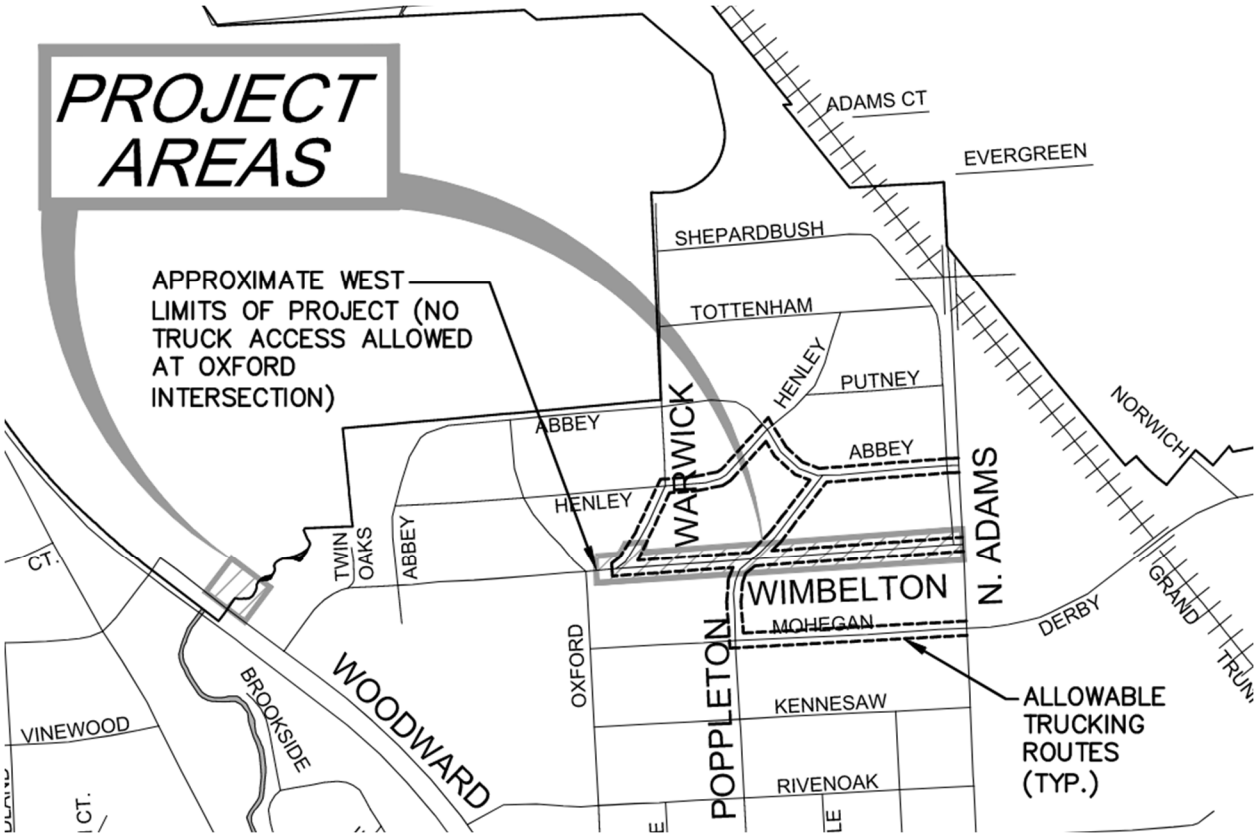
6. Right of Way Tree Information
7. Wimbleton Intersection Evaluation

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to award the Wimbleton Phase 2 Project Contract #6-26 (W) to Anglin Civil in the amount of $2,502,731.16.50 plus a 10% construction contingency for a total of $2,753,004.28. In addition, to authorize the Mayor and Clerk to sign the agreement on behalf of the City contingent upon execution of the agreement and meeting all insurance and bond requirements by Anglin Civil.

AND

To authorize the installation of a stop sign on southbound Warwick Street at Wimbleton Street.

Wimbleton Phase 2 Project Area



BID TABULATION
CITY OF BIRMINGHAM
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-226(W)

Bids Due: April 9, 2026

Item	Quantity	Unit	**Anglin Civil** 13000 Newburgh Rd Livonia, MI 48150		**CI Contracting, Inc.** 7135 Dan McGuire Drive, Suite B Brighton, MI 48116		**HMC, LLC** 297 Elmwood Drive Troy, MI 48083		
			Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	
DIVISION 1: SEWER PAY ITMES									
1. 15" Combined Sewer, PVC PS 115, Trench A	471	LF	$ 123.49	$ 58,163.79	$ 190.50	$ 89,725.50	$ 165.00	$ 77,715.00	
2. 12" Combined Sewer, PVC SDR 26, Trench A	830	LF	$ 93.92	$ 77,953.60	$ 192.50	$ 159,775.00	$ 125.00	$ 103,750.00	
3. 36" Storm Sewer C76, CL-Iv, Trench A	681	LF	$ 207.81	$ 141,518.61	$ 193.50	$ 131,773.50	$ 350.00	$ 238,350.00	
4. 30" Storm Sewer C76, CL-Iv, Trench A	100	LF	$ 143.10	$ 14,310.00	$ 256.00	$ 25,600.00	$ 325.00	$ 32,500.00	
5. 21" Storm Sewer C76, CL-IV, Trench A	345	LF	$ 183.16	$ 63,190.20	$ 193.00	$ 66,585.00	$ 185.00	$ 63,825.00	*
6. 18" Storm Sewer C76, CL-IV, Trench A	88	LF	$ 151.29	$ 13,313.52	$ 108.00	$ 9,504.00	$ 135.00	$ 11,880.00	
7. 12" Storm Sewer C76, CL-IV, Trench A	794	LF	$ 78.47	$ 62,305.18	$ 150.00	$ 119,100.00	$ 90.00	$ 71,460.00	
8. Sewer Service, 6" PVC Sdr 23.5	1,157	LF	$ 49.77	$ 57,583.89	$ 98.50	$ 113,964.50	$ 150.00	$ 173,550.00	
9. 6" Perforated Pipe Underdrain (No Sock)	450	LF	$ 26.65	$ 11,992.50	$ 15.00	$ 6,750.00	$ 22.00	$ 9,900.00	
10. New 4'-0" Diameter Combined Manhole	6	EA	$ 4,241.29	$ 25,447.74	$ 4,423.50	$ 26,541.00	$ 6,500.00	$ 39,000.00	
11. New 6'-0" Diameter Storm Manhole	6	EA	$ 9,039.93	$ 54,239.58	$ 11,198.50	$ 67,191.00	$ 13,000.00	$ 78,000.00	
12. New 5'-0" Diameter Storm Manhole	2	EA	$ 4,645.28	$ 9,290.56	$ 5,951.50	$ 11,903.00	$ 7,500.00	$ 15,000.00	*
13. New 4'-0" Diameter Storm Manhole	2	EA	$ 2,579.36	$ 5,158.72	$ 5,083.00	$ 10,166.00	$ 5,000.00	$ 10,000.00	
14. New 4'-0" Diamtere Storm Catch Basin w/4' sump & Sed. Trap	9	EA	$ 2,933.87	$ 26,404.83	$ 5,541.50	$ 49,873.50	$ 6,000.00	$ 54,000.00	
15. New 2'-0" Diameter Inlet	8	EA	$ 1,652.92	$ 13,223.36	$ 2,995.50	$ 23,964.00	$ 4,000.00	$ 32,000.00	
16. Sewer Investigation, Laterals	16	EA	$ 650.00	$ 10,400.00	$ 900.00	$ 14,400.00	$ 650.00	$ 10,400.00	
17. Sewer Service Tap, 6"	37	EA	$ 209.90	$ 7,766.30	$ 1,932.00	$ 71,484.00	$ 950.00	$ 35,150.00	
18. Sewer Tap, Combined, 15"	2	EA	$ 691.20	$ 1,382.40	$ 3,525.50	$ 7,051.00	$ 1,500.00	$ 3,000.00	
19. Sewer Tap, Storm, 10"	1	EA	$ 377.40	$ 377.40	$ 3,525.50	$ 3,525.50	$ 1,150.00	$ 1,150.00	
20. Sewer Stub w/ Capped End, Storm, 30"	1	EA	$ 850.20	$ 850.20	$ 1,268.00	$ 1,268.00	$ 700.00	$ 700.00	
21. Sewer Stub w/ Capped End, Storm, 18"	1	EA	$ 478.10	$ 478.10	$ 857.00	$ 857.00	$ 700.00	$ 700.00	
22. Sewer Stub w/ Capped End, Storm, 12"	1	EA	$ 425.10	$ 425.10	$ 637.00	$ 637.00	$ 700.00	$ 700.00	
23. Reconstruct Manhole (if and where needed)	10	VF	$ 398.60	$ 3,986.00	$ 476.50	$ 4,765.00	$ 300.00	$ 3,000.00	
24. Remove & Replace Structure Cover (as directed by City)	2	EA	$ 1,290.10	$ 2,580.20	$ 1,220.50	$ 2,441.00	$ 750.00	$ 1,500.00	
25. Remove Ex. Sewer Manhole	5	EA	$ 1,103.00	$ 5,515.00	$ 674.50	$ 3,372.50	$ 700.00	$ 3,500.00	
26. Remove Ex. Drainage Structure	4	EA	$ 464.30	$ 1,857.20	$ 674.50	$ 2,698.00	$ 600.00	$ 2,400.00	
27. Abandon Ex. 15" Combined Sewer	45	LF	$ 21.57	$ 970.65	$ 69.50	$ 3,127.50	$ 20.00	$ 900.00	
28. Abandon Ex. 12" Combined Sewer	706	LF	$ 8.07	$ 5,697.42	$ 51.00	$ 36,006.00	$ 15.00	$ 10,590.00	
29. Abandon Ex. 8" Combined Sewer	483	LF	$ 5.23	$ 2,526.09	$ 46.50	$ 22,459.50	$ 16.00	$ 7,728.00	
30. Remove Ex. 18" Combined Sewer	10	LF	$ 222.50	$ 2,225.00	$ 12.00	$ 120.00	$ 55.00	$ 550.00	
31. Remove Ex. 10" Storm Sewer	127	LF	$ 85.81	$ 10,897.87	$ 12.00	$ 1,524.00	$ 13.00	$ 1,651.00	
32. Bulkhead Structure, 18"	1	EA	$ 372.10	$ 372.10	$ 266.00	$ 266.00	$ 550.00	$ 550.00	
33. Bulkhead Structure, 12" or less	2	EA	$ 356.20	$ 712.40	$ 266.00	$ 532.00	$ 250.00	$ 500.00	
34. Bulkhead Pipe, Larger than 8"	10	EA	$ 451.60	$ 4,516.00	$ 266.00	$ 2,660.00	$ 200.00	$ 2,000.00	
35. CCTV Sewer Acceptance Inspection	1	LS	$ 7,000.00	$ 7,000.00	$ 5,000.00	$ 5,000.00	$ 22,000.00	$ 22,000.00	

BID TABULATION
CITY OF BIRMINGHAM
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-226(W)

Bids Due: April 9, 2026

Item	Quantity	Unit		**Anglin Civil** 13000 Newburgh Rd Livonia, MI 48150		**CI Contracting, Inc.** 7135 Dan McGuire Drive, Suite B Brighton, MI 48116		**HMC, LLC** 297 Elmwood Drive Troy, MI 48083	
			Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	
SUBTOTAL DIVISION 1: SEWER PAY ITEMS				**$ 704,631.51**		**$ 1,096,610.00**		**$ 1,119,599.00**	*
DIVISION 2: WATER MAIN PAY ITEMS									
36. Remove Hydrant	2	EA	$ 1,170.60	$ 2,341.20	$ 151.00	$ 302.00	$ 500.00	$ 1,000.00	
37. Remove Gate Valve Well	1	EA	$ 1,339.41	$ 1,339.41	$ 225.00	$ 225.00	$ 500.00	$ 500.00	
38. Retrofit Ex. Gate Well w/ 12" Gate Valve	1	EA	$ 5,461.60	$ 5,461.60	$ 10,113.50	$ 10,113.50	$ 5,500.00	$ 5,500.00	
39. 12" Gate Valve & Well	5	EA	$ 10,803.98	$ 54,019.90	$ 8,377.00	$ 41,885.00	$ 9,000.00	$ 45,000.00	
40. 8" Gate Valve & Well	3	EA	$ 7,634.93	$ 22,904.79	$ 7,478.00	$ 22,434.00	$ 7,000.00	$ 21,000.00	
41. Fire Hydrant Assembly, Complete	4	EA	$ 7,351.00	$ 29,404.00	$ 7,228.50	$ 28,914.00	$ 8,500.00	$ 34,000.00	
42. 12" D.I. CL 52 Water Main w/ Polywrap, Trench A	1,476	LF	$ 177.87	$ 262,536.12	$ 179.50	$ 264,942.00	$ 175.00	$ 258,300.00	
43. 8" D.I. CL 52 Water Main w/ Polywrap, Trench A	272	LF	$ 118.59	$ 32,256.48	$ 117.50	$ 31,960.00	$ 150.00	$ 40,800.00	
44. 6" D.I. CL 52 Water Main w/ Polywrap, Trench A	32	LF	$ 194.75	$ 6,232.00	$ 108.00	$ 3,456.00	$ 100.00	$ 3,200.00	
45. 12" Water Main Connection to Ex. 12" Water Main	2	EA	$ 6,786.61	$ 13,573.22	$ 4,808.00	$ 9,616.00	$ 6,500.00	$ 13,000.00	
46. 8" Water Main Connection to Ex. 4" Wate Main	2	EA	$ 7,175.63	$ 14,351.26	$ 2,016.50	$ 4,033.00	$ 5,500.00	$ 11,000.00	
47. New Water Service, 1", Trench A, Copper	317	LF	$ 35.54	$ 11,266.18	$ 79.50	$ 25,201.50	$ 70.00	$ 22,190.00	
48. New Water Service, 1.5", Trench A, Copper	36	LF	$ 59.03	$ 2,125.08	$ 111.50	$ 4,014.00	$ 115.00	$ 4,140.00	
49. New Water Service, 1", Private Property (BORE), PEX	45	LF	$ 165.93	$ 7,466.85	$ 86.50	$ 3,892.50	$ 95.00	$ 4,275.00	
50. Water Service Connection, 1.5"	2	EA	$ 903.30	$ 1,806.60	$ 1,176.50	$ 2,353.00	$ 1,150.00	$ 2,300.00	
51. Water Service Connection, 1"	24	EA	$ 474.00	$ 11,376.00	$ 1,042.50	$ 25,020.00	$ 750.00	$ 18,000.00	
52. Water Service Connection, 1", Connection at Meter, 871 Poppleton	1	EA	$ 1,763.40	$ 1,763.40	$ 2,013.50	$ 2,013.50	$ 1,000.00	$ 1,000.00	
53. Install Curb Stop & Box, 1"	7	EA	$ 697.66	$ 4,883.62	$ 734.00	$ 5,138.00	$ 350.00	$ 2,450.00	
54. Hydra-Stop, Insta-Valve 250, 6"	1	EA	$ 9,544.18	$ 9,544.18	$ 10,066.50	$ 10,066.50	$ 8,000.00	$ 8,000.00	
55. Hydra-Stop, Line-Stop, 6"	2	EA	$ 5,654.59	$ 11,309.18	$ 6,892.00	$ 13,784.00	$ 5,250.00	$ 10,500.00	
56. Hydra-Stop, Line-Stop, 4"	2	EA	$ 5,294.59	$ 10,589.18	$ 4,750.50	$ 9,501.00	$ 4,875.00	$ 9,750.00	
57. Abandon Existing Water Mains, Entire Project	1	LS	$ 110,110.34	$ 110,110.34	$ 9,458.50	$ 9,458.50	$ 15,000.00	$ 15,000.00	
SUBTOTAL DIVISION 2: WATER MAIN PAY ITEMS				**$ 626,660.59**		**$ 528,323.00**		**$ 530,905.00**	
DIVISION 3: PAVING PAY ITEMS									
58. Earth Excavation	2,090	CY	$ 27.32	$ 57,098.80	$ 27.50	$ 57,475.00	$ 28.00	$ 58,520.00	
59. Subgrade Undercutting, 21AA Limeston	200	CY	$ 87.17	$ 17,434.00	$ 111.00	$ 22,200.00	$ 85.00	$ 17,000.00	
60. Subgrade Undercutting, 1"x3" Limestone	200	CY	$ 89.56	$ 17,912.00	$ 113.00	$ 22,600.00	$ 80.00	$ 16,000.00	
61. Subgrade Geogrid Fabric, Tensar Triax TXC130S	1,250	SY	$ 2.95	$ 3,687.50	$ 3.50	$ 4,375.00	$ 3.50	$ 4,375.00	
62. Removing and Salvaging Brick Pavers	225	SF	$ 3.90	$ 877.50	$ 51.00	$ 11,475.00	$ 2.50	$ 562.50	
63. Removing Concrete Drive Approach	425	SY	$ 10.47	$ 4,449.75	$ 18.00	$ 7,650.00	$ 11.50	$ 4,887.50	

BID TABULATION
CITY OF BIRMINGHAM
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-226(W)

Bids Due: April 9, 2026

	Item	Quantity	Unit	**Anglin Civil** 13000 Newburgh Rd Livonia, MI 48150 Unit Price	Total Cost	**CI Contracting, Inc.** 7135 Dan McGuire Drive, Suite B Brighton, MI 48116 Unit Price	Total Cost	**HMC, LLC** 297 Elmwood Drive Troy, MI 48083 Unit Price	Total Cost
64.	Removing Asphalt Drive Approach	260	SY	$ 9.31	$ 2,420.60	$ 20.00	$ 5,200.00	$ 12.50	$ 3,250.00
65.	Removing Concrete Sidewalk & Ramp (sawcutting included)	195	SY	$ 16.76	$ 3,268.20	$ 19.50	$ 3,802.50	$ 7.50	$ 1,462.50
66.	Pulverize, Remove, Stockpile, Replace, and Re-Shape Existing Bituminous Pavement	6,220	SY	$ 12.46	$ 77,501.20	$ 5.50	$ 34,210.00	$ 26.00	$ 161,720.00
67.	Aggregate Base, MDOT 21AA Limestone, 4"	6,630	SY	$ 7.49	$ 49,658.70	$ 7.00	$ 46,410.00	$ 9.50	$ 62,985.00
68.	Capeseal Surface	6,386	SY	$ 15.50	$ 98,983.00	$ 15.50	$ 98,983.00	$ 16.50	$ 105,369.00
69.	Bituminous Mixture No. 4EML (Handpatching)	3	TON	$ 299.76	$ 899.28	$ 460.00	$ 1,380.00	$ 550.00	$ 1,650.00
70.	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	20	LF	$ 50.00	$ 1,000.00	$ 56.00	$ 1,120.00	$ 44.00	$ 880.00
71.	Concrete Drive Approach, 6" Thick on 6" 21AA Limestone	715	SY	$ 56.00	$ 40,040.00	$ 79.50	$ 56,842.50	$ 90.00	$ 64,350.00
72.	Concrete Sidewalk, 6" (Includes Ramps)	765	SF	$ 8.00	$ 6,120.00	$ 12.50	$ 9,562.50	$ 17.00	$ 13,005.00
73.	Concrete Sidewalk, 4"	865	SF	$ 6.00	$ 5,190.00	$ 11.00	$ 9,515.00 *	$ 10.50	$ 9,082.50
74.	Handicap Ramp Truncated Domes	110	SF	$ 60.00	$ 6,600.00	$ 60.50	$ 6,655.00	$ 137.50	$ 15,125.00
75.	Adjust Structure Cover	2	EA	$ 850.20	$ 1,700.40	$ 551.00	$ 1,102.00	$ 500.00	$ 1,000.00
76.	Maintenance Aggregate fro Entire Project	1	LS	$ 11,543.66	$ 11,543.66	$ 10,970.00	$ 10,970.00	$ 25,000.00	$ 25,000.00
	SUBTOTAL DIVISION 3: PAVING PAY ITEMS				**$ 406,384.59**		**$ 411,527.50** *		**$ 566,224.00**
	DIVISION 4: GENERAL PAY ITEMS								
77.	Mobilization (Max. 5% of Bid)	1	LS	$ 99,818.70	$ 99,818.70	$ 50,000.00	$ 50,000.00	$ 125,000.00	$ 125,000.00
78.	Traffic Maintenance & Control	1	LS	$ 121,577.40	$ 121,577.40	$ 55,985.50	$ 55,985.50	$ 10,925.00	$ 10,925.00
79.	Inspector Crew Days	$650.00	DAY	88	$ 57,200.00	60	$ 39,000.00	120	$ 78,000.00
80.	Water and Sewer Allowance	1	LS	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00
81.	Audio-Video Route Survey	1	LS	$ 985.00	$ 985.00	$ 1,880.00	$ 1,880.00	$ 1,083.50	$ 1,083.50
82.	Salvage Existing Signs	1	LS	$ 15,780.00	$ 15,780.00	$ 500.00	$ 500.00	$ 2,200.00	$ 2,200.00
83.	New Signs	80	SF	$ 21.00	$ 1,680.00	$ 25.00	$ 2,000.00	$ 23.00	$ 1,840.00
84.	Sign Post, U-Channel	240	LF	$ 9.00	$ 2,160.00	$ 12.00	$ 2,880.00	$ 10.00	$ 2,400.00
85.	Tree Protection, 3" Dia. Or Greater	55	EA	$ 120.92	$ 6,650.60	$ 342.50	$ 18,837.50	$ 150.00	$ 8,250.00
86.	Mulch, 3"	225	SY	$ 6.67	$ 1,500.75	$ 15.00	$ 3,375.00	$ 10.00	$ 2,250.00
87.	Topsoil, 3"	3,640	SY	$ 3.80	$ 13,832.00	$ 6.00	$ 21,840.00	$ 8.00	$ 29,120.00
88.	Sod, Class A	3,640	SY	$ 6.80	$ 24,752.00	$ 9.00	$ 32,760.00	$ 9.50	$ 34,580.00
89.	Inlet Filter, Silt Sack	25	EA	$ 117.14	$ 2,928.50	$ 133.00	$ 3,325.00	$ 100.00	$ 2,500.00
	SUBTOTAL DIVISION 4: GENERAL PAY ITEMS				**$ 423,864.95**		**$ 307,383.00**		**$ 373,148.50**
	DIVISION 5: STORM OUTFALL PAY ITMES								

BID TABULATION
CITY OF BIRMINGHAM
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-226(W)

Bids Due: April 9, 2026

	Item	Quantity	Unit	**Anglin Civil** 13000 Newburgh Rd Livonia, MI 48150		**CI Contracting, Inc.** 7135 Dan McGuire Drive, Suite B Brighton, MI 48116		**HMC, LLC** 297 Elmwood Drive Troy, MI 48083	
				Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
90.	42" Storm Sewer, C76, CL-IV, Trench A	25	LF	$ 236.67	$ 5,916.75	$ 662.00	$ 16,550.00	$ 625.00	$ 15,625.00
91.	New 6'-0" Diameter Storm Manhole, Construct Online	1	EA	$ 8,600.40	$ 8,600.40	$ 11,878.50	$ 11,878.50	$ 25,000.00	$ 25,000.00
92.	New 42" Dia. End Sections w/ Bar Screen	1	EA	$ 8,416.60	$ 8,416.60	$ 7,998.00	$ 7,998.00	$ 13,500.00	$ 13,500.00
93.	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	246	LF	$ 50.00	$ 12,300.00	$ 19.50	$ 4,797.00	$ 55.00	$ 13,530.00
94.	Sewel Lining, Pre-Liner, 42" RIFI-CIPP	246	LF	$ 19.29	$ 4,745.34	$ 12.00	$ 2,952.00	$ 1.10	$ 270.60
95.	Sewer Lining, 42" RIFI-CIPP	246	LF	$ 490.00	$ 120,540.00	$ 390.00	$ 95,940.00	$ 539.00	$ 132,594.00
96.	Cut/Grind Protruding Sewer Leads, Any Material	2	EA	$ 55.00	$ 110.00	$ 700.00	$ 1,400.00	$ 60.50	$ 121.00
97.	Cut/Grind Root Intrusion	5	EA	$ 55.00	$ 275.00	$ 420.00	$ 2,100.00	$ 60.50	$ 302.50
98.	Cut/Grind Mineral Deposit	5	EA	$ 55.00	$ 275.00	$ 420.00	$ 2,100.00	$ 60.50	$ 302.50
99.	Remove Ex. Tree	8	EA	$ 440.10	$ 3,520.80	$ 2,700.00	$ 21,600.00	$ 3,000.00	$ 24,000.00
100.	Remove Ex. 42" Storm Headwall	1	EA	$ 538.30	$ 538.30	$ 2,133.50	$ 2,133.50	$ 5,000.00	$ 5,000.00
101.	Remove Ex. 42" Storm Sewer	31	LF	$ 36.94	$ 1,145.14	$ 172.50	$ 5,347.50	$ 125.00	$ 3,875.00
102.	Earth Excavation, Storm Outfall	220	CY	$ 43.34	$ 9,534.80	$ 61.00	$ 13,420.00	$ 180.00	$ 39,600.00
103.	Remove & Replace Woodward Ave. Sidewalk	300	SF	$ 13.16	$ 3,948.00	$ 21.50	$ 6,450.00	$ 19.50	$ 5,850.00
104.	Remove & Replace Woodward Ave. Guardrail	60	LF	$ 110.00	$ 6,600.00	$ 110.00	$ 6,600.00	$ 30.00	$ 1,800.00
105.	Mobilization, Traffic Maintenance & Control, Storm Outfall	1	LS	$ 23,933.75	$ 23,933.75	$ 8,397.00	$ 8,397.00	$ 75,000.00	$ 75,000.00
106.	Inspector Crew Day, Storm Outfall	$650.00	DAY	20	$ 13,000.00	15	$ 9,750.00	20	$ 13,000.00
107.	Silt Fencing, 30" Height	325	LF	$ 2.30	$ 747.50	$ 6.50	$ 2,112.50	$ 4.50	$ 1,462.50
108.	Lawn Restoration Along Bank at Storm Outlet	1	LS	$ 69,309.59	$ 69,309.59	$ 5,500.00	$ 5,500.00	$ 15,000.00	$ 15,000.00
109.	Gravity Retaining Wall, Boulder	500	FSF	$ 65.61	$ 32,805.00	$ 150.00	$ 75,000.00	$ 152.00	$ 76,000.00
110.	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per Detail)	$165.00	SY	90	$ 14,927.55	507	$ 83,572.50	420	$ 69,300.00
	SUBTOTAL DIVISION 5: STORM SEWER OUTFALL PAY ITEMS				**$ 341,189.52**		**$ 385,598.50**		**$ 531,133.10**
	TOTAL BID				**$ 2,502,731.16**		**$ 2,729,442.00** *		**$ 3,121,009.60** *
	Corrected By Engineer*								
	Other Bids Received:								
	Pamar Enterprises, Inc.				$ 3,326,452.50				
	Eminent Excavating				$ 3,444,315.00				
	F.D.M. Contracting LLC				$ 3,565,648.50				
	DiPonio Contracting				$ 3,980,793.00				

April 21, 2026

City of Birmingham
151 Martin Street
Birmingham, MI 48012

Attn: Ms. Melissa A. Coatta, P.E.
City Engineer

Re: Recommendation for Bid Award
Wimbleton Drive Phase 2 Project - Contract #6-26W
NFE Job #O979

Dear Ms. Coatta,

Bids for the subject project were received, opened, and read on Thursday, April 9th, 2026 at 2:00 p.m. at City Hall. A total of seven (7) bids were received and read. The bids have been tabulated, checked, and are in order. This project was not bid with any alternates.

The low bidder for the project is Anglin Civil, LLC (Anglin Civil) from Livonia, Michigan, with a total bid amount of $2,502,731.16. This total is approximately 13.7% below the engineer's estimate for the same scope of work.

To provide additional context on the overall low bid cost, in the table below, we have compared several key unit prices for typical pay items to average unit prices compiled from other recent projects located in southeast Michigan. While these comparisons provide "data points", it is important to note that unit rates from a single low bidder on a project will not always correlate to average prices due to the nature of the competitive bidding process.

Pay Item Name	Anglin Civil Bid Unit Price	Average Comparable Unit Price
6' Diameter Storm Manhole	$9,039.93 each	$10,000.00 each
2' Diameter Storm Inlet	$1,652.92 each	$2,030 each
36" Diameter Storm Sewer	$207.81 per linear foot	$373.00 per linear foot
12" D.I. Water Main	$177.87 per linear foot	$228.33 per linear foot
4" Concrete Sidewalk	$6.00 per square foot	$6.93 per square foot

NFE has previous experience working with Anglin Civil on previous infrastructure projects in surrounding communities, but has not worked with them recently in Birmingham. A check of their submitted references was performed, and found to be satisfactory with positive comments provided by other municipal representatives and engineers regarding their performance on recent infrastructure projects of comparable scope. Based on this response, we do not have any concerns about Anglin Civil's capability to perform the work.

We therefore recommend that Contract #6-26W for the Wimbleton Drive Phase 2 Project be awarded to Anglin Civil, LLC. in the amount of $2,502,731.16.

Please do not hesitate to contact our office if you have any questions or comments.

Sincerely,

Paul Tulikangas, P.E.
Associate / Engineering Manager

Brett Buchholz, P.E.,
Principal

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

WIMBLETON DRIVE PHASE 2 PROJECT

CONTRACT #6-26(W)

SHEET INDEX

COVER SHEET (WIMBLETON DRIVE PAVING PROJECT)
C01 Utility Plan Wimbleton Drive Sta. P.O.B. to 4+25
C02 Utility Plan Wimbleton Drive Sta. 4+25 to 9+00
C03 Utility Plan Wimbleton Drive Sta. 9+00 to 12+50
C04 Utility Plan Wimbleton Drive Sta. 12+50 to P.O.E.
C05 Utility Plan Poppleton St. (South) Sta. P.O.B. to P.O.E.
C06 Sewer Profiles 1 of 3
C07 Sewer Profiles 2 of 3
C08 Sewer Profiles 3 of 3
C09 Supplemental Water Main Profiles
C10 Utility Service Plan Sta. P.O.B. to 9+00
C11 Utility Service Plan Sta. 9+00 to P.O.E.
C12 Paving and Grading Plan Sta. P.O.B. to Sta. 4+25
C13 Paving and Grading Plan Sta. 4+25 to Sta. 9+00
C14 Paving and Grading Plan Sta. 9+00 to Sta. 12+50
C15 Paving and Grading Plan Sta. 12+50 to Sta. P.O.E.
C16 Paving and Grading Plan Poppleton St. Sta P.O.B. to P.O.E.
C17 Intersection Grading Detail - Wimbleton & Warwick
C18 Intersection Grading Detail - Wimbleton & Poppleton
C19 Notes and Details
C20 SESC Plan
C21 Wimbleton Drive Storm Outfall Removal & SESC Plan
C22 Wimbleton Drive Storm Outfall Utility Plan
C23 Wimbleton Drive Storm Outfall Grading Plan & Details
C24 Advanced Warning Signage (AWS) Traffic Diagram
Q1 Quantities

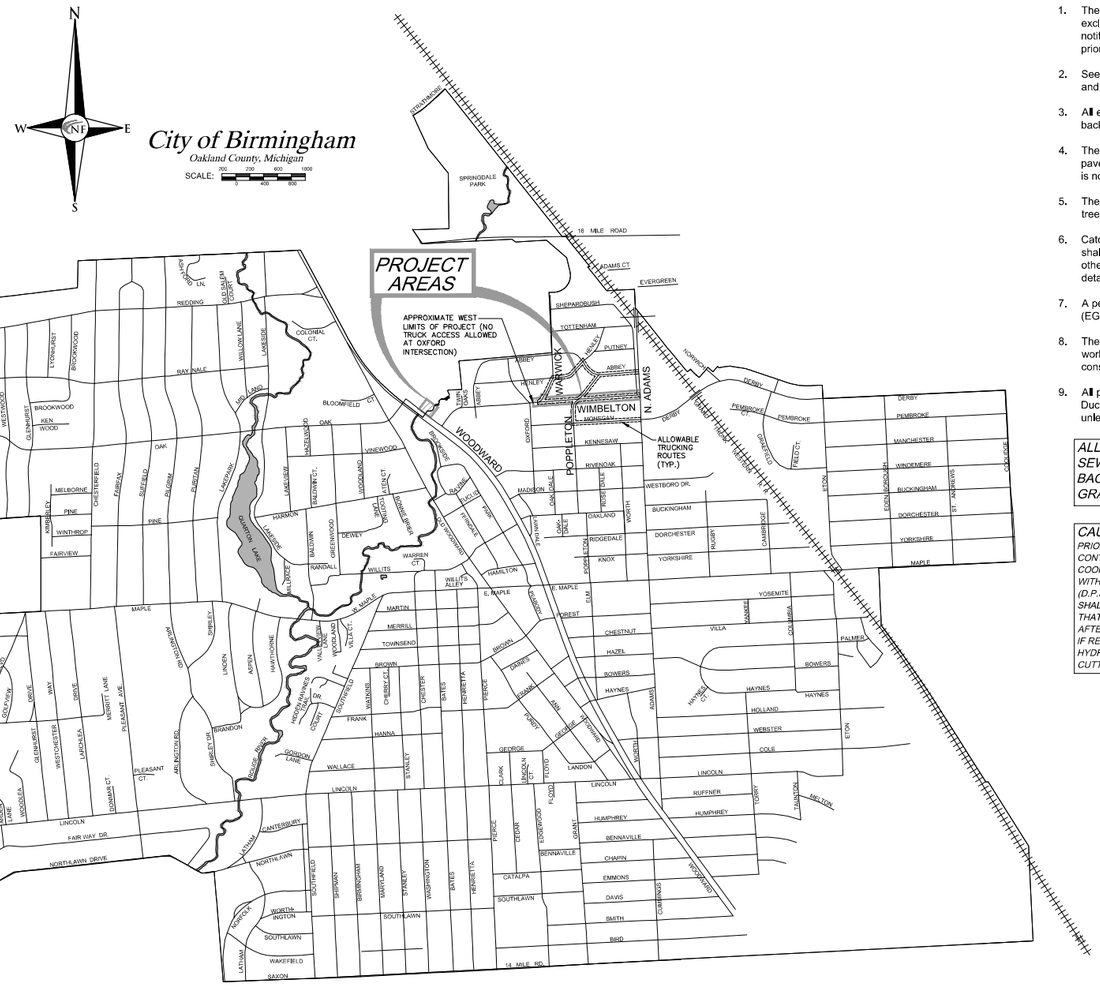
City of Birmingham - Water Main Standard Notes & Details - 1 of 2
City of Birmingham - Water Main Standard Notes & Details - 2 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 1 of 2
City of Birmingham - Sanitary & Combined Sewer Standard Notes & Details - 2 of 2
City of Birmingham - Storm Drain Sewer Standard Notes & Details - 1 of 1
City of Birmingham - Paving Standard Notes & Details - 1 of 1

WATER / SEWER SERVICE NOTE

ALL WATER AND SEWER SERVICE LATERAL INFORMATION IS SHOWN PER RECORD, WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL PRIVATE-SIDE WATER AND SEWER LATERAL INFORMATION, AS REQUIRED, TO CONSTRUCT THE PROJECT (INC.).

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



811 Know what's below Call before you dig.

BENCHMARK NOTE

BENCHMARKS SET AND SHOWN PER SHEET WERE ESTABLISHED OFF OF THE CITY OF BIRMINGHAM BENCHMARK DATUM.

CONSTRUCTION NOTES

These notes shall apply for all work within this contract:

1. The contractor shall notify MISS DIG 1-800-482-7171 at least 3 working days excluding Saturday, Sunday, and Holidays before making any excavations and notify the City of Birmingham Engineering Department a minimum of 24 hours prior to the start of construction (248-530-1850).
2. See the City of Birmingham Standard Notes & Details for water main, sewer, and paving work.
3. All excavation under or within three feet of pavement, public or private, shall be backfilled and compacted with sand.
4. The joints at the edges of all excavations in the pavement shall be sawcut, or pavement will be removed to existing joints, as directed by the Engineer. There is no separate pay item for saw cutting pavements.
5. The contractor shall be responsible for damage to existing utilities, pavement, trees, landscaping, gravel, etc., whether located on public or private property.
6. Catch basin and inlet castings scheduled for replacement, or new construction shall be EJIW 5000Z4 DI / 5000M4 DI Hinged Assembly unless specified otherwise. Manhole castings shall be EJIW 1040-A cover as noted on the detail sheets and plans, unless otherwise specified.
7. A permit from the Michigan Department of Environment, Great Lakes & Energy (EGLE) is required for all new water main and sanitary sewer installations.
8. The contractor shall coordinate and cooperate with all other utility companies working in the same area, project related or not, during the same allotted construction period.
9. All proposed Public Water Main for this project shall be Pressure Class 52 Ductile Iron Pipe (D.I.P.) in conformance with City of Birmingham specifications, unless otherwise noted.

ALL WATER MAIN, STORM AND SEWER TRENCH SHALL BE BACKFILLED WITH COMPACTED GRANULAR (SAND) MATERIAL.

CAUTION!!! LIVE WATER MAIN

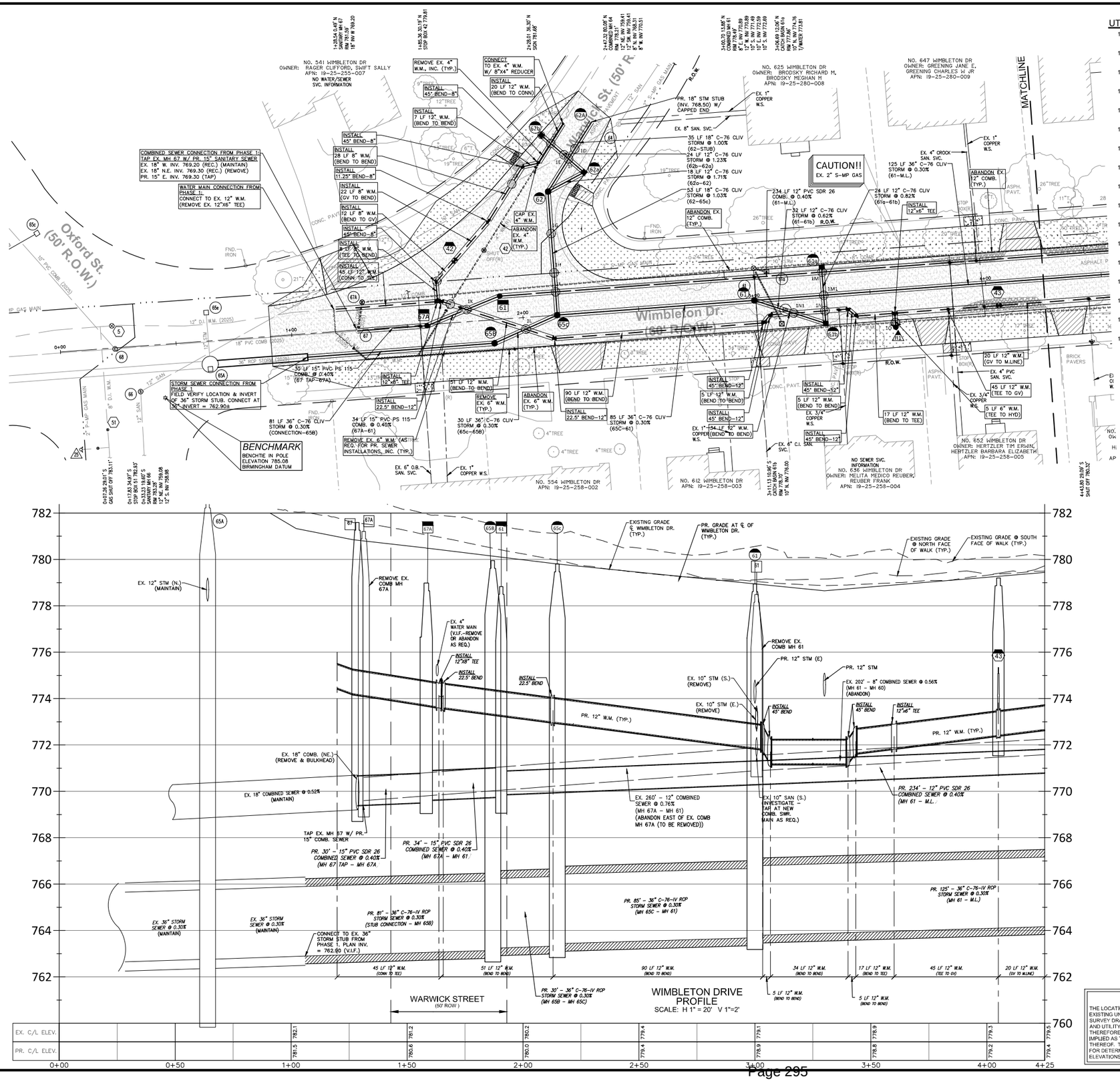
PRIOR TO CUTTING IN NEW MAIN FITTINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING EXISTING WATER MAIN SHUT-DOWNS WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (D.P.S.). MORE IMPORTANTLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY ENSURING THAT PRESSURES DO NOT EXIST IN THE MAIN AFTER SHUT-DOWN & PRIOR TO CUTTING THE MAIN. IF REQUIRED, THE CONTRACTOR SHALL UTILIZE A HYDRA-STOP DEVICE TO CLOSE OFF FLOW WHILE CUTTING IN NEW TEE.

DESIGN ENGINEER SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

APPROVED DATE

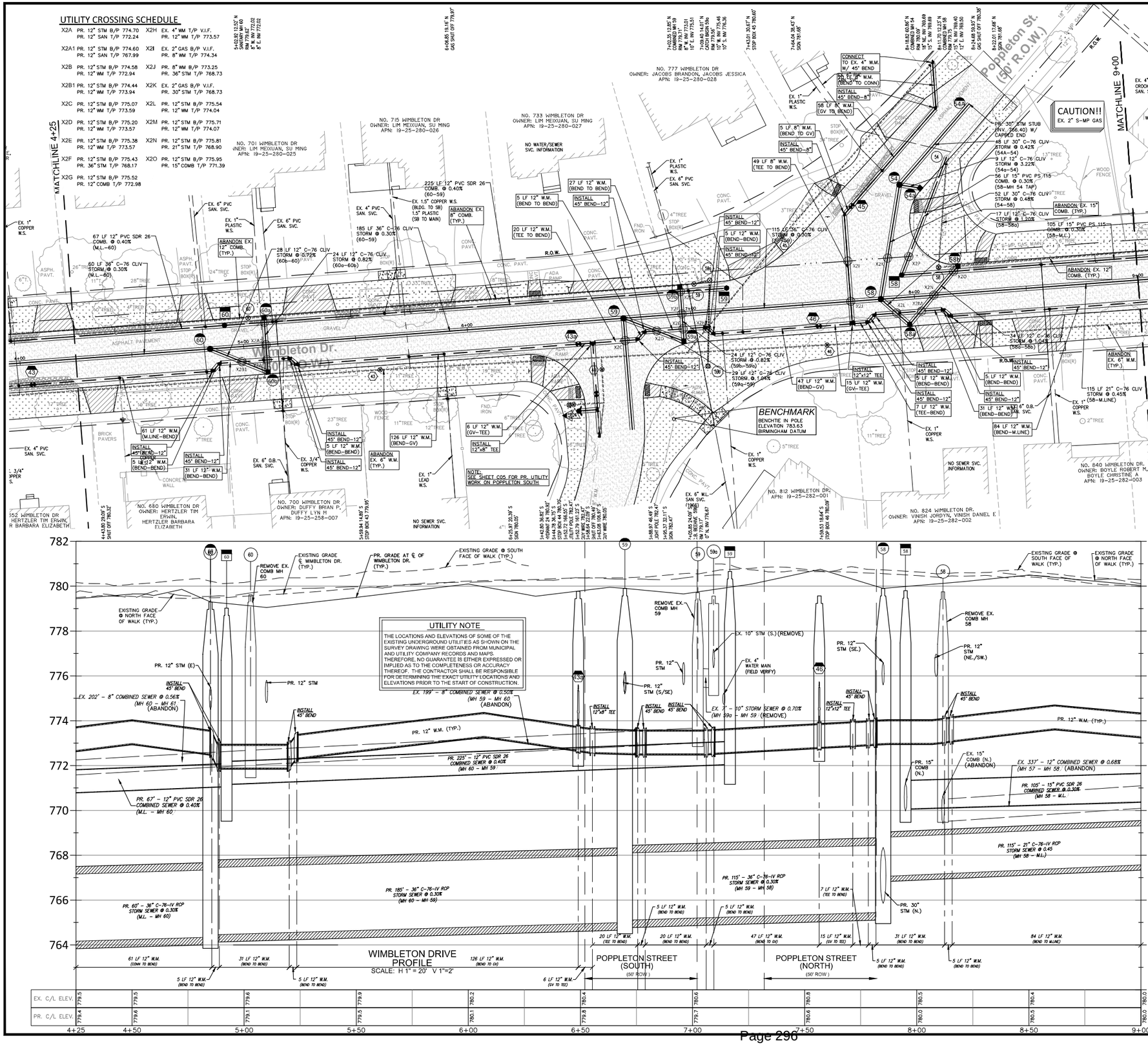
03-27-26 ADDENDUM 1

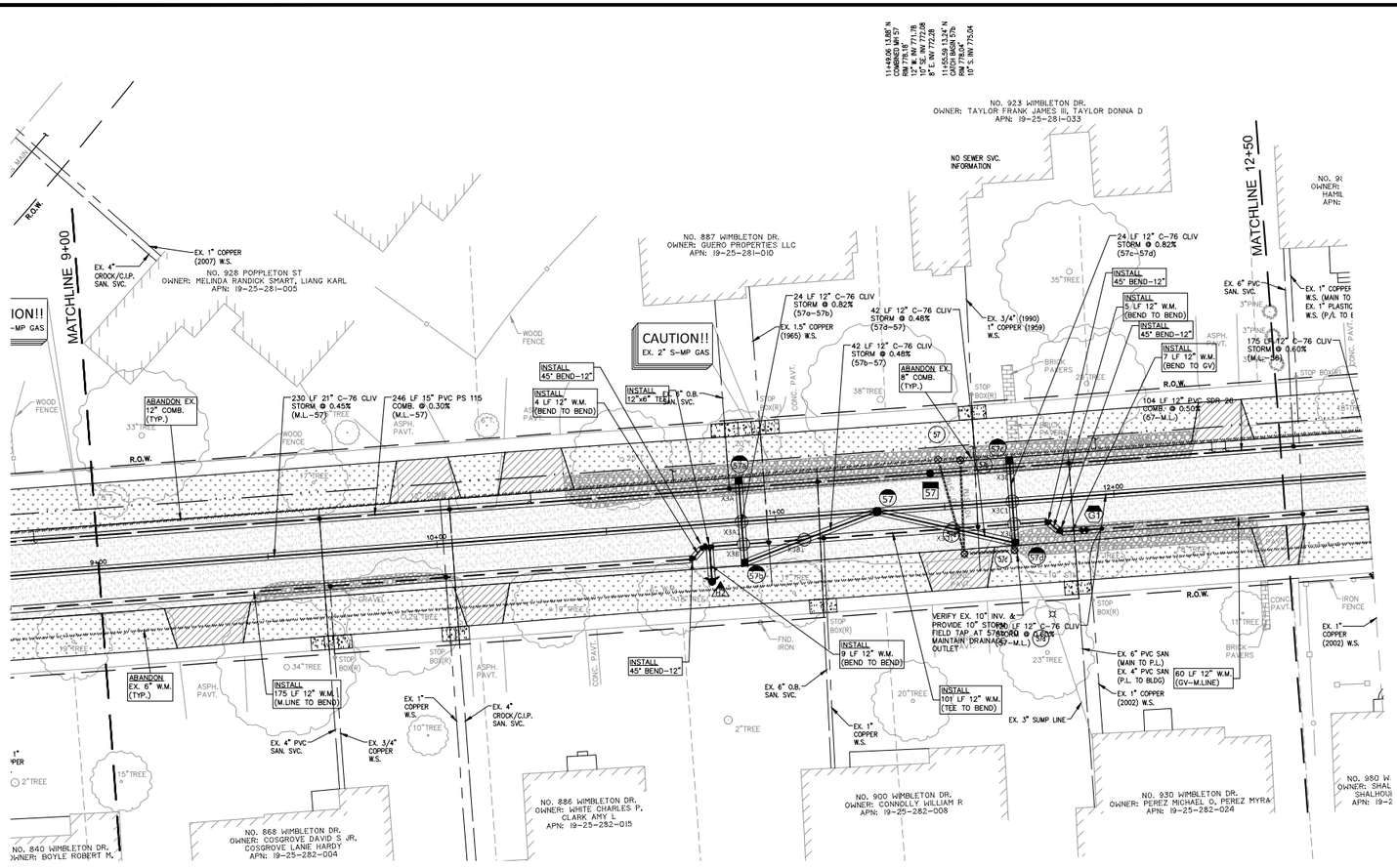
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

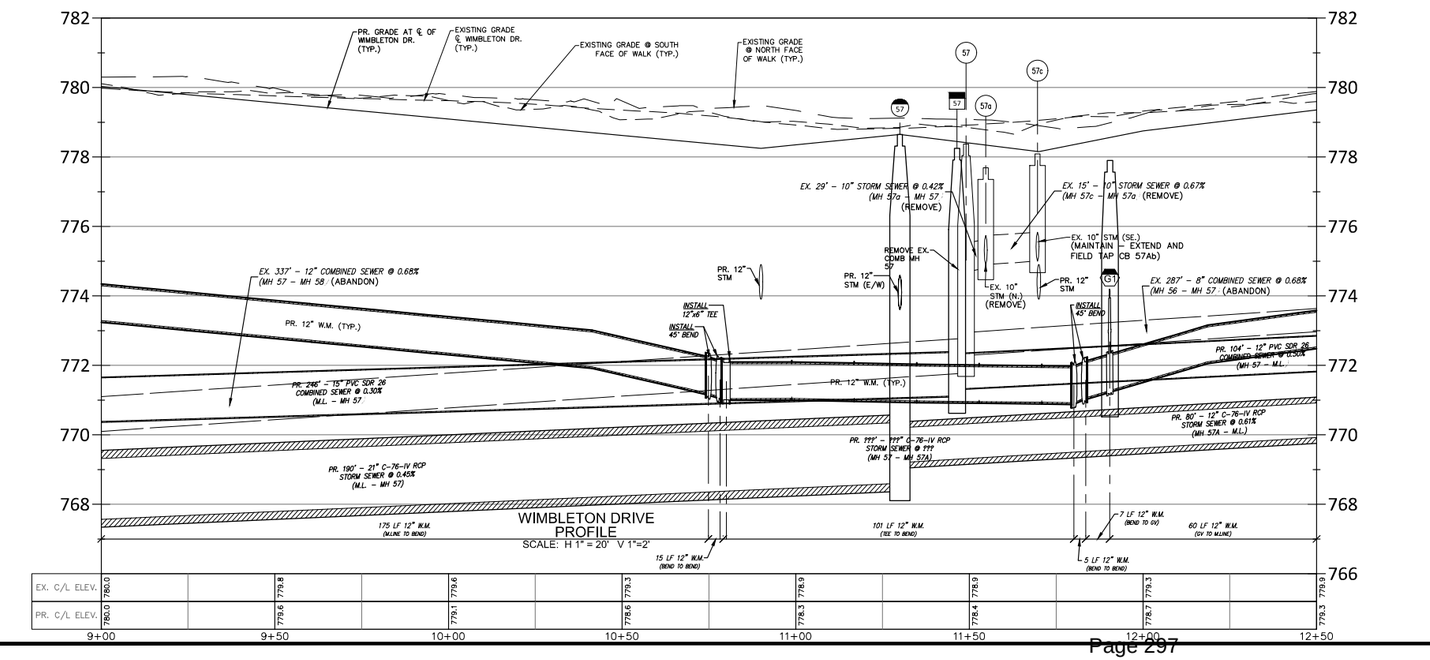

Oxford St. (50' R.O.W.)
Wimbleton Dr. (50' R.O.W.)
Wallick St. (50' R.O.W.)
MATCHLINE
CAUTION!! EX. 2" S-MP GAS
NO. 541 WIMBLETON DR
OWNER: RAGER CLIFFORD, SWIFT SALLY
APN: 19-25-255-007
NO WATER/SEWER SVC. INFORMATION
NO. 625 WIMBLETON DR
OWNER: BRODSKY RICHARD M, BRODSKY MEGHAN M
APN: 19-25-280-008
NO. 647 WIMBLETON DR
OWNER: GREENING JANE E, GREENING CHARLES M JR
APN: 19-25-280-009
NO. 652 WIMBLETON DR
OWNER: HERTZLER TIM ERWIN, HERTZLER BARBARA ELIZABETH
APN: 19-25-258-005
NO. 636 WIMBLETON DR
OWNER: MELITA MEDICO REUBER, REUBER FRANK
APN: 19-25-258-004
NO. 554 WIMBLETON DR
APN: 19-25-258-002
NO. 612 WIMBLETON DR
APN: 19-25-258-003
COMBINED SEWER CONNECTION FROM PHASE 1: TAP EX. MH 67 W/ PR. 15" SANITARY SEWER
EX. 18" W. INV. 769.20 (REC.) (MAINTAIN)
EX. 18" N.E. INV. 769.30 (REC.) (REMOVE)
PR. 15" E. INV. 769.30 (TAP)
WATER MAIN CONNECTION FROM PHASE 1: CONNECT TO EX. 12" W.M. (REMOVE EX. 12"X6" TEE)
STORM SEWER CONNECTION FROM PHASE 1: FIELD VERIFY LOCATION & INVERT OF 36" STORM STUB, CONNECT AT 762.90± INVERT
BENCHMARK
BENCHTIE IN POLE
ELEVATION 785.08
BIRMINGHAM DATUM
REMOVE EX. 4" W.M., INC. (TYP.)
CONNECT TO EX. 4" W.M. W/ 8"X4" REDUCER
INSTALL 20 LF 12" W.M. (BEND TO CONN)
INSTALL 45° BEND-8"
INSTALL 7 LF 12" W.M. (BEND TO BEND)
INSTALL 45° BEND-8"
INSTALL 28 LF 8" W.M. (BEND TO BEND)
INSTALL 11.25° BEND-8"
INSTALL 22 LF 8" W.M. (GV TO BEND)
INSTALL 12 LF 8" W.M. (BEND TO GV)
INSTALL 45° BEND-8"
INSTALL 8"x6" W.M. (TEE TO BEND)
INSTALL 45 LF 12" W.M. (CONN. TO TEE)
CAP EX. 4" W.M.
ABANDON EX. 4" W.M. (TYP.)
ABANDON EX. 12" COMB. (TYP.)
INSTALL 12"x6" TEE
INSTALL 30 LF 15" PVC PS 115 COMB. @ 0.40% (67-TAP-67A)
INSTALL 12"x6" TEE
INSTALL 22.5° BEND-12"
61 LF 12" W.M. (BEND TO BEND)
REMOVE EX. 6" W.M. (TYP.)
ABANDON EX. 6" W.M. (TYP.)
90 LF 12" W.M. (BEND TO BEND)
INSTALL 22.5° BEND-12"
85 LF 36" C-76 CLIV STORM @ 0.30% (65C-61)
INSTALL 45° BEND-12"
5 LF 12" W.M. (BEND TO BEND)
INSTALL 45° BEND-12"
EX. 1"-54 LF 12" W.M. COPPER (BEND TO BEND)
INSTALL 45° BEND-12"
5 LF 12" W.M. (BEND TO BEND)
EX. 3/4" COPPER W.S.
INSTALL 45° BEND-12" SAN.
17 LF 12" W.M. (BEND TO TEE)
45 LF 12" W.M. (TEE TO GV)
5 LF 6" W.M. (TEE TO HYD)
20 LF 12" W.M. (GV TO M.LINE)
EX. 4" PVC SAN. SVC.
EX. 3/4" COPPER W.S.
REMOVE EX. 6" W.M. (AS REQ. FOR PR. SEWER INSTALLATIONS, INC. (TYP.)
81 LF 36" C-76 CLIV STORM @ 0.30% (CONNECTION-65B)
34 LF 15" PVC PS 115 COMB. @ 0.40% (67A-61)
30 LF 36" C-76 CLIV STORM @ 0.30% (65C-65B)
234 LF 12" PVC SDR 26 COMB. @ 0.40% (61-M.L.)
32 LF 12" C-76 CLIV STORM @ 0.62% (61-61b)
24 LF 12" C-76 CLIV STORM @ 0.82% (61b-61b)
125 LF 36" C-76 CLIV STORM @ 0.30% (61-M.L.)
18 LF 12" C-76 CLIV STORM @ 1.71% (62a-62)
53 LF 18" C-76 CLIV STORM @ 1.03% (62-65c)
24 LF 12" C-76 CLIV STORM @ 1.23% (62b-62a)
35 LF 18" C-76 CLIV STORM @ 1.00% (62-STUB)
PR. 18" STM STUB (INV. 768.50) W/ CAPPED END
EX. 8" SAN. SVC.
EX. 1" COPPER W.S.
EX. 4" CROCK SAN. SVC.
EX. 6" C.I. SVC.
EX. 6" D.I. SAN. SVC.
EX. 1" COPPER W.S.
EX. 2" GAS MAIN
EX. 8" SAN. MAIN
EX. 12" SAN. MAIN
EX. 8" D.I. W.M.
EX. 12" D.I. W.M. (2025)
EX. 18" PVC COMB (2025)
EX. 36" RCP STORM (2025)
EX. 10" PVC COMB (2025)
EX. 2"-5 PSI GAS MAIN
EX. 1P GAS MAIN
EX. 12" STORM
EX. 8" W.M.
EX. 6" W.M.
EX. 4" W.M.
EX. 2" GAS MAIN
EX. 12" W.M.
EX. 12" SAN. MAIN
EX. 8" W.M.
EX. 6" W.M.
EX. 4" W.M.
EX. 2" GAS MAIN
EX. 12" W.M.

UTILITY CROSSING SCHEDULE

X2A	PR. 12" STM B/P 774.70 PR. 12" SAN T/P 772.24	X2H	EX. 4" WM T/P V.I.F. PR. 12" WM T/P 773.57
X2A1	PR. 12" STM B/P 774.60 PR. 12" SAN T/P 767.99	X2I	EX. 2" GAS B/P V.I.F. PR. 8" WM T/P 774.34
X2B	PR. 12" STM B/P 774.58 PR. 12" WM T/P 772.94	X2J	PR. 8" WM B/P 773.25 PR. 36" STM T/P 768.73
X2B1	PR. 12" STM B/P 774.44 PR. 12" WM T/P 773.94	X2K	EX. 2" GAS B/P V.I.F. PR. 30" STM T/P 768.73
X2C	PR. 12" STM B/P 775.07 PR. 12" WM T/P 773.59	X2L	PR. 12" STM B/P 775.54 PR. 12" WM T/P 774.04
X2D	PR. 12" STM B/P 775.20 PR. 12" WM T/P 773.57	X2M	PR. 12" STM B/P 775.71 PR. 12" WM T/P 774.07
X2E	PR. 12" STM B/P 775.38 PR. 12" WM T/P 773.57	X2N	PR. 12" STM B/P 775.81 PR. 21" STM T/P 768.90
X2F	PR. 12" STM B/P 775.43 PR. 36" STM T/P 768.17	X2O	PR. 12" STM B/P 775.95 PR. 15" COMB T/P 771.39
X2G	PR. 12" STM B/P 775.52 PR. 12" COMB T/P 772.98		


MATCHLINE 4+25
MATCHLINE 9+00
Wimbleton Dr. (50' R.O.W.)
Poppleton St. (50' R.O.W.)
NO. 777 WIMBLETON DR OWNER: JACOBS BRANDON, JACOBS JESSICA APN: 19-25-280-028
NO. 715 WIMBLETON DR OWNER: LIM MEIXUAN, SU MING APN: 19-25-280-026
NO. 733 WIMBLETON DR OWNER: LIM MEIXUAN, SU MING APN: 19-25-280-027
NO. 701 WIMBLETON DR OWNER: LIM MEIXUAN, SU MING APN: 19-25-280-025
NO. 880 WIMBLETON DR OWNER: HERTZLER TIM ERWIN, HERTZLER BARBARA ELIZABETH
NO. 700 WIMBLETON DR OWNER: DUFFY BRIAN P, DUFFY LYN N APN: 19-25-258-007
NO. 812 WIMBLETON DR APN: 19-25-282-001
NO. 824 WIMBLETON DR. OWNER: VINISH JORDYN, VINISH DANIEL E APN: 19-25-282-002
NO. 840 WIMBLETON DR. OWNER: BOYLE ROBERT M, BOYLE CHRISTINE A APN: 19-25-282-003
552 WIMBLETON DR HERTZLER TIM ERWIN, R BARBARA ELIZABETH
BENCHMARK
BENCHTIE IN POLE
ELEVATION 783.63
BIRMINGHAM DATUM
CAUTION!! EX. 2" S-MP GAS
NOTE: SEE SHEET C05 FOR PR. UTILITY WORK ON POPPLETON SOUTH
NO WATER/SEWER SVC. INFORMATION
NO SEWER SVC. INFORMATION
67 LF 12" PVC SDR 26 COMB. @ 0.40% (M.L.–60)
60 LF 36" C-76 CLIV STORM @ 0.30% (M.L.–60)
28 LF 12" C-76 CLIV STORM @ 0.72% (60b–60)
24 LF 12" C-76 CLIV STORM @ 0.82% (60a–60b)
225 LF 12" PVC SDR 26 COMB. @ 0.40% (60–59)
185 LF 36" C-76 CLIV STORM @ 0.30% (60–59)
115 LF 36" C-76 CLIV STORM @ 0.30% (60–59)
24 LF 12" C-76 CLIV STORM @ 0.82% (59b–59a)
29 LF 12" C-76 CLIV STORM @ 1.04% (59a–59)
105 LF 15" PVC PS 115 COMB. @ 0.30% (58–M.L.)
46 LF 30" C-76 CLIV STORM @ 0.42% (54A–54)
9 LF 12" C-76 CLIV STORM @ 3.22% (54a–54)
56 LF 15" PVC PS 115 COMB. @ 0.30% (58–MH 54 TAP)
52 LF 30" C-76 CLIV STORM @ 0.48% (54–58)
17 LF 12" C-76 CLIV STORM @ 1.20% (58–58a)
34 LF 12" C-76 CLIV STORM @ 1.04% (58a–58b)
115 LF 21" C-76 CLIV STORM @ 0.45% (58–M.LINE)
PR. 30" STM STUB (INV. 766.40) W/ CAPPED END
CONNECT TO EX. 4" W.M. W/ 45° BEND
INSTALL 45° BEND–8"
58 LF 8" W.M. (GV TO BEND)
5 LF 8" W.M. (BEND TO GV)
49 LF 8" W.M. (TEE TO BEND)
5 LF 12" W.M. (BEND TO BEND)
27 LF 12" W.M. (BEND TO BEND)
20 LF 12" W.M. (TEE TO BEND)
INSTALL 45° BEND–12"
5 LF 12" W.M. (BEND–BEND)
47 LF 12" W.M. (BEND–GV)
15 LF 12" W.M. (GV–TEE)
INSTALL 12"x12" TEE
7 LF 12" W.M. (TEE–BEND)
31 LF 12" W.M. (BEND–BEND)
84 LF 12" W.M. (BEND–M.LINE)
61 LF 12" W.M. (M.LINE–BEND)
126 LF 12" W.M. (BEND–GV)
6 LF 12" W.M. (GV–TEE)
INSTALL 12"x8" TEE
ABANDON EX. 12" COMB. (TYP.)
ABANDON EX. 67" W.M. (TYP.)
ABANDON EX. 6" W.M. (TYP.)
ABANDON EX. 15" COMB. (TYP.)
REMOVE EX. 4" CROOK/CLP. SAN. SVC.
EX. 1" COPPER W.S.
EX. 1" PLASTIC W.S.
EX. 6" PVC SAN. SVC.
EX. 4" PVC SAN. SVC.
EX. 1.5" COPPER W.S. (BLDG. TO SB)
1.5" PLASTIC (SB TO MAIN)
EX. 6" W.L. SAN. SVC.
EX. 3/4" COPPER W.S.
EX. 6" O.B. SAN. SVC.
EX. 3/4" PIPER S.
EX. 1" LEAD W.S.
EX. 4" W.M. (FIELD VERIFY)
EX. 2" GAS MAIN
EX. 4" GAS SHUT OFF
EX. 8" W.M.
EX. 12" W.M.
EX. 16" W.M.
EX. 6" W.M.
EX. 20" W.M.
EX. 24" W.M.
EX. 30" W.M.
EX. 36" W.M.
EX. 42" W.M.
EX. 48" W.M.
EX. 54" W.M.
EX. 60" W.M.
EX. 66" W.M.
EX. 72" W.M.
EX. 78" W.M.
EX. 84" W.M.
EX. 90" W.M.
EX. 96" W.M.
EX.





UTILITY CROSSING SCHEDULE

X3A PR. 12" STM B/P 773.82
PR. 15" COMB T/P 772.20

X3A1 PR. 12" STM B/P 773.73
PR. 21" STM T/P 770.02

X3B PR. 12" STM B/P 773.59
PR. 12" WM T/P 772.09

X3B1 PR. 12" STM B/P 773.68
PR. 12" WM T/P 773.04

X3C PR. 12" STM B/P 773.80
PR. 12" COMB T/P 772.44

X3C1 PR. 12" STM B/P 773.73
PR. 12" STM T/P 770.50

X3D PR. 12" STM B/P 773.68
PR. 12" WM T/P 772.04

X3D1 PR. 12" STM B/P 773.54
PR. 12" WM T/P 772.04

EX. SEWER STRUCTURE SCHEDULE

57 REMOVE
11+49.06 13.86' N
COMBINED MH 57
RIM 778.18'
12" W. INV 771.78
10" SE. INV 772.08
8" E. INV 772.28

EX. STORM STRUCTURE SCHEDULE

57a REMOVE
11+54.74 14.38' S
C.B. BEHIVE 57a
RIM 777.69'
10" N. INV 772.19 (REMOVE)
10" E. INV 772.39 (REMOVE)
10" NW. INV 772.39 (REMOVE)

57c REMOVE
11+69.61 14.46' S
C.B. BEHIVE 57c
RIM 778.09'
10" W. INV 774.49 (REMOVE)
10" SE. INV 774.49 (V.I.F., EXTEND & TAP 10" TO NEW CB 57Ab)

57b REMOVE
11+55.59 13.24' N
CATCH BASIN 57b
RIM 778.04'
10" S. INV 775.04 (REMOVE)

57d MAINTAIN
11+79.34 34.02' S
C.B. BEHIVE 57d
RIM 777.35'
10" NW. INV 775.05 (MAINTAIN)

WATER MAIN SCHEDULE

G1 PR. 12" GATE VALVE IN 5' DIA. WELL
PR. RIM 778.35
PR. T/PIPE 772.21

H2 PR. HYDRANT & ASSEMBLY
FG 778.45
PR. T/PIPE 772.95

Sanitary Structure Schedule

Structure Name	Structure Details
#57 PR. 4' COMBINED MANHOLE	PR. RIM 778.25 PR. 15" W. INV. 771.12 PR. 12" E. INV. 771.32

Storm Drainage Structure Schedule

Structure Name	Structure Details
#57 PR. 5' STORM MANHOLE	PR. RIM 778.65 PR. 12" E. INV. 773.60 PR. 12" W. INV. 773.60 PR. 12" E. INV. 769.20 PR. 21" W. INV. 768.60
#57a PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.00
#57b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 778.00 PR. 12" N. INV. 773.80 PR. 12" E. INV. 773.80
#57c PR. 2' STORM INLET	PR. RIM 778.00 PR. 12" S. INV. 774.00
#57d PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 777.80 PR. 12" N. INV. 773.80 PR. 12" W. INV. 773.80

N E S W

UTILITY NOTE

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LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX. PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" HMA ON 6" 21AA)
- PR. BITUMINOUS CAPESEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

(RECORD) CURB STOP LOCATION (APPROX.)
LANDSCAPE BED
EX. SOIL BORING
PUBLIC PHONE
WELL
PUMP
SIGN
POST/BOLLARD
PARKING METER
MAIL BOX
ROCK/BOULDER
SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
×000.00 GROUND ELEVATION

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER
NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Utility Plan Wimbleton
Drive Sta. 9+00 to 12+50

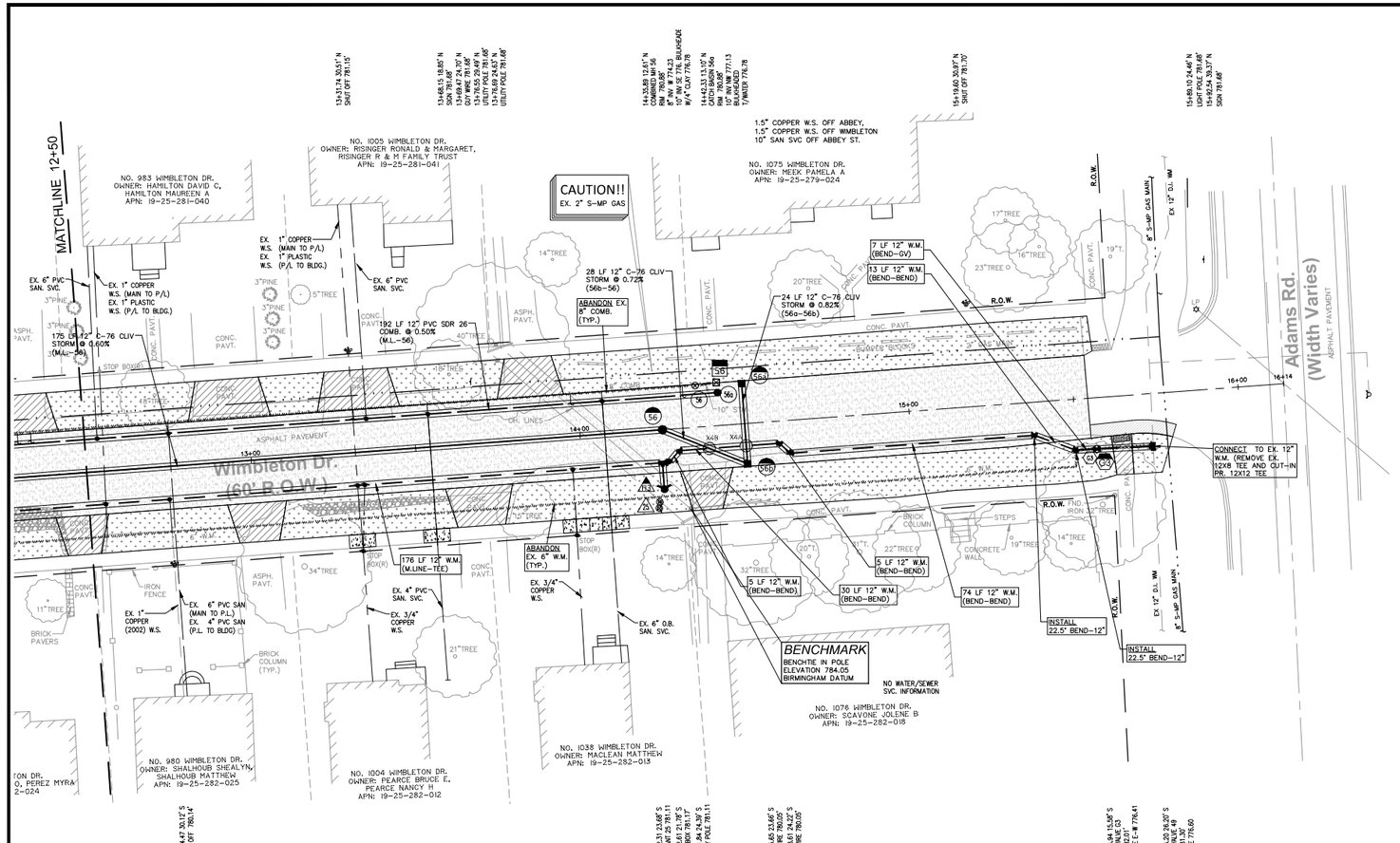
Know what's below
Call before you dig.

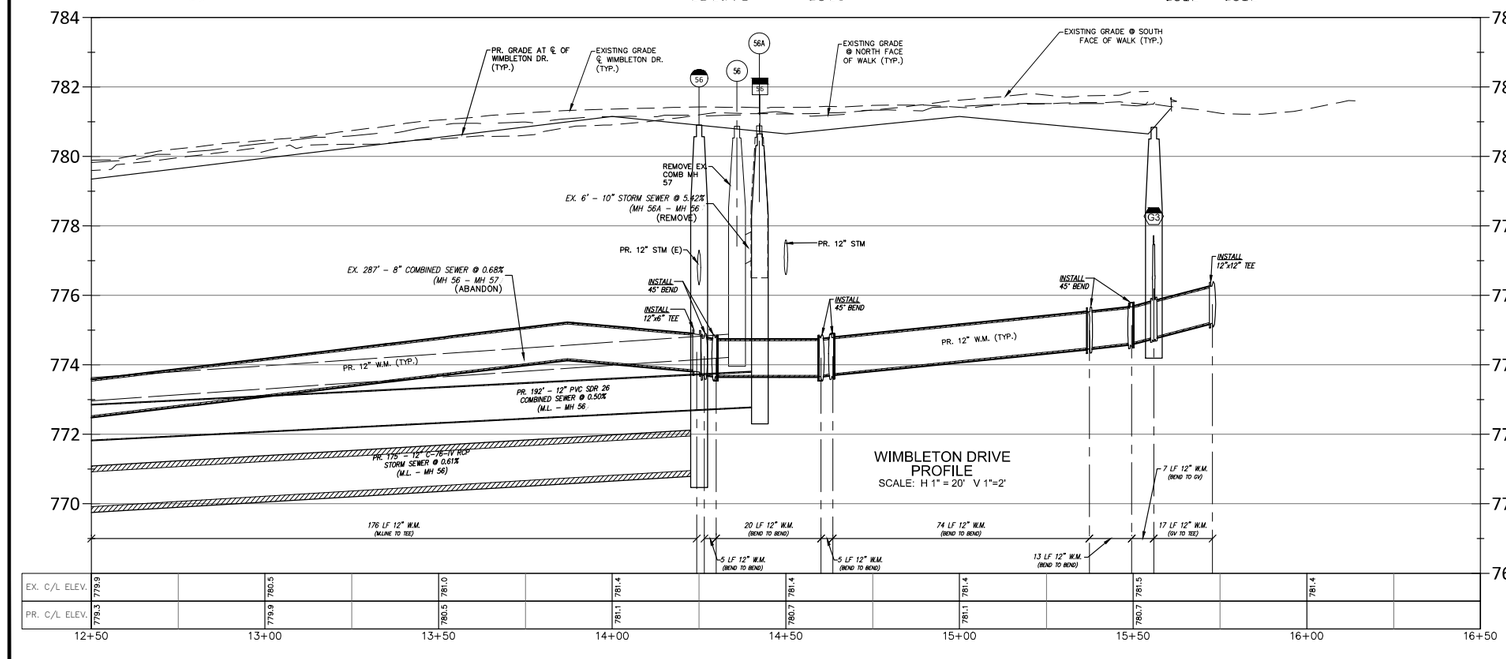
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C03

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UTILITY CROSSING SCHEDULE

X4A PR. 12" STM B/P 776.38
PR. 12" WM T/P 774.74

X4A PR. 12" STM B/P 776.24
PR. 12" WM T/P 774.74

EX. SEWER STRUCTURE SCHEDULE

56 REMOVE
14+35.89 12.61° N
COMBINED MH 56
RIM 780.88'
8" INV. W 774.23
10" INV SE 776. BULKHEADED
W/4" CLAY 776.78

EX. STORM STRUCTURE SCHEDULE

56b REMOVE
14+42.33 13.10° N
CATCH BASIN 56a
RIM 780.88'
10" INV NW 777.13
BULKHEADED
T/WATER 776.78

WATER MAIN SCHEDULE

G3 RETROFIT 12" GATE VALVE IN EXISTING WELL
15+19.94 15.58° S
GATE VALVE G3
RIM 782.01'
T/PIPE E-W 776.41
(REMOVE EX. 8" VALVE AND D.I. WATER MAIN PIPE)
PR. RIM 782.00
PR. T/PIPE 776.40

A12 PR. HYDRANT & ASSEMBLY
FG 780.75
PR. T/PIPE 775.25

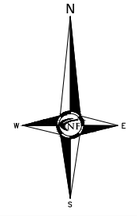
A2a REMOVE
14+22.31 23.68° S
HYDRANT 25 781.11'

Sanitary Structure Schedule

Structure Name	Structure Details
#56 PR. 4' COMBINED MANHOLE	PR. RIM 780.65 PR. 12" W. INV. 772.80

Storm Drainage Structure Schedule

Structure Name	Structure Details
#56 PR. 4' STORM MANHOLE	PR. RIM 780.90 PR. 12" E. INV. 776.30 PR. 12" W. INV. 770.97
#56a PR. 2' STORM INLET	PR. RIM 780.50 PR. 12" S. INV. 776.70
#56b PR. 4' STORM C.B. W/ 4' SUMP, SED. TRAP	PR. RIM 780.50 PR. 12" N. INV. 776.50 PR. 12" W. INV. 776.50



UTILITY NOTE

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LEGEND

- SWR. SVC. (PER VIDEO INSP.)
- MANHOLE
- CLEAN-OUT
- CMB
- GW
- HYDRANT
- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- EX. PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" HMA ON 6" 21AA)
- PR. BITUMINOUS CAPSEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

NF ENGINEERS
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TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

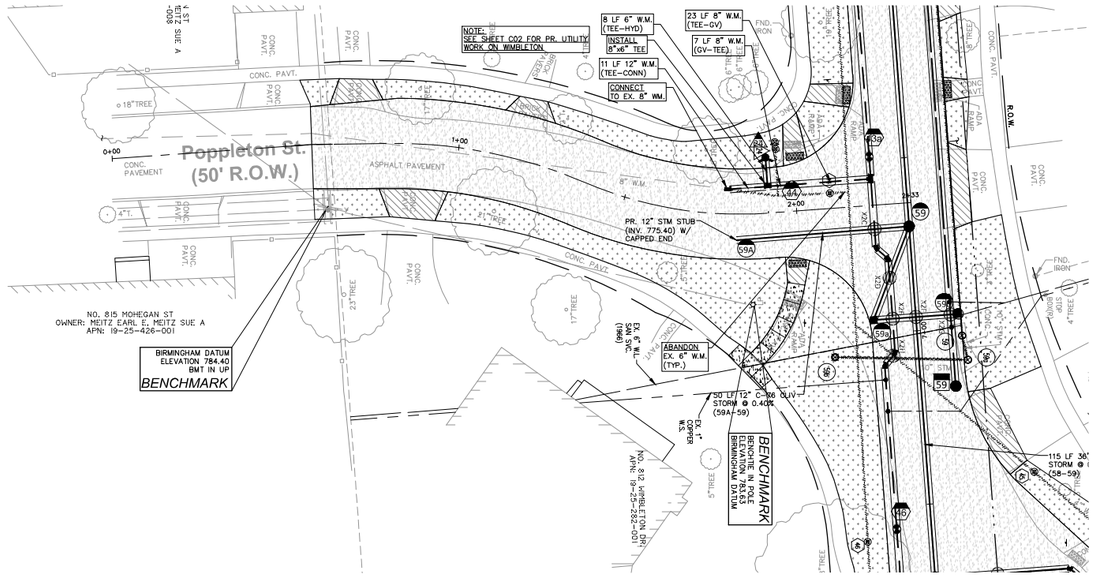
SHEET
Utility Plan Wimbleton Drive Sta. 12+50 to P.O.E.

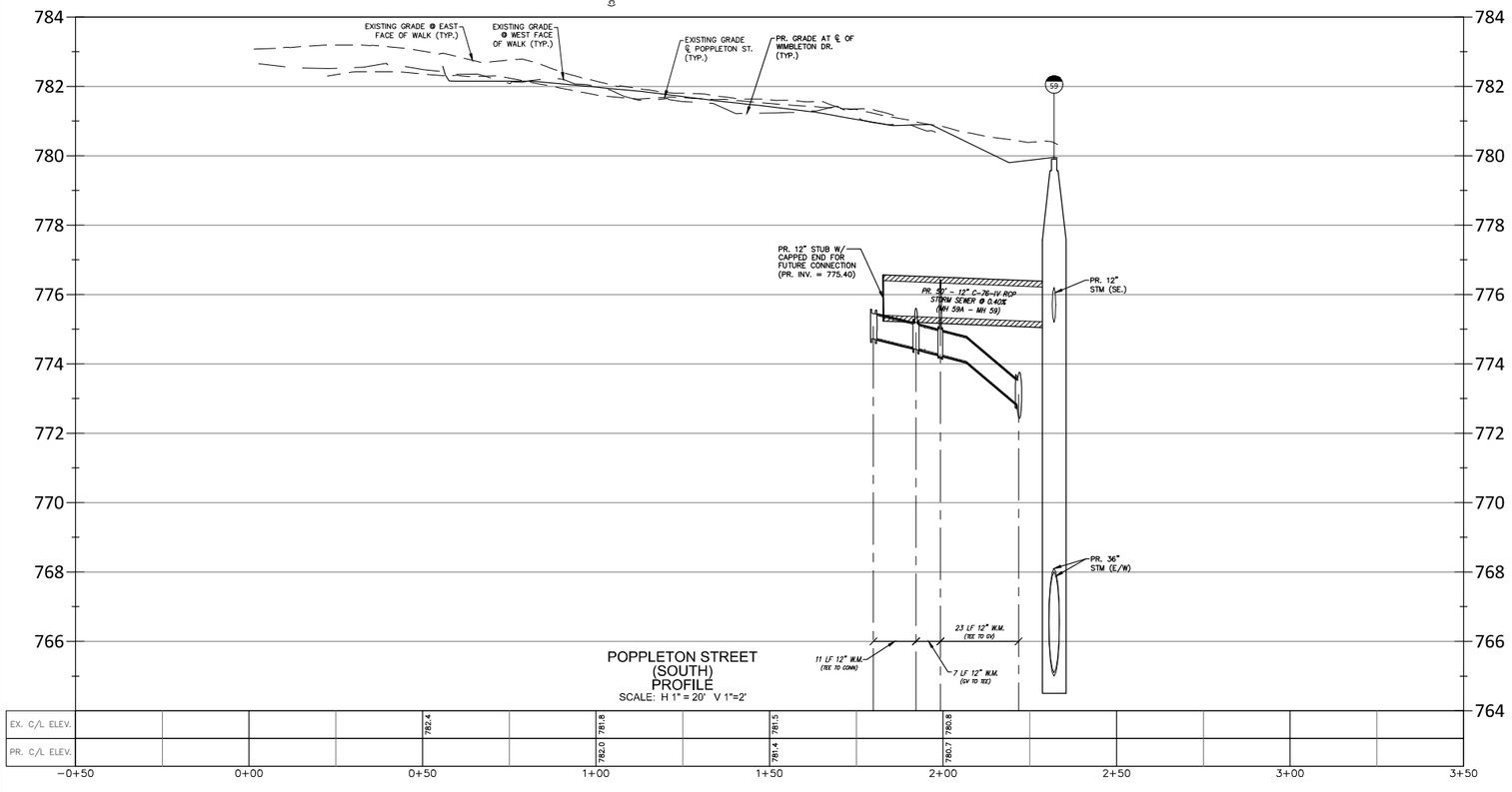
Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O979
SHEET NO. C04

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UTILITY CROSSING SCHEDULE

01 EX. 8" WM B/P 745.03
PR. 15" STM T/P 743.48
VERTICAL CLEARANCE: 1.55'

WATER MAIN SCHEDULE

44 PR. 8" GATE VALVE IN 5' DIA. WELL
PR. RIM 780.70
PR. T/PIPE 774.92

24 PR. HYDRANT & ASSEMBLY
FG 780.0
PR. T/PIPE 775.30

Storm Drainage Structure Schedule

Structure Name	Structure Details
#59A PR. 12" STORM STUB W/ CAPPED END	PR. RIM 776.63 PR. 12" N. INV. 775.40

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (4" MIN. ON 6" 21AA)
- PR. BITUMINOUS CAPESEAL
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
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The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Utility Plan Poppleton St. (South) Sta. P.O.B. to P.O.E.

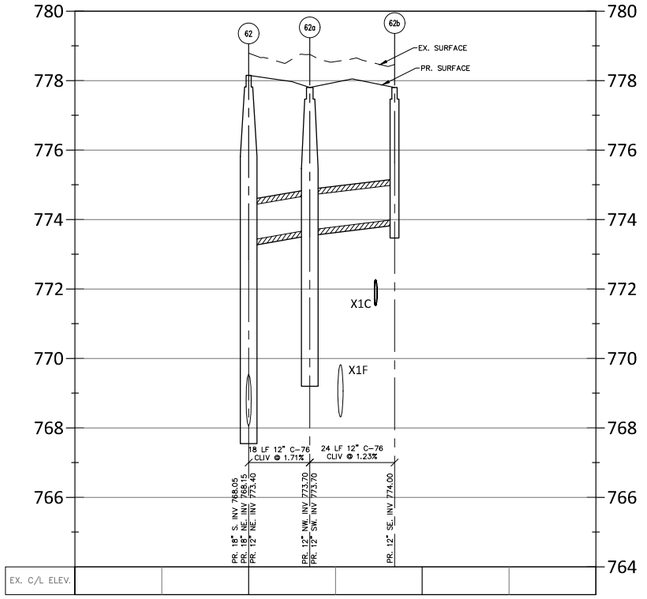
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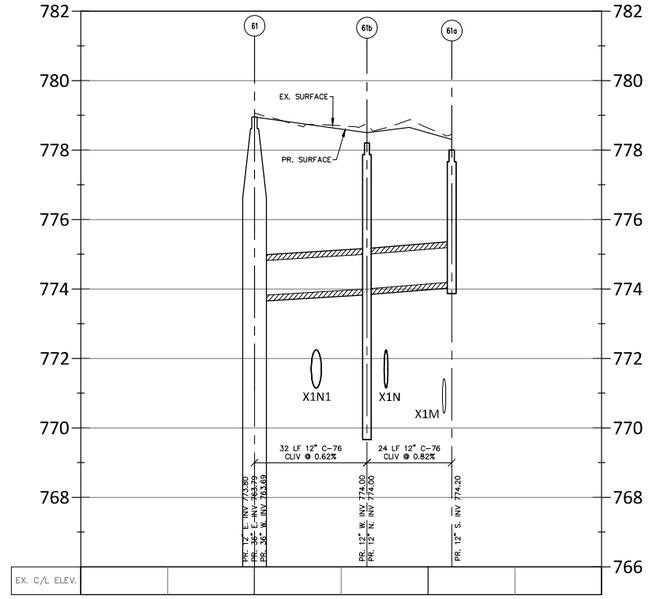
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03-19-26	BIDS
03-27-26	ADDENDUM 1

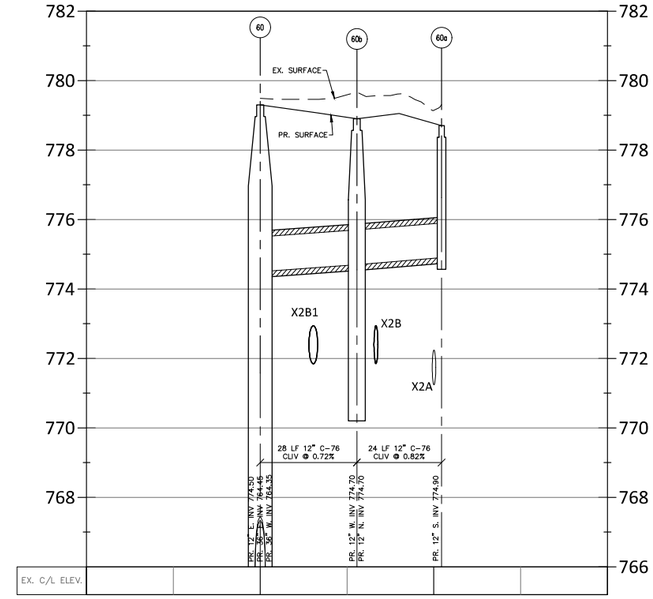
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20' / 1"=2'

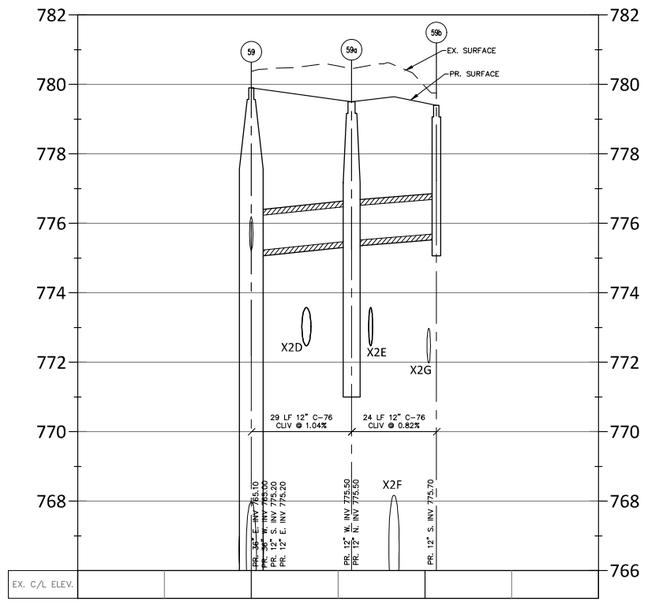
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SHEET NO. C05

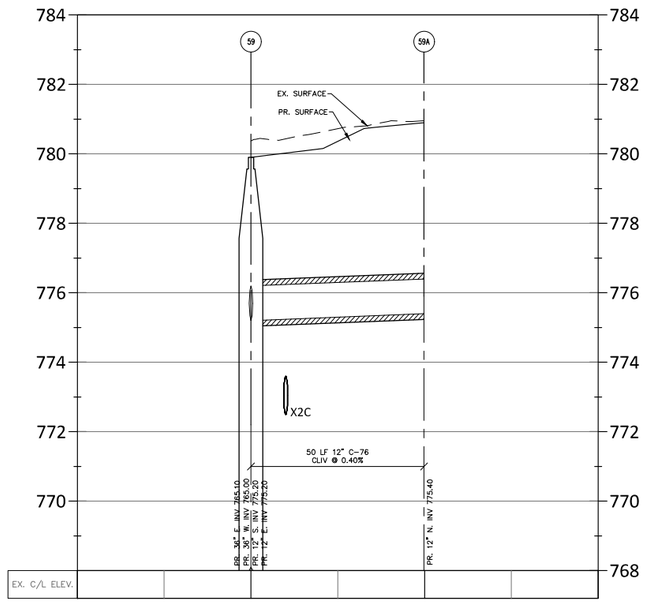
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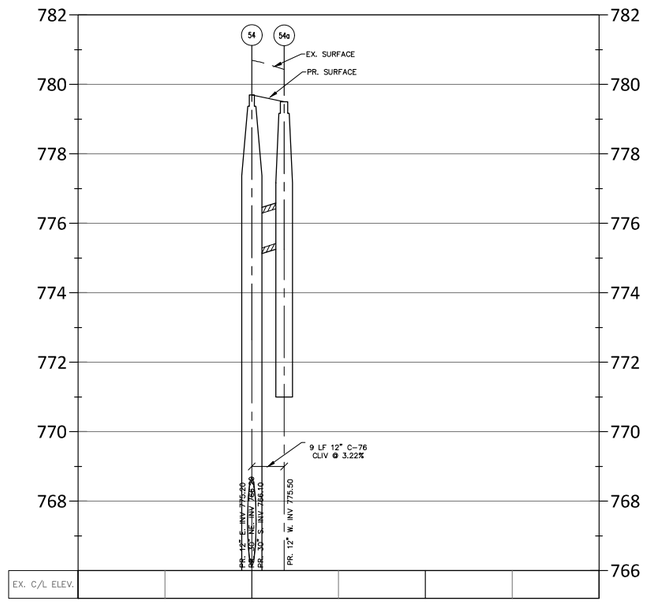












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SHEET
Sewer Profiles 1 of 3

811
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03-19-26	BIDS
03-27-26	ADDENDUM 1

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A. Panley

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

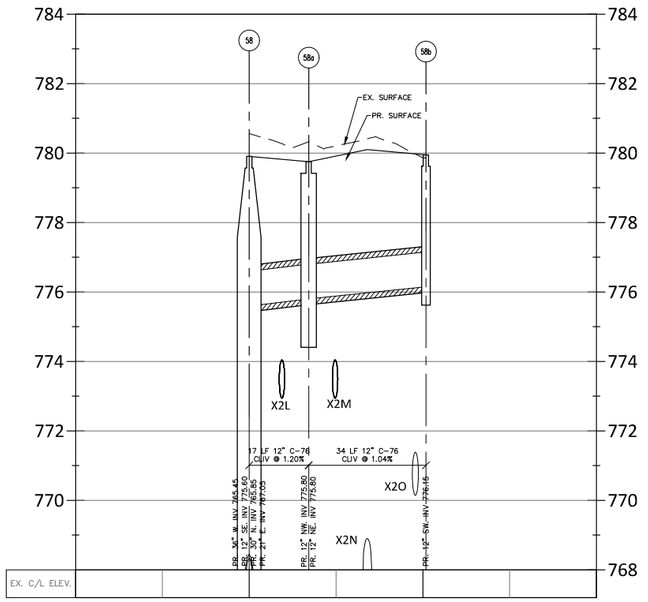
DATE:
January 5, 2026

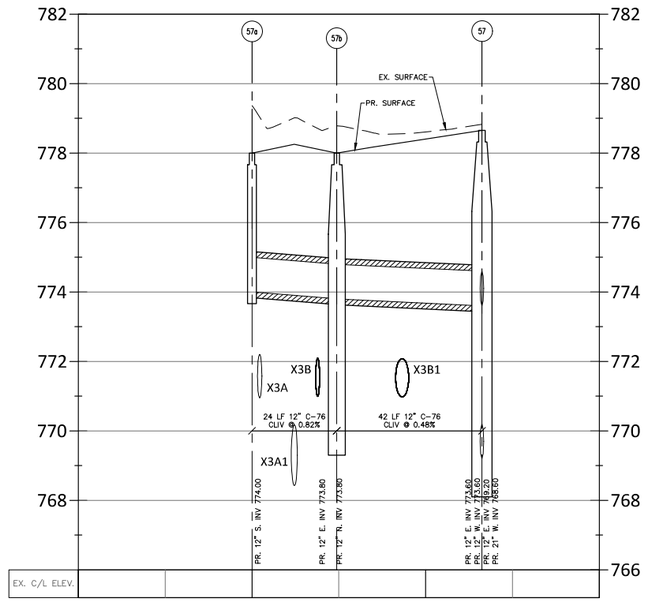
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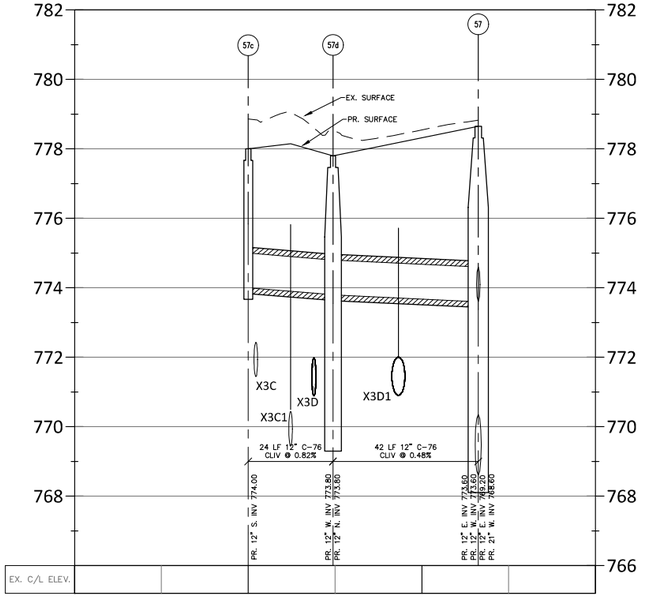
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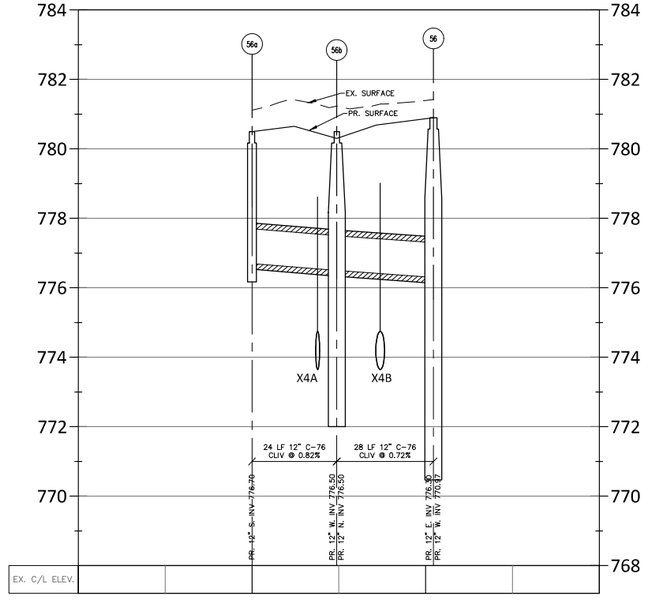
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SHEET
Sewer Profiles 2 of 3

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03-19-26	BIDS
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DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

DATE:
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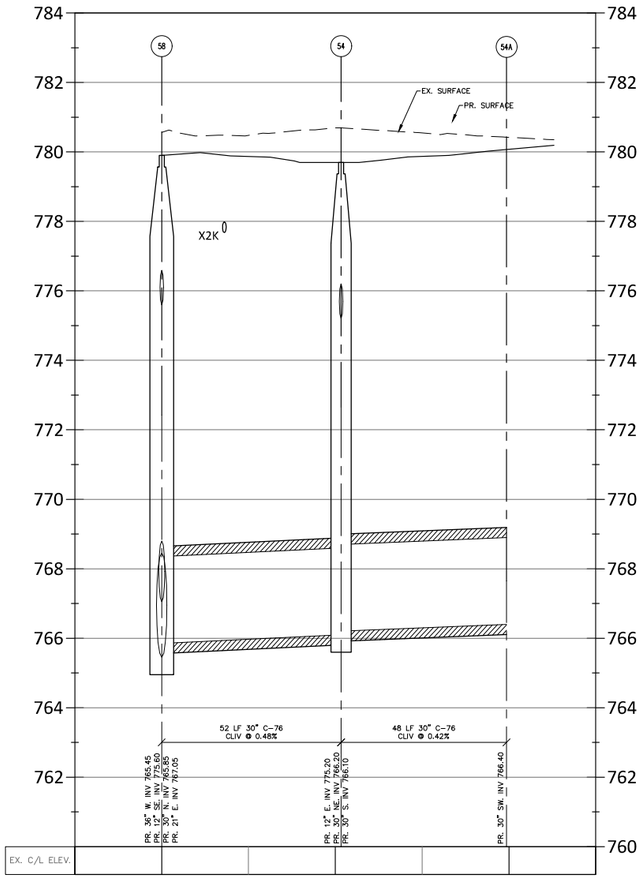
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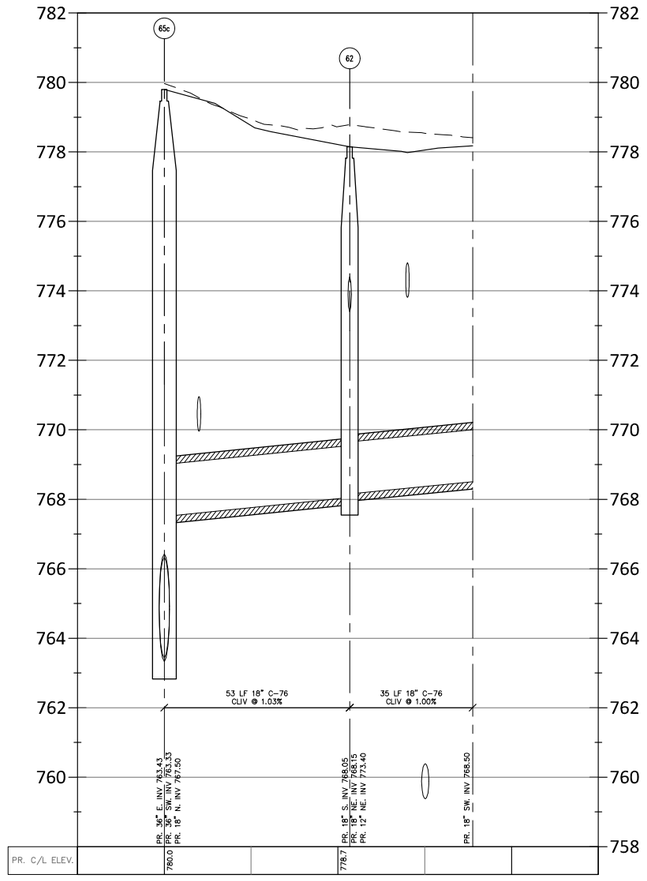
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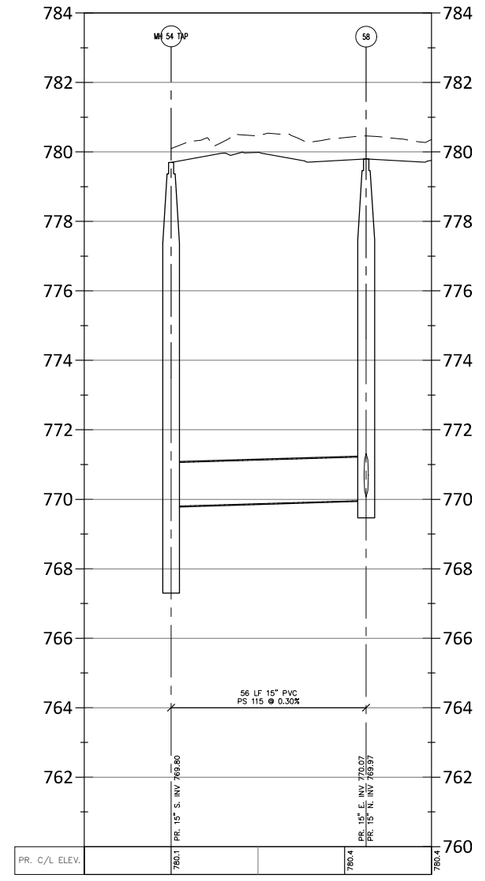
NFE JOB NO. **O979**

SHEET NO. **C07**

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SHEET
Sewer Profiles 3 of 3

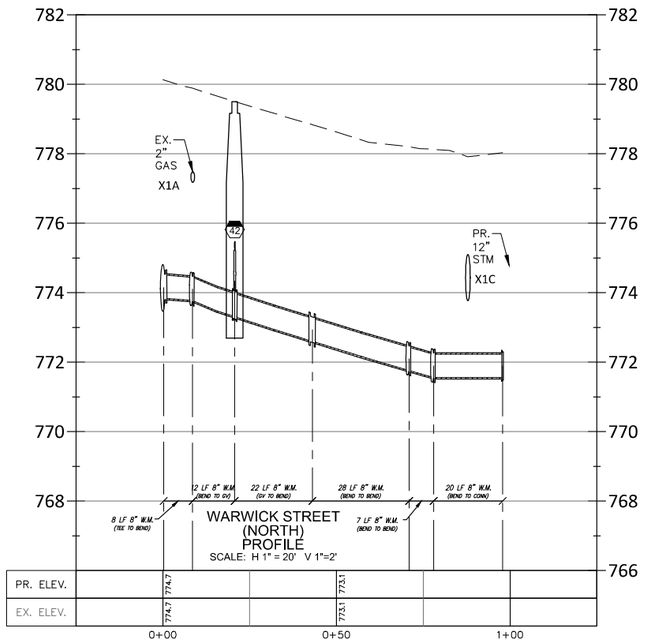
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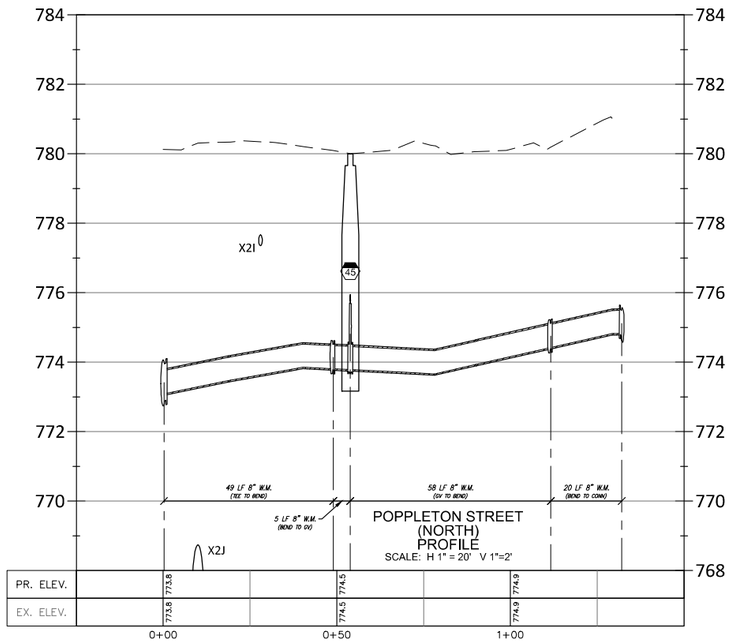
DRAWN BY:
A. Panley
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
DATE:
January 5, 2026
SCALE: 1" = 20' / 1"=2'
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NFE JOB NO. O979
SHEET NO. C08

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Storm Sewer Profile
(-0+25.00 - 1+25.00)



Storm Sewer Profile
(-0+25.00 - 1+50.00)

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Supplemental Water Main Profiles

811
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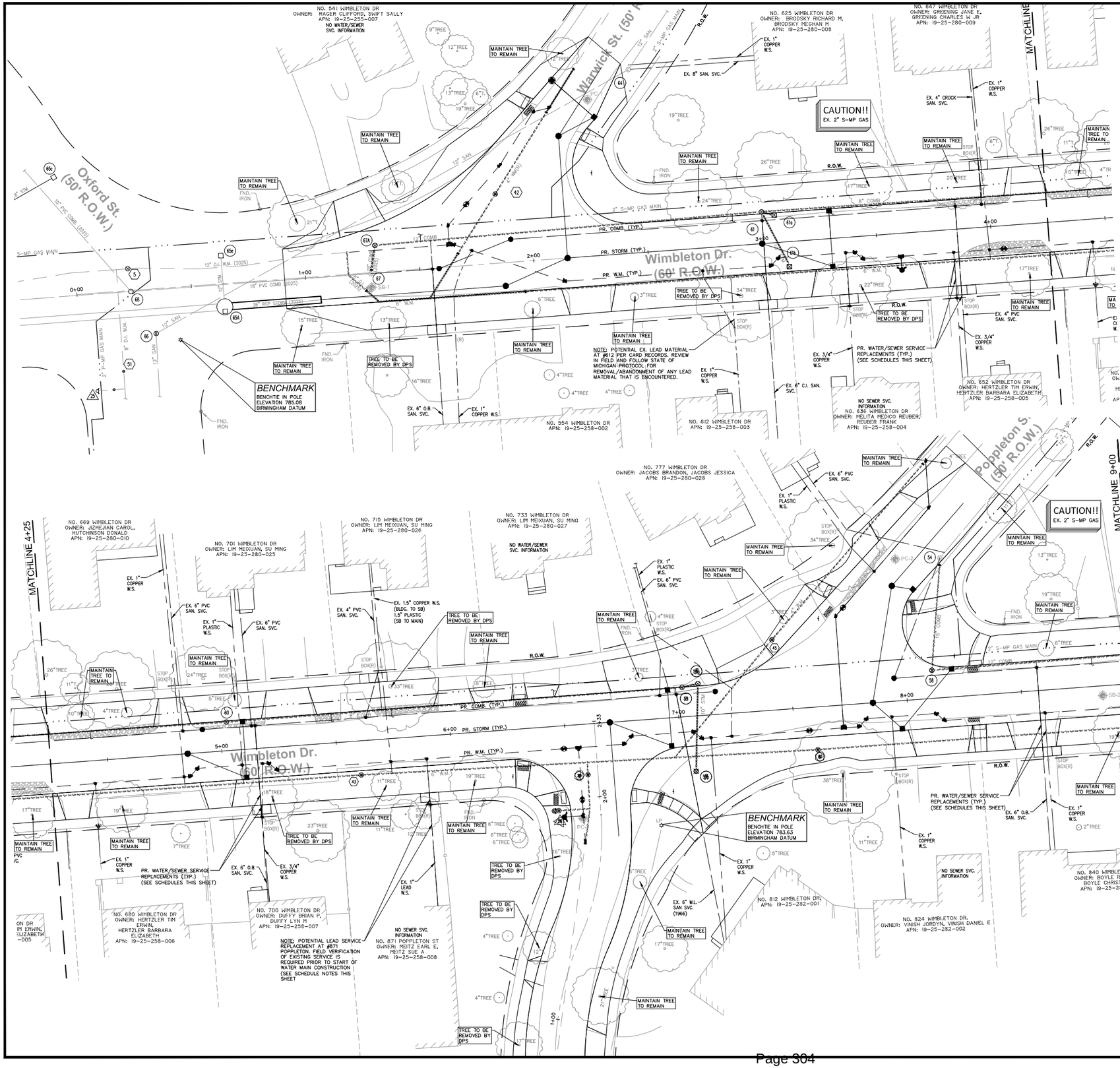
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DRAWN BY: A. Panley
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NFE JOB NO. O979
SHEET NO. C09

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Combined Sewer Service Schedule - Wimbleton Drive Sta. P.O.B. to 9+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Existing MH#1 to MH#2								
1+02	686 Oxford St.	12" Comb.	South	6"	Unknown	Active	Hot tap 6 dia. ring + sleeve	N/A
1+22	541 Wimbleton Dr	12" Comb.	North	6"	PVC	Active	Hot tap 6 dia. ring + sleeve	N/A
1+52	541 Wimbleton Dr	12" Comb.	North	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	50/0" (Estimated)
1+56	554 Wimbleton Dr	12" Comb.	South	6"	C.I.	Active	Tap to New Comb. Sewer Main	8/0"
1+98	541 Wimbleton Dr	12" Comb.	North	6"	Unknown	Capped	No Work	N/A
1+87	554 Wimbleton Dr	12" Comb.	South	6"	Unknown	Capped	No Work	N/A
2+56	625 Wimbleton Dr	12" Comb.	North	6"	Unknown	Capped	No Work	N/A
2+70	612 Wimbleton Dr	12" Comb.	South	6"	Unknown	Capped	No Work	N/A
2+88	612 Wimbleton Dr	12" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	15/0" (Estimated)
Existing MH#2 to MH#3								
3+01	612 Wimbleton Dr.	8" Comb.	South	6"	C.I.	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	41/0"
3+31	636 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	15/0" (Estimated)
3+85	652 Wimbleton Dr.	8" Comb.	South	4"	PVC	Active	Tap to New Comb. Sewer Main	41/0"
3+96	647 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No Work	N/A
3+98	647 Wimbleton Dr.	8" Comb.	North	4"	Crock	Active	Tap to New Comb. Sewer Main	20/0"
4+43	680 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert new Replace/Tap to New Comb. Sewer	41/0" (Estimated)
4+54	689 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No Work	N/A
4+55	680 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Capped	No Work	N/A
4+85	680 Wimbleton Dr.	8" Comb.	North	6"	PVC	Active	Tap to New Comb. Sewer Main	5/0
Existing MH#3 to MH#4								
5+13	701 Wimbleton Dr.	8" Comb.	South	6"	PVC	Likely Active	Insert new Replace/Tap to New Comb. Sewer	9/0"
5+32	700 Wimbleton Dr.	8" Comb.	South	6"	U.B.	Active	Tap to New Comb. Sewer Main	61/0"
5+73	700 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Capped	No Work	N/A
5+99	871 Poppleton St.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	15/0" (Estimated)
5+71	715 Wimbleton Dr.	8" Comb.	North	6"	PVC	Active	Tap to New Comb. Sewer Main	27/0
5+72	733 Wimbleton Dr.	8" Comb.	North	6"	Unknown	Capped	No Work	N/A
5+75	871 Poppleton St.	8" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	41/0" (Estimated)
6+16	733 Wimbleton Dr.	8" Comb.	South	6"	Unknown	Likely Active	Insert new Replace/Tap to New Comb. Sewer	21/0" (Estimated)
6+97	777 Wimbleton Dr.	8" Comb.	North	6"	PVC	Likely Active	Tap to New Comb. Sewer Main	16/0
6+98	812 Wimbleton Dr.	8" Comb.	South	6"	W.L.	Active	Tap to New Comb. Sewer Main	0/0"
Existing MH#4 to MH#5								
8+58	840 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Insert gate-Replace/Tap to New Comb. Sewer	40/0
8+80	840 Wimbleton Dr.	12" Comb.	South	6"	Unknown	Likely Active	Insert new Replace/Tap to New Comb. Sewer	40/0" (Estimated)

Water Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+25

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
3+88	647 Wimbleton Dr.	1" Copper	0	1"	N
South Side Addresses					
1+65	554 Wimbleton Dr.	1" Copper	21/1"	1"	N
2+73	612 Wimbleton Dr.	1" Copper*	3/1"	1"	N
3+76	636 Wimbleton Dr.	3/4" Copper	23/1"	1"	Y
3+83	652 Wimbleton Dr.	3/4" Copper	20/1"	1"	Y

***NOTE:** Records indicate that portion of existing lead service is still active from ex. main to original stop box. There is a copper service from existing main to a new stop box that is reinstated as a copper service to building.

Water Service Schedule - Bird Avenue Sta. 4+25 to 9+00

North Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
4+83	668 Wimbleton Dr.	1" Copper	0	1"	N
5+08	701 Wimbleton Dr.	1" Plastic	0	1"	N
5+73	715 Wimbleton Dr.	1.5" Copper	0	1.5"	N
Unknown	733 Wimbleton Dr.	Unknown (Assumed Material)	0	1"	N
7+23	777 Wimbleton Dr.	Plastic	21/1"	1"	N
7+80	928 Poppleton St	1" Plastic	35/1"	1"	N
South Side Addresses					
4+84	680 Wimbleton Dr.	1" Copper	4/1"	1"	N
5+37	700 Wimbleton Dr.	3/4" Copper	24/1"	1"	Y
5+89	878 Poppleton St.	1" Lead**	20 (Public)/1" 45 (Pvt.)/1"	1"	Y
7+15	812 Wibleton Dr.	1" Copper	8/1"	1"	N
7+93	824 Wimbleton Dr.	1" Copper	32/1"	1"	N
8+60	840 Wimbleton Dr.	1" Copper	9/1"	1"	N

****NOTE:** Records indicate that lead water services at #871 Poppleton St. likely exist between the ex. water main and the shut-off valve and possibly exists between the shut off valve and the house meter. In advance of any other construction, and incidental to other work for this contract, the Contractor shall perform limited excavation on both the sides of the shut-off valve near the ROW to confirm materials on each side, and shall be prepared to replace both "public" and "private" portions of the service line using applicable pay items for each. If required, replacement of the "private" portion of the service line between the ROW and house meter shall be paid using the following pay items: "New Water Service", 1", Private Property (Bored), PEX", and "Water Service Connection, 1", Connection at Meter, 871 Poppleton".

TREE PROTECTION NOTES

SEE TYPICAL TREE PROTECTION NOTES AND DETAILS ON SHEET C11. THE CONTRACTOR SHALL CONTACT CITY D.P.S. IN ADVANCE IF TREE TRIMMING IS REQUIRED PRIOR TO CONSTRUCTION TO AVOID DAMAGE TO EXISTING TREES THAT ARE PROPOSED TO REMAIN.

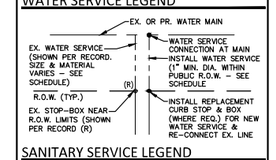
E.G.L.E. & O.C.W.R.C. SEWER PERMIT NOTES

ALL PROPOSED COMBINED SEWER MAINS REQUIRE AN APPROVED PART 41 PERMIT FROM MICHIGAN E.G.L.E. AND AN OAKLAND COUNTY SEWER INSPECTION PERMIT.

UTILITY NOTE

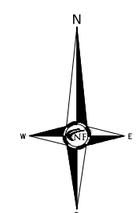
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWING WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

WATER SERVICE LEGEND



SANITARY SERVICE LEGEND





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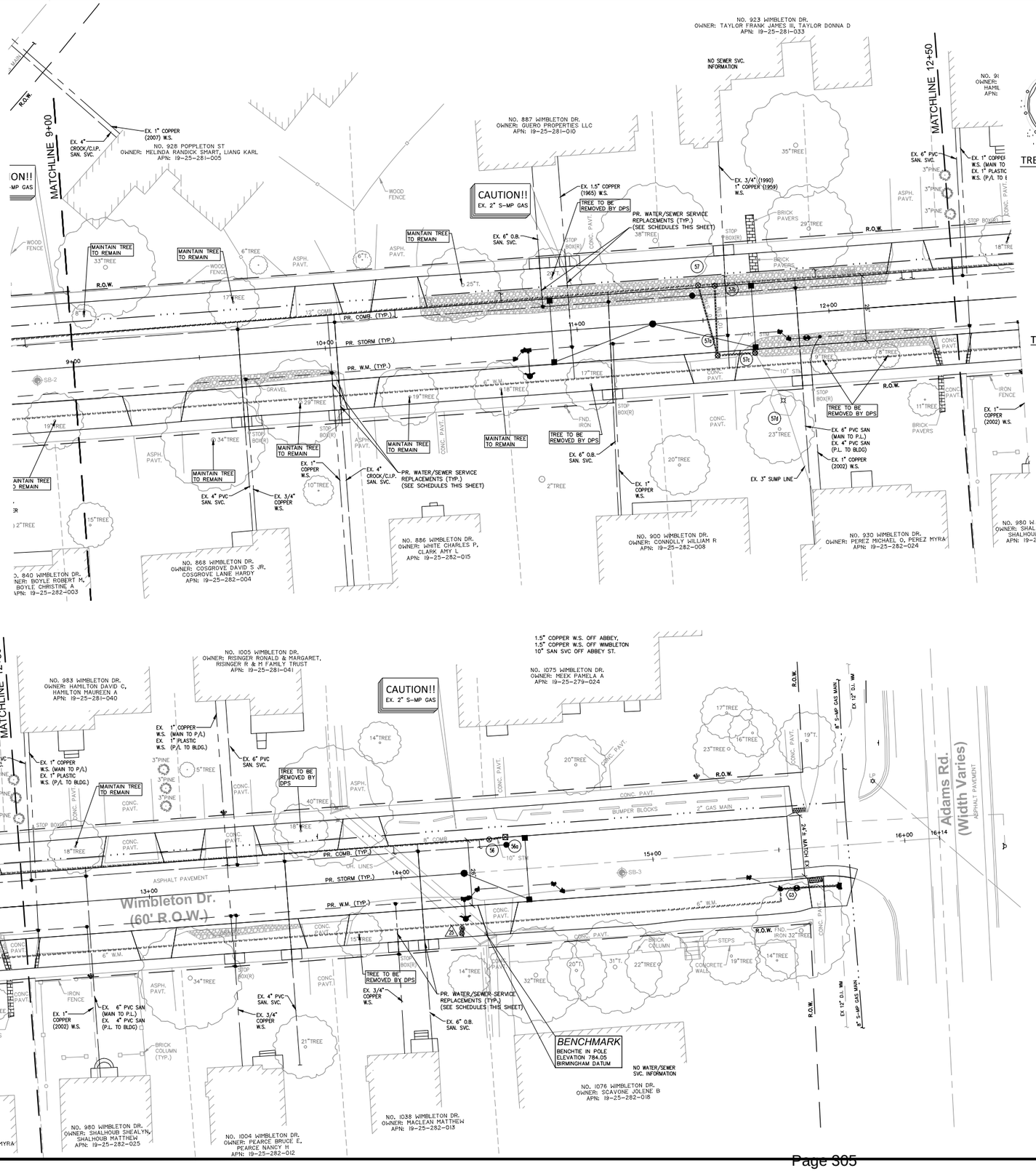
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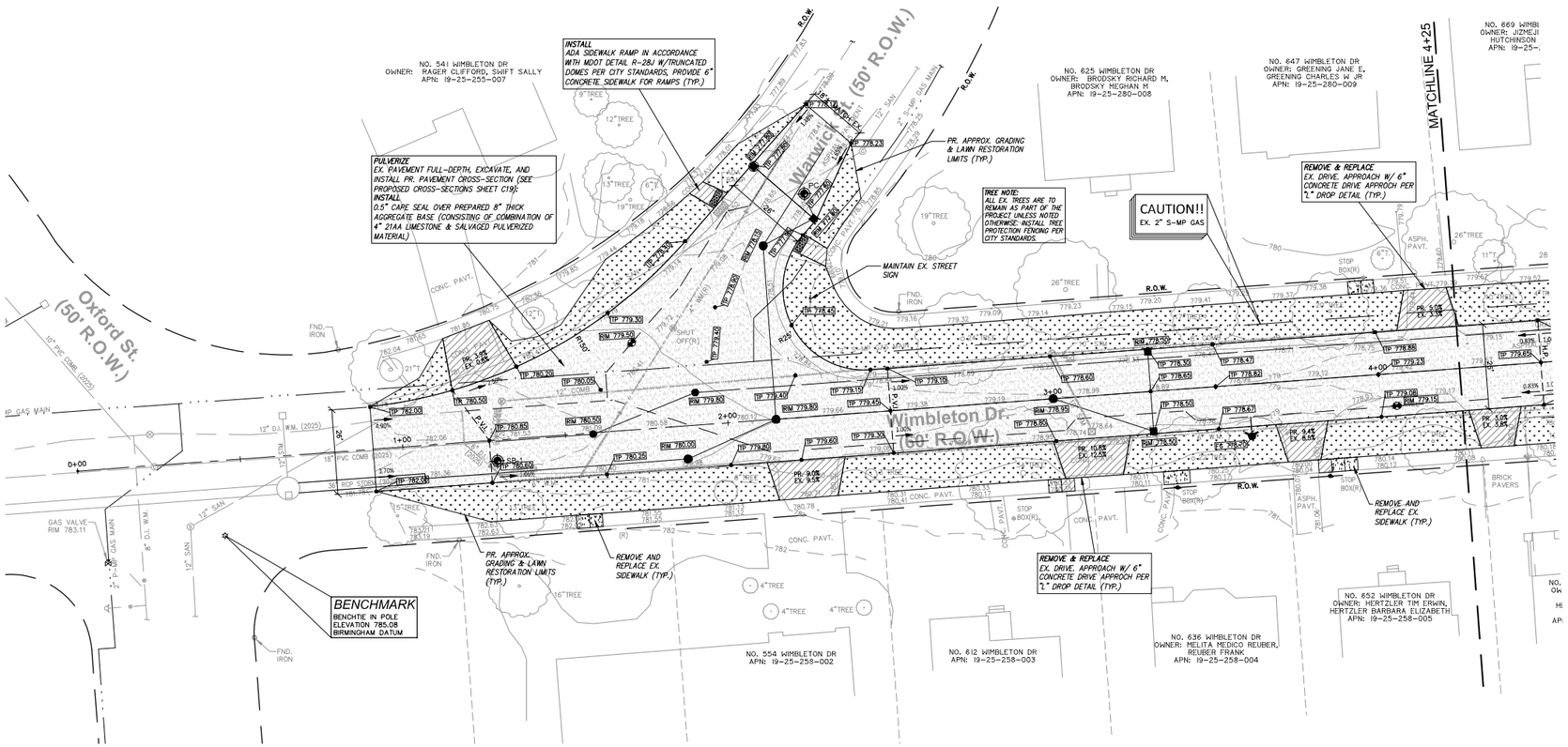
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'

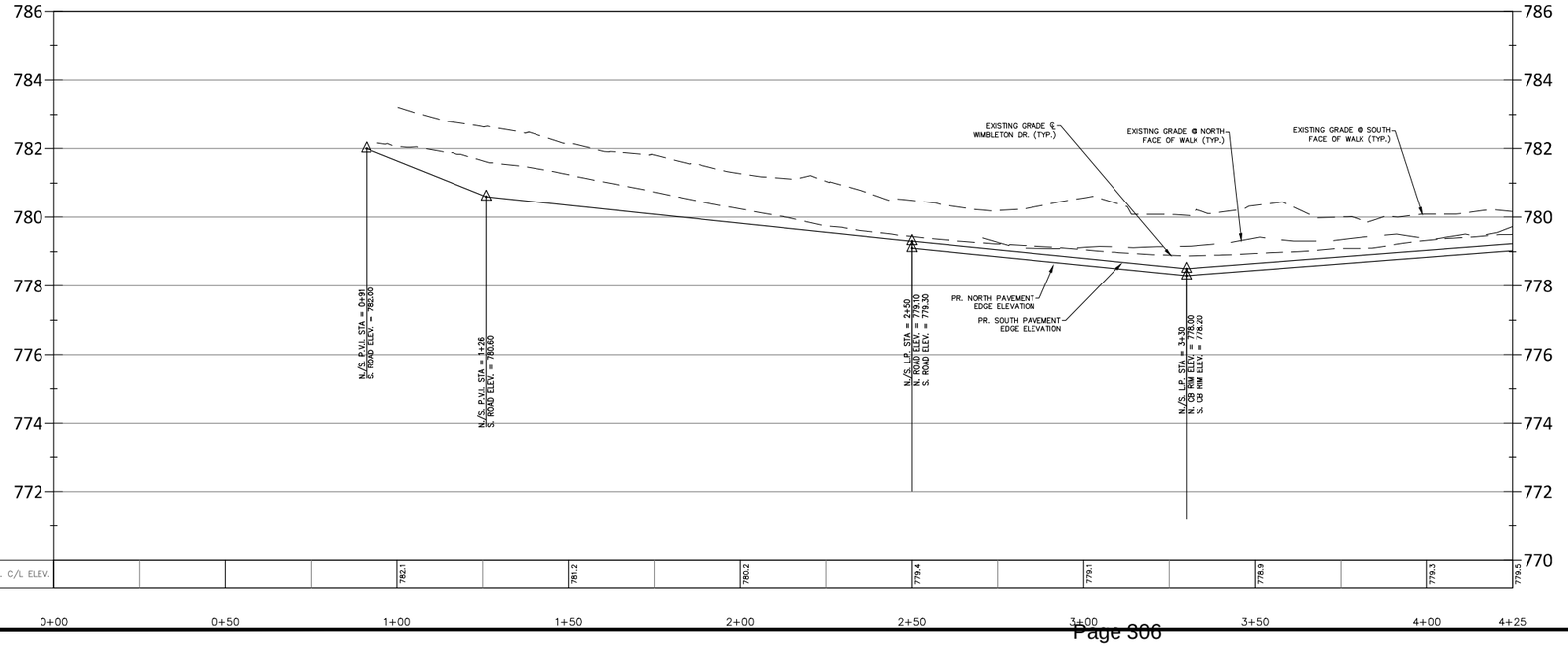
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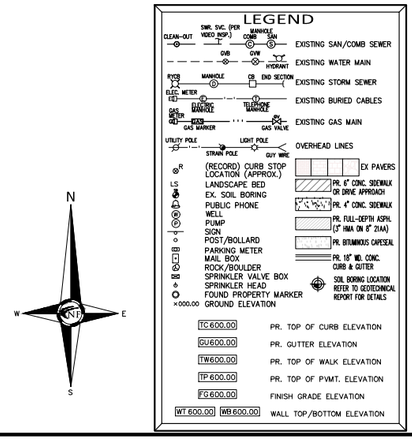
NFE JOB NO. O979
SHEET NO. C10

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NO. 923 WIMBLETON DR.
OWNER: TAYLOR FRANK JAMES III, TAYLOR DONNA D
APN: 19-25-281-033
NO SEWER SVC. INFORMATION
NO. 887 WIMBLETON DR.
OWNER: GUERO PROPERTIES LLC
APN: 19-25-281-010
NO. 928 POPPLETON ST
OWNER: MELINDA RANDICK SHART, LIANG KARL
APN: 19-25-281-005
MATCHLINE 9+00
MATCHLINE 12+50
CAUTION!! EX. 2" S-MP GAS
EX. 1" COPPER (2007) W.S.
EX. 4" CROCK/C.I.P. SAN. SVC.
EX. 1.5" COPPER (1965) W.S.
EX. 3/4" (1990) 1" COPPER (1959) W.S.
EX. 6" PVC SAN. SVC.
EX. 1" COPPER W.S. (MAIN TO EX. 1" PLASTIC W.S. (P/L TO
TREE TO BE REMOVED BY DPS
PR. WATER/SEWER SERVICE REPLACEMENTS (TYP.) (SEE SCHEDULES THIS SHEET)
EX. 6" O.B. SAN. SVC.
MAINTAIN TREE TO REMAIN
R.O.W.
PR. COMB. (TYP.)
PR. STORM (TYP.)
PR. W.M. (TYP.)
EX. 6" PVC SAN (MAIN TO P.L.) EX. 4" PVC SAN (P.L. TO BLDG)
EX. 1" COPPER (2002) W.S.
EX. 3" SUMP LINE
EX. 4" PVC SAN. SVC.
EX. 3/4" COPPER W.S.
EX. 1" COPPER W.S.
NO. 886 WIMBLETON DR.
OWNER: WHITE CHARLES P, CLARK AMY L
APN: 19-25-282-015
NO. 900 WIMBLETON DR.
OWNER: CONNOLLY WILLIAM R
APN: 19-25-282-008
NO. 930 WIMBLETON DR.
OWNER: PEREZ MICHAEL O, PEREZ MYRA
APN: 19-25-282-024
NO. 868 WIMBLETON DR.
OWNER: COSGROVE DAVID S JR, COSGROVE LANIE HARDY
APN: 19-25-282-004
NO. 840 WIMBLETON DR.
OWNER: BOYLE ROBERT M, BOYLE CHRISTINE A
APN: 19-25-282-003
WOOD FENCE
ASPH. PAVT.
CONC. PAVT.
BRICK PAVERS
GRAVEL
IRON FENCE
BRICK COLUMN (TYP.)
STOP BOX(R)
SB-2
SB-3
FND. IRON
10" SAN
6" W.M.
OH. LINES
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57b
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STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Paving and Grading Plan
Sta. P.O.B. to Sta. 4+25

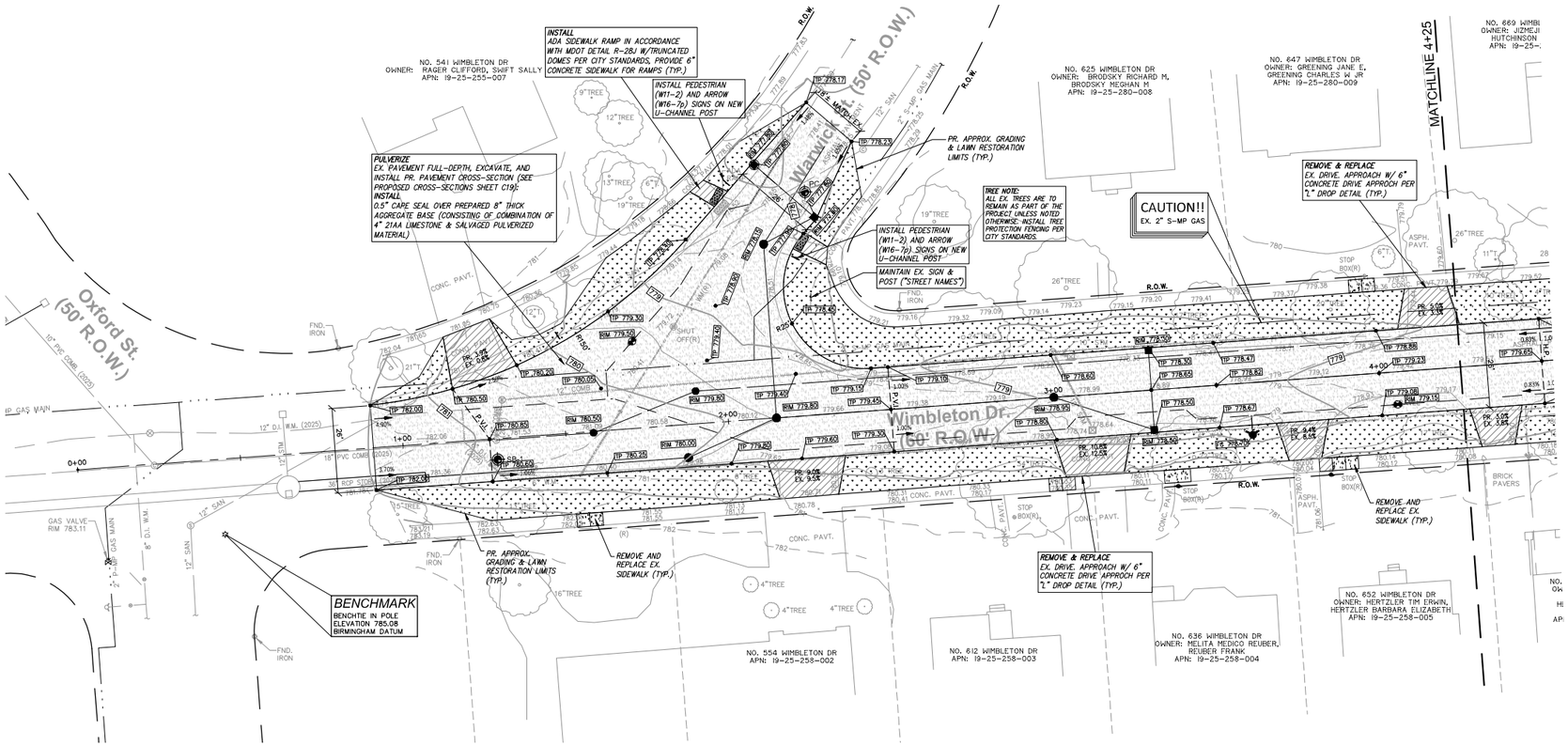
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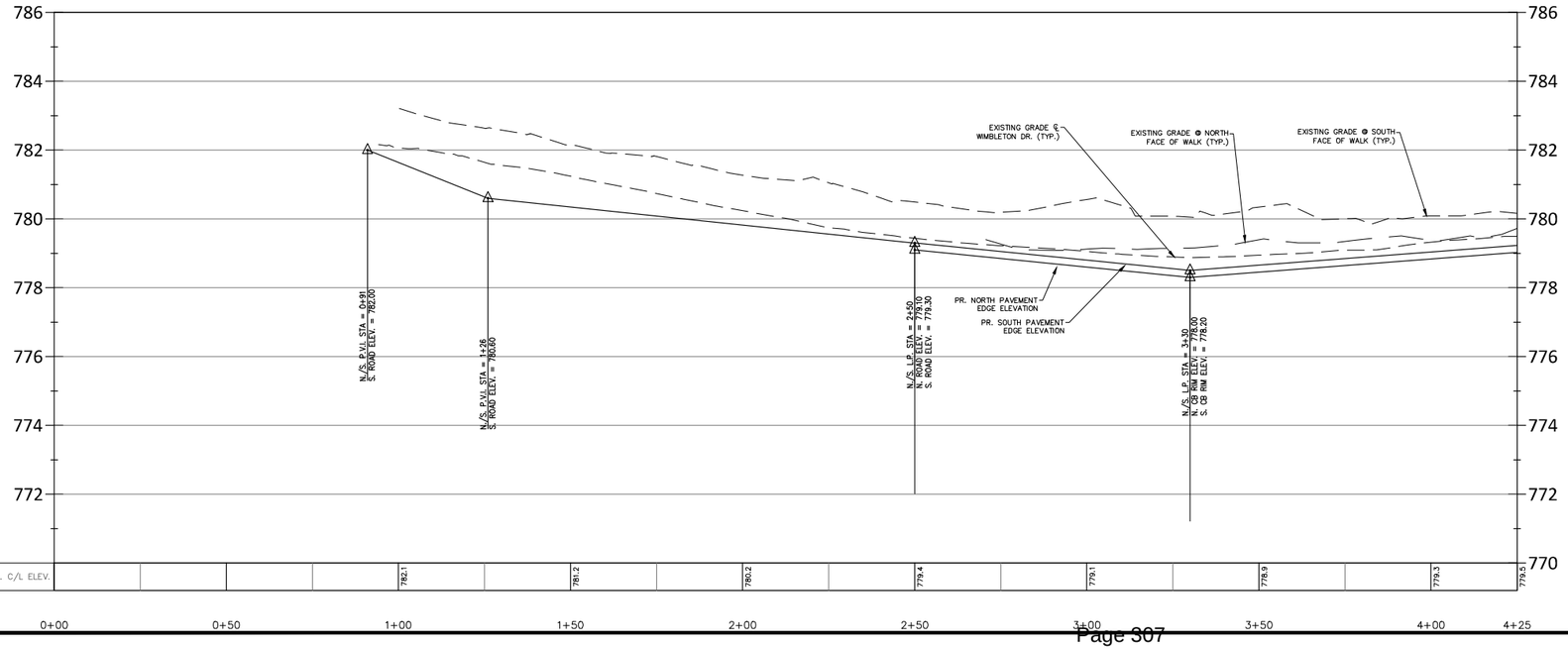
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
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SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O979
SHEET NO. C12

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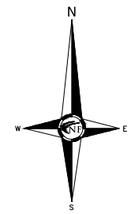
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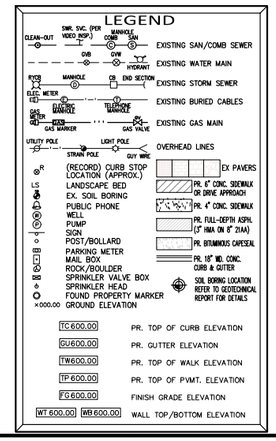


SIGN DETAIL W16-7p DETAIL
(30" x 18")



SIGN DETAIL-R1-1
(30" x 30")





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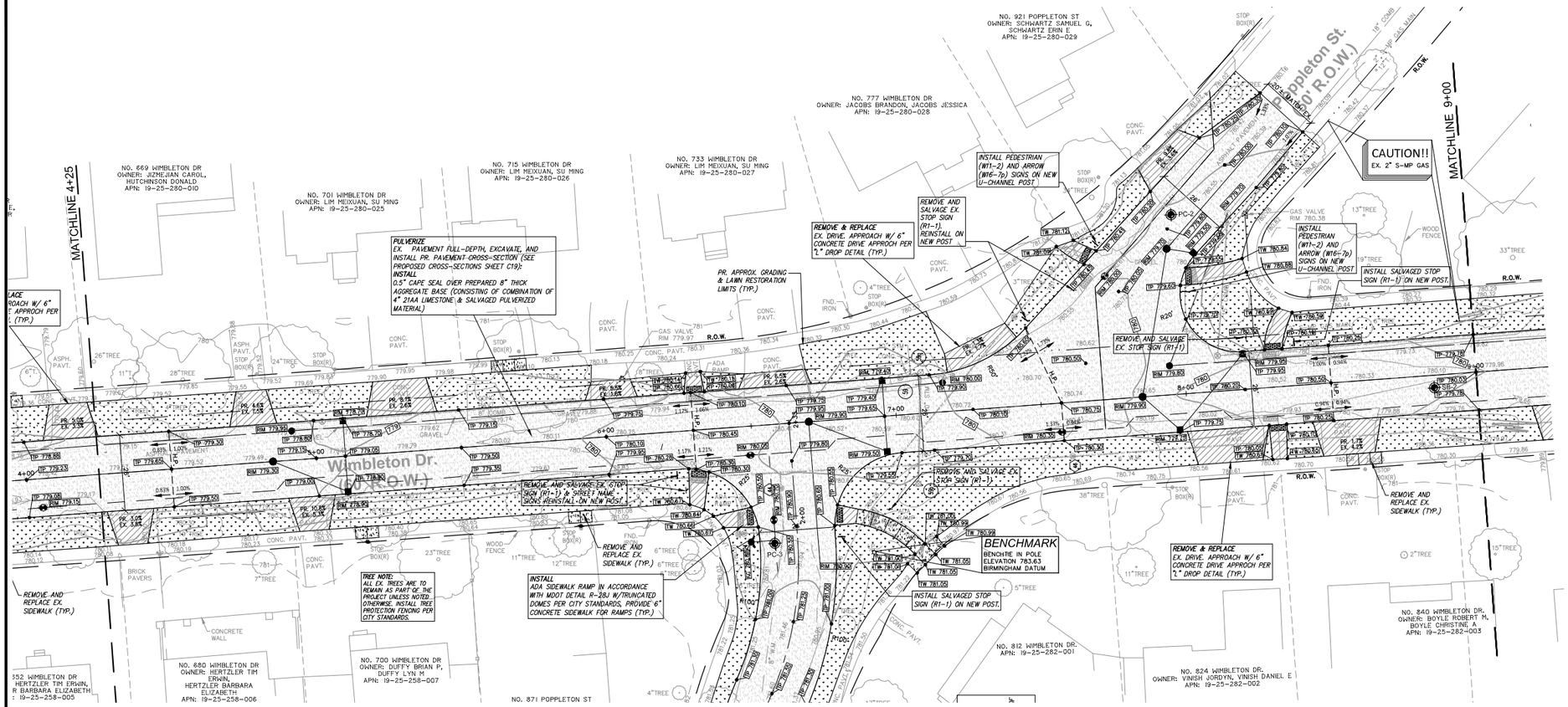
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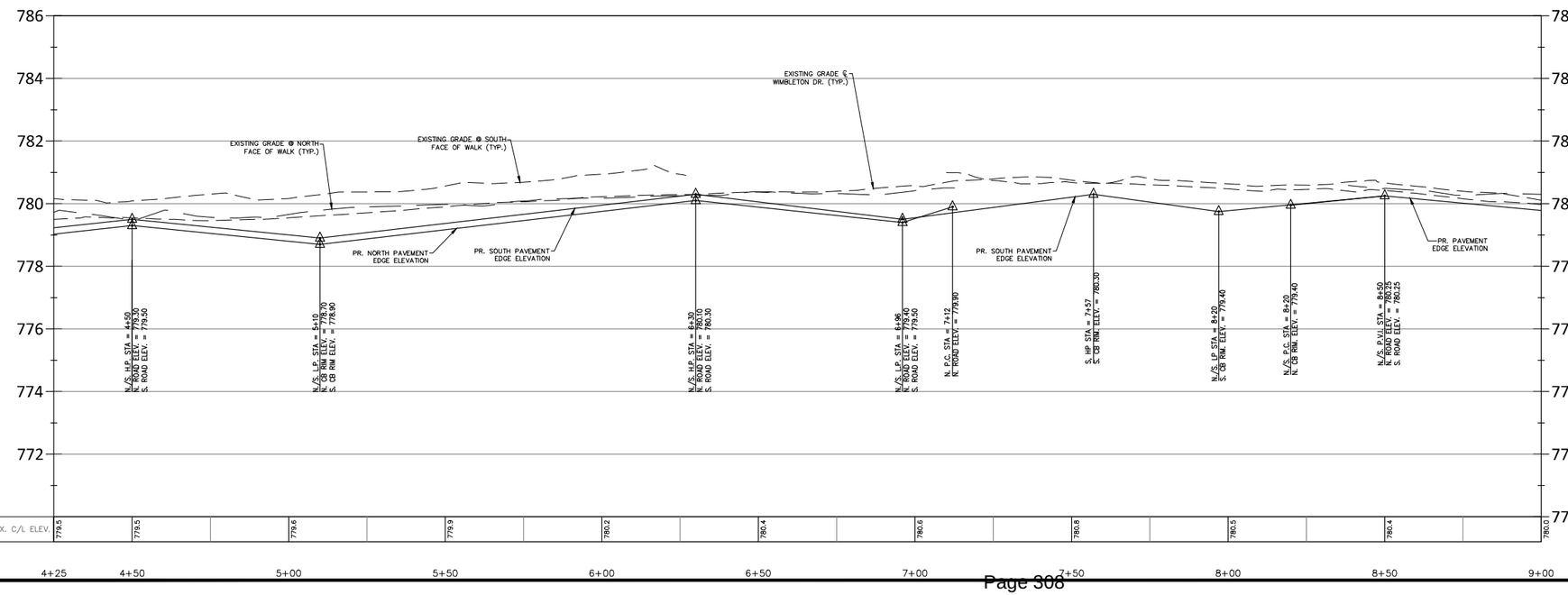
DATE	ISSUED/REVISED
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05-11-26	REVISED SIGNS

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SIGN DETAIL W11-2 DETAIL
(30" x 30")

SIGN DETAIL W16-7p DETAIL
(30" x 18")

SIGN DETAIL-R1-1
(30" x 30")

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX. PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 6" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- GROUND ELEVATION

TC 600.00	PR. TOP OF CURB ELEVATION
GU 600.00	PR. GUTTER ELEVATION
TW 600.00	PR. TOP OF WALK ELEVATION
TP 600.00	PR. TOP OF PVMT. ELEVATION
FG 600.00	FINISH GRADE ELEVATION
WT 600.00 / WB 600.00	WALL TOP/BOTTOM ELEVATION

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PROJECT LOCATION
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SHEET
Paving, Grading, and Sign Plan Sta. 4+25 to Sta. 9+00

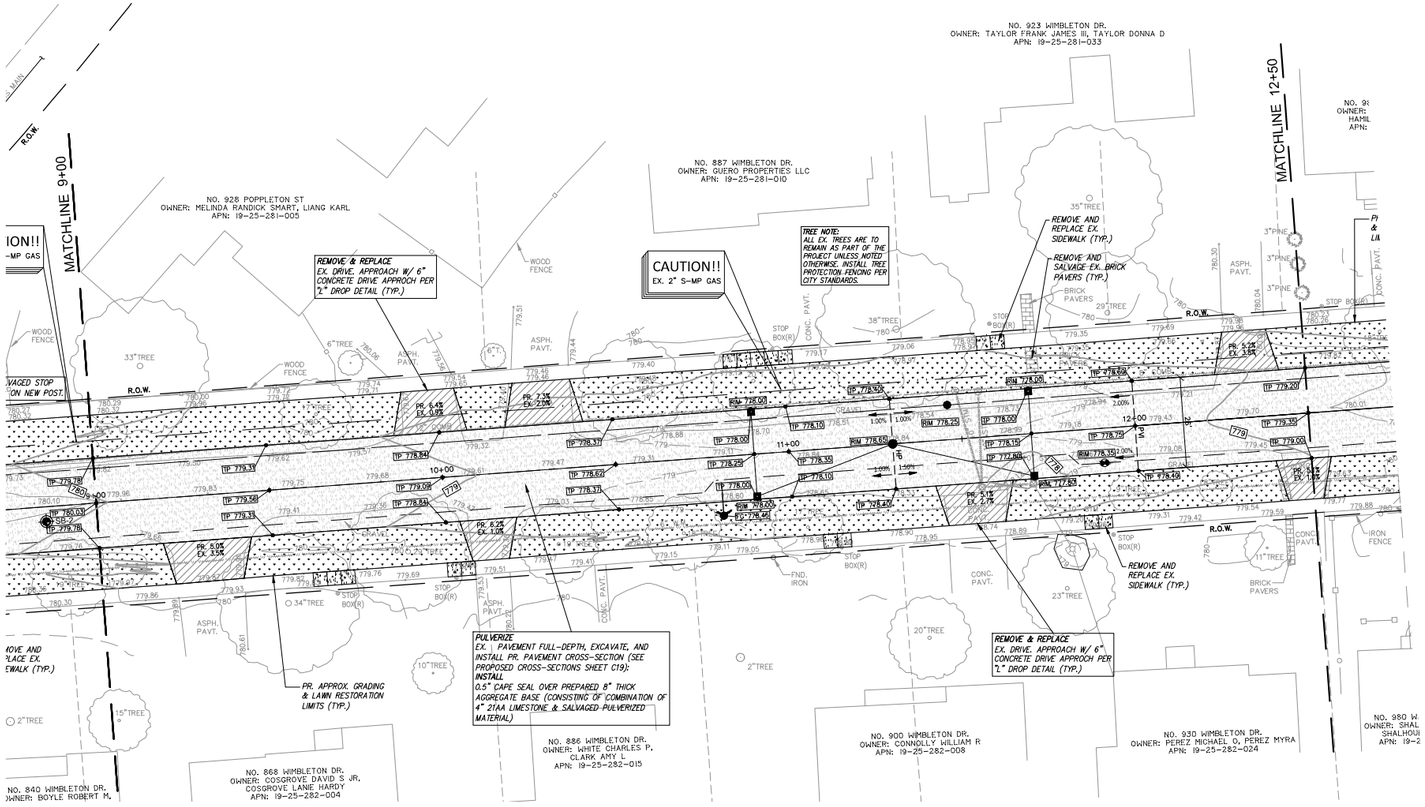
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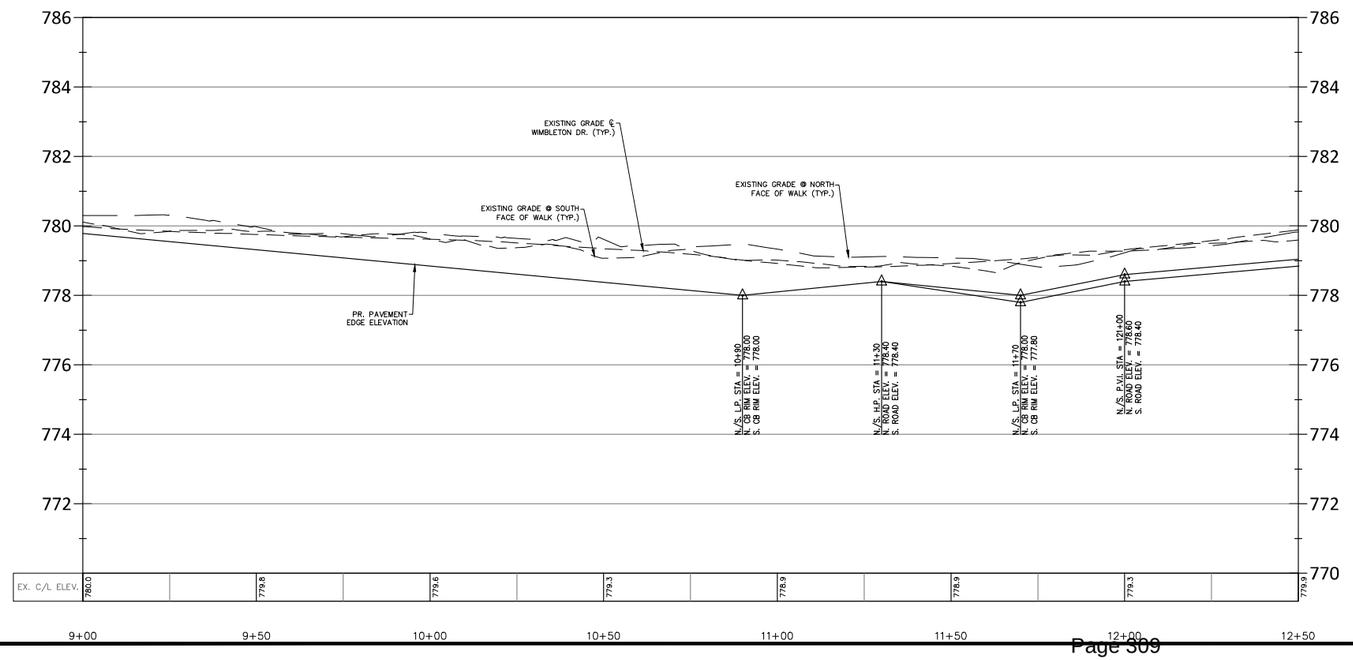
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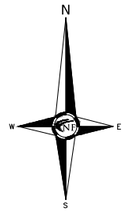
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NFE JOB NO. O979
SHEET NO. C13

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LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX. PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
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SHEET
Paving, Grading, and Sign Plan Sta. 9+00 to Sta. 12+50

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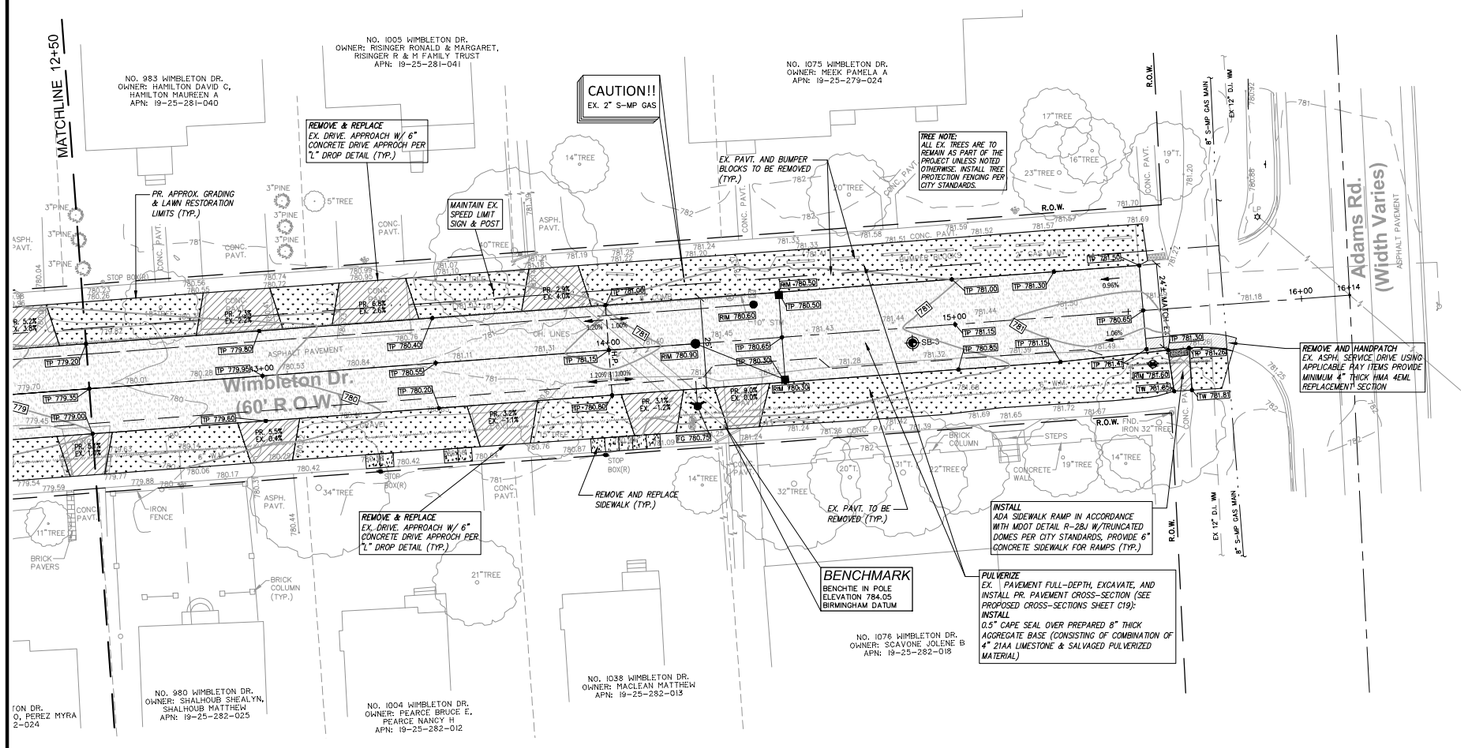
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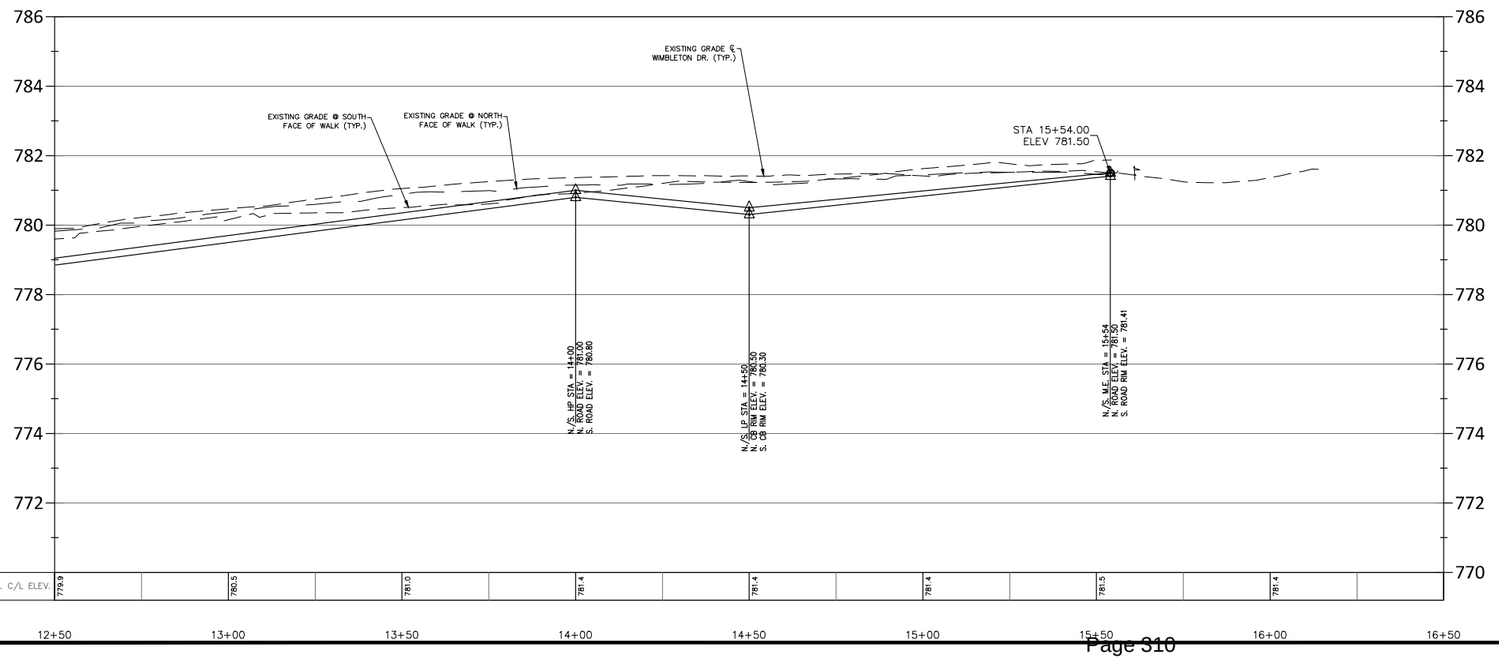
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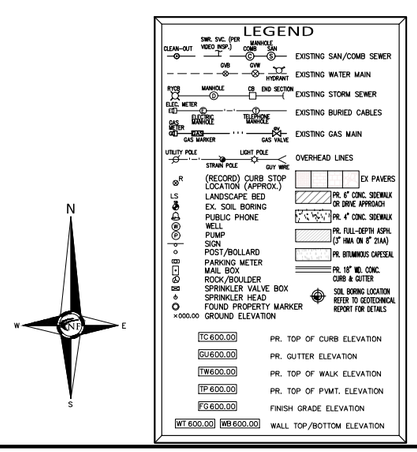
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NFE JOB NO. O979
SHEET NO. C14

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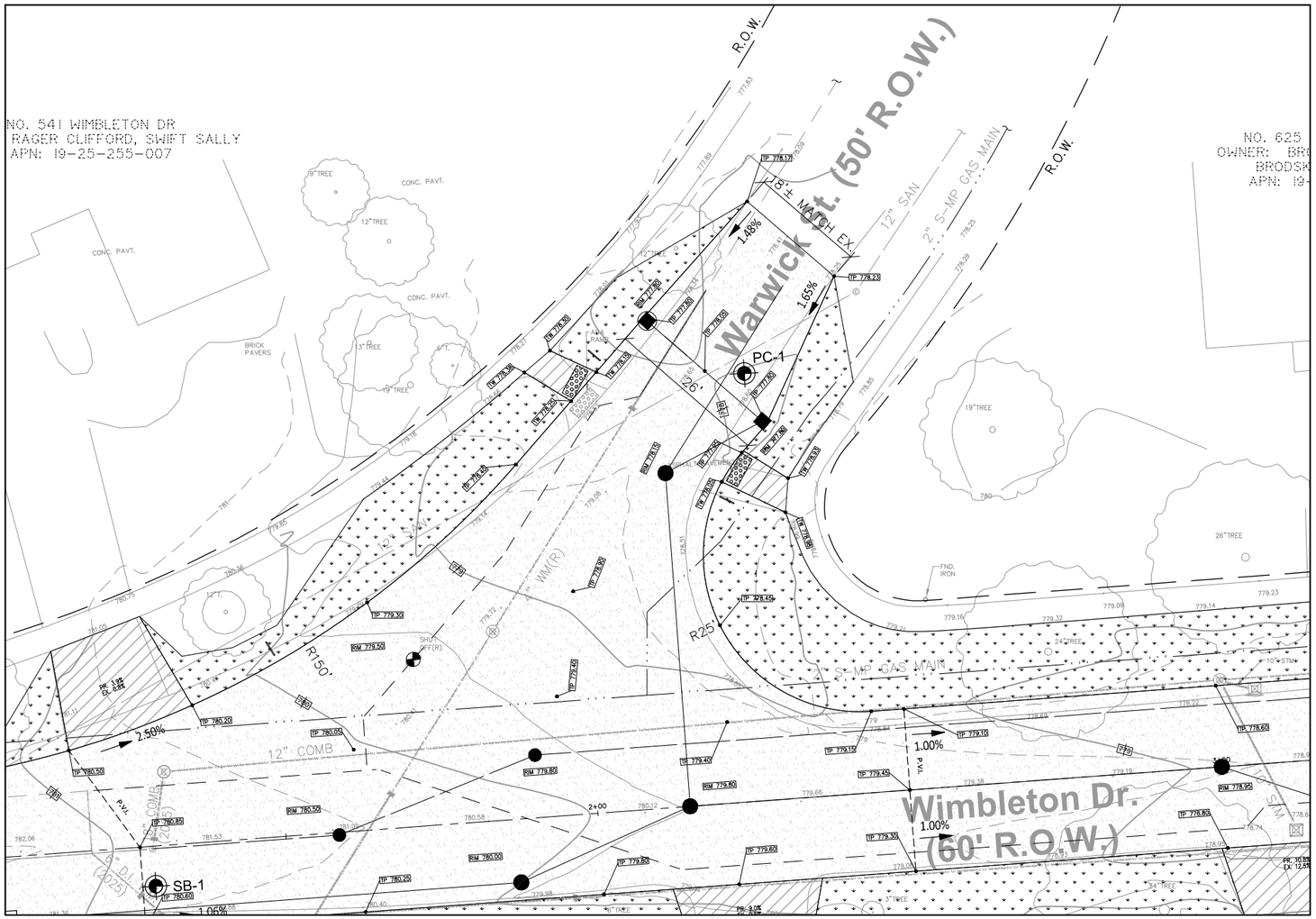
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DATE	ISSUED/REVISED
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NFE JOB NO. O979
SHEET NO. C15

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WIMBLETON DRIVE AND WARWICK STREET INTERSECTION

ADA COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL OF ¼ INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

THE CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12.

WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').

DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING REQUIREMENTS:

LANDING SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

LANDINGS SHALL BE PROVIDED AT THE TOPS OF CURB RAMPS. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.

RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.

LEGEND

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- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
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- SPRINKLER VALVE BOX
- SPRINKLER HEAD
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- ×000.00 GROUND ELEVATION
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- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
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- PR. BITUMINOUS CAPESEAL
- PR. 18" MD. CONC. CURB & GUTTER
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- TC 600.00 PR. TOP OF CURB ELEVATION
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- TP 600.00 PR. TOP OF PVMT. ELEVATION
- FG 600.00 FINISH GRADE ELEVATION
- WT 600.00 WB 600.00 WALL TOP/BOTTOM ELEVATION

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CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Intersection Grading Detail - Wimbleton & Warwick

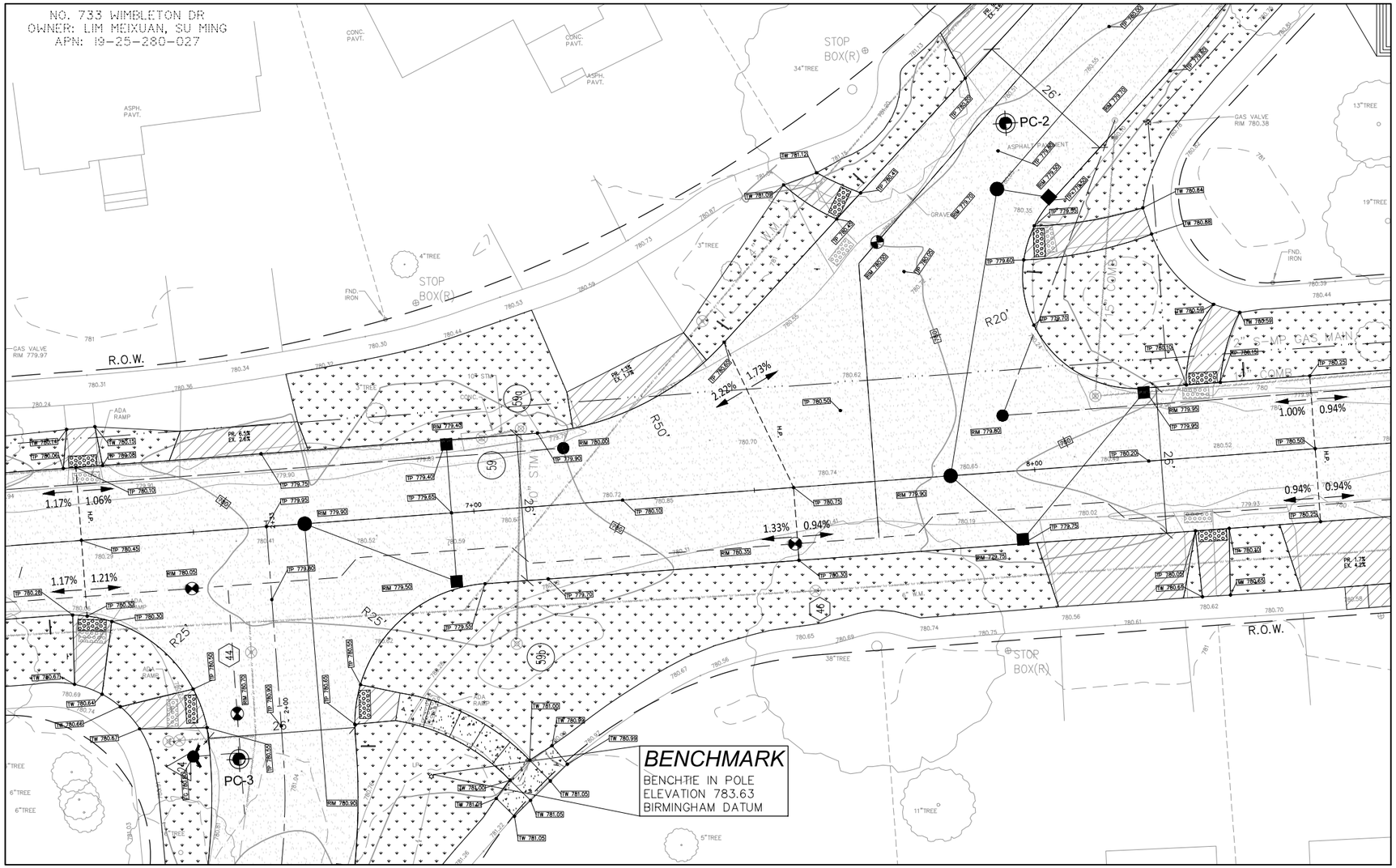
Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1
05-11-26	REVISED SIGNS

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

NFE JOB NO. O979
SHEET NO. C17

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WIMBLETON DRIVE AND POPPLETON STREET INTERSECTION

ADA COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL OF ¼ INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

THE CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48.

THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12.

WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10.

THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.

COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.

CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').

DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

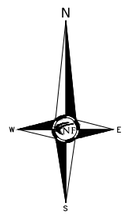
RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING REQUIREMENTS:

LANDING SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

LANDINGS SHALL BE PROVIDED AT THE TOPS OF CURB RAMPS. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.

RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.



LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX PAVERS
- PR. 6" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" MIN ON 6" DIA)
- PR. BITUMINOUS DRIVEWAY
- PR. 18" WD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- (RECORD) CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION
- TC 600.00 PR. TOP OF CURB ELEVATION
- GU 600.00 PR. GUTTER ELEVATION
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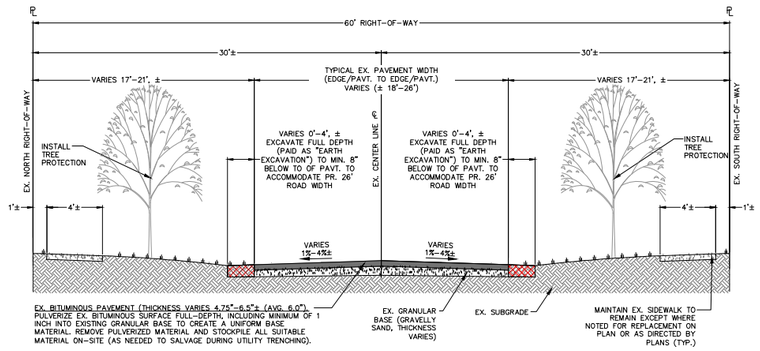
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

NFE JOB NO. O979
SHEET NO. C18

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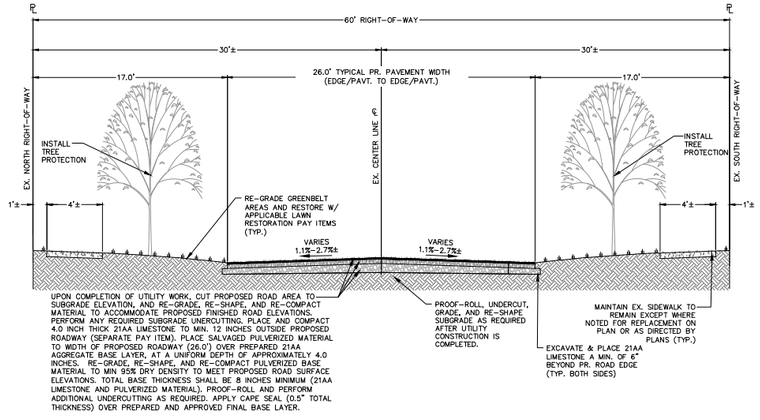
NOTE:
PROVIDE 6" PERFORATED UNDERDRAIN AROUND STRUCTURE AT 2.5' BELOW RIM

UNDERDRAIN DETAIL
N.T.S.



EXISTING BITUMINOUS PAVEMENT SECTION
N.T.S.
WIMBLETON DRIVE
APPLIES TO: STA. P.O.B. TO STA. P.O.E

NOTE: REFER TO GEOTECHNICAL INVESTIGATION REPORT BY G2 CONSULTING GROUP, DATED 11/12/25, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



PROPOSED BITUMINOUS PAVEMENT SECTION
N.T.S.
WIMBLETON DRIVE
APPLIES TO: STA. P.O.B. TO STA. P.O.E

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Notes and Details

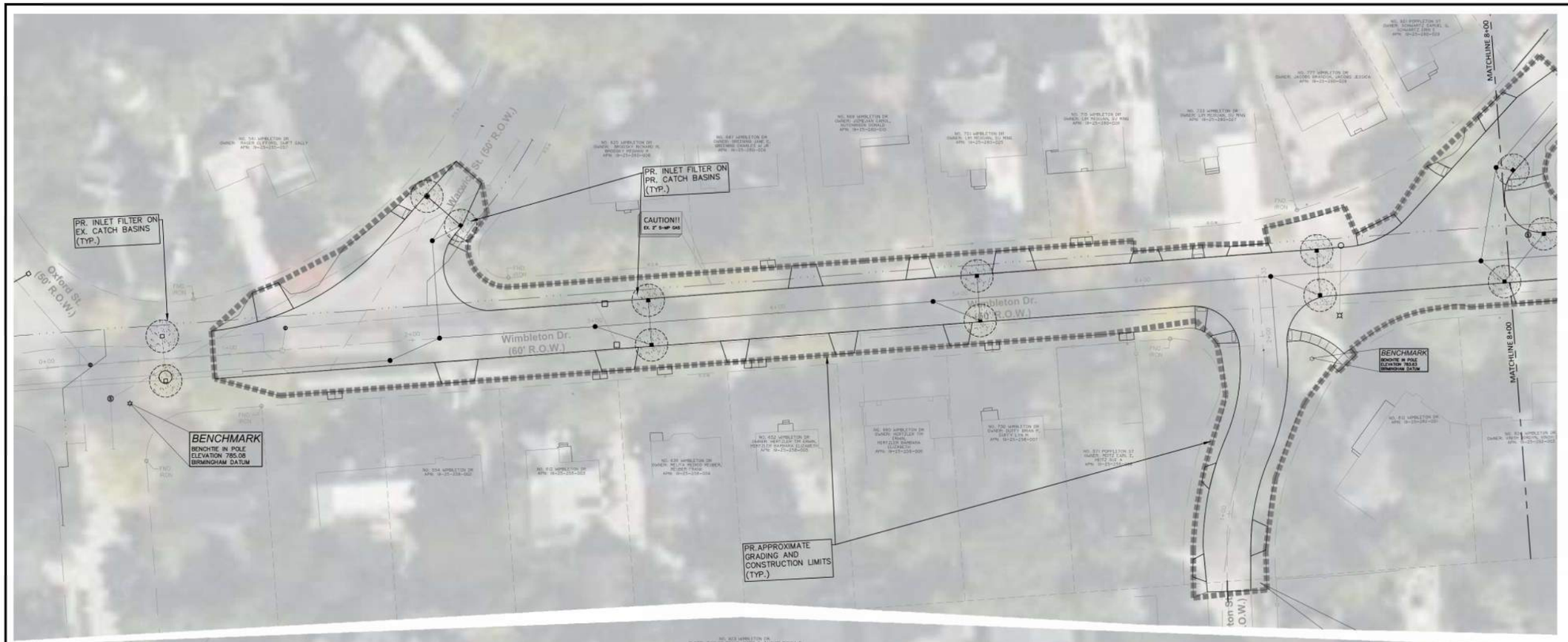
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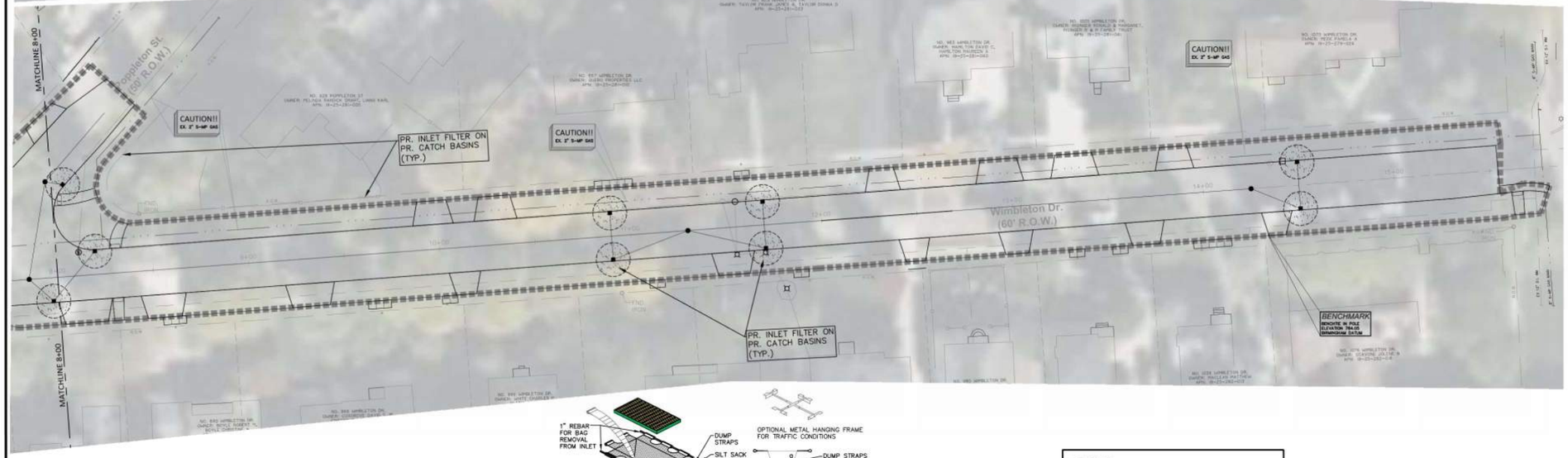
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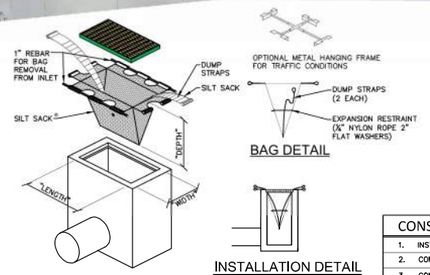
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DATE: January 5, 2026
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NFE JOB NO. O979
SHEET NO. C19

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SILT SACK FILTER DETAIL

BAG DETAIL

INSTALLATION DETAIL

LEGEND

- INDICATES APPROXIMATE LIMITS OF EARTH DISTRUPTION
- INDICATES SILT SACK INLET FILTER INSTALLED AND MAINTAINED IN EXISTING CATCH BASIN (IN ACCORDANCE WITH CITY SPECIFICATIONS AND O.C.W.R.C. DETAILS)

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE UNDERGROUND CONSTRUCTION	2ND MONTH
3.	COMPLETE ROAD CONSTRUCTION	3RD MONTH
4.	COMPLETE LANDSCAPE RESTORATION	4TH MONTH
5.	REMOVE SOIL EROSION MEASURES	5TH MONTH

NOTES

A DISTANCE OF APPROXIMATELY 0.25 MI TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 2.1 ACRES.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 59 (URBAN LAND), 60B (URBAN LAN-MARTELLE COMPLEX, 0 TO 8 PERCENT SLOPES), 62B (URBAN LAND-SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES), AND ShbuoB (SHEBEON-URBAN LAND COMPLEX, 0 TO 4 PERCENT SLOPES) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

SOIL EROSION CONTROL NOTES

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

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DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 30'
30 15 0 15 30 45
NFE JOB NO. O979
SHEET NO. C20

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CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL SOIL EROSION MEASURES	1ST MONTH
2.	COMMENCE & COMPLETE UNDERGROUND CONSTRUCTION	1ST MONTH
3.	COMPLETE ROUGH GRADING AND INSTALLATION OF STORM OUTFALL SETTLING POOL	2ND MONTH
4.	COMPLETE FINAL GRADING AND INSTALL GREENBELT RESTORATION MEASURES	2ND/3RD MONTH
5.	REMOVE SOIL EROSION MEASURES	4TH MONTH

STREET CLEANING SCHEDULE (MINIMUM REQUIREMENT)

TASKS	SUN	MON	TUE	WED	THU	FRI	SAT
SCRAPE STREETS	X	X	X	X	X	X	X
SWEEP STREETS				X			

SOIL EROSION CONTROL

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

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DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANY GAS SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANIES COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MDOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.



LOCATION MAP
1" = 1,200'

NOTES

WORK IS PROPOSED WITHIN THE CITY OF BIRMINGHAM, INCLUDING THE WOODWARD AVENUE PUBLIC R.O.W. (MDOT JURISDICTION), AND WITHIN PRIVATE PARCEL #35980 WOODWARD AVENUE (P.I.D. 19-25-177-018) WITHIN BLOOMFIELD TOWNSHIP.

A DISTANCE OF APPROXIMATELY 0 FEET TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS APPROXIMATELY 4,125 S.F. (0.095 ACRES).

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY CONTRACTOR

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

SOIL DATA

THIS SITE CONSISTS OF 59 (URBAN LAND), 60B (URBAN LAN-MARTELLE COMPLEX, 0 TO 8 PERCENT SLOPES), 62B (URBAN LAND-SPINKS COMPLEX, 0 TO 8 PERCENT SLOPES), AND 68 (CONOCHAH-FOX ASSOCIATION) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

REMOVAL LEGEND

- TREE OR MISC. REMOVAL
- REMOVE EX. GUARDRAIL AS INDICATED
- REMOVE EX. UTILITY AS INDICATED
- INDICATES AREAS OF CONCRETE PAVEMENT/ SIDEWALK TO BE REMOVED

SESC LEGEND

- INDICATES LIMITS OF SILT FABRIC FENCE - 36" HGT.
- INDICATES LIMITS OF SOIL DISRUPTION
- INDICATES SILT SACK OR EQUAL ON EXISTING. DRAINAGE STRUCTURE

LEGEND

- MANHOLE
- HYDRANT
- GATE VALVE
- MANHOLE CATCH BASIN
- UTILITY POLE
- GUY POLE
- GUY WIRE
- EXISTING SANITARY SEWER
- EXISTING SAN. CLEAN OUT
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN

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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.W. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

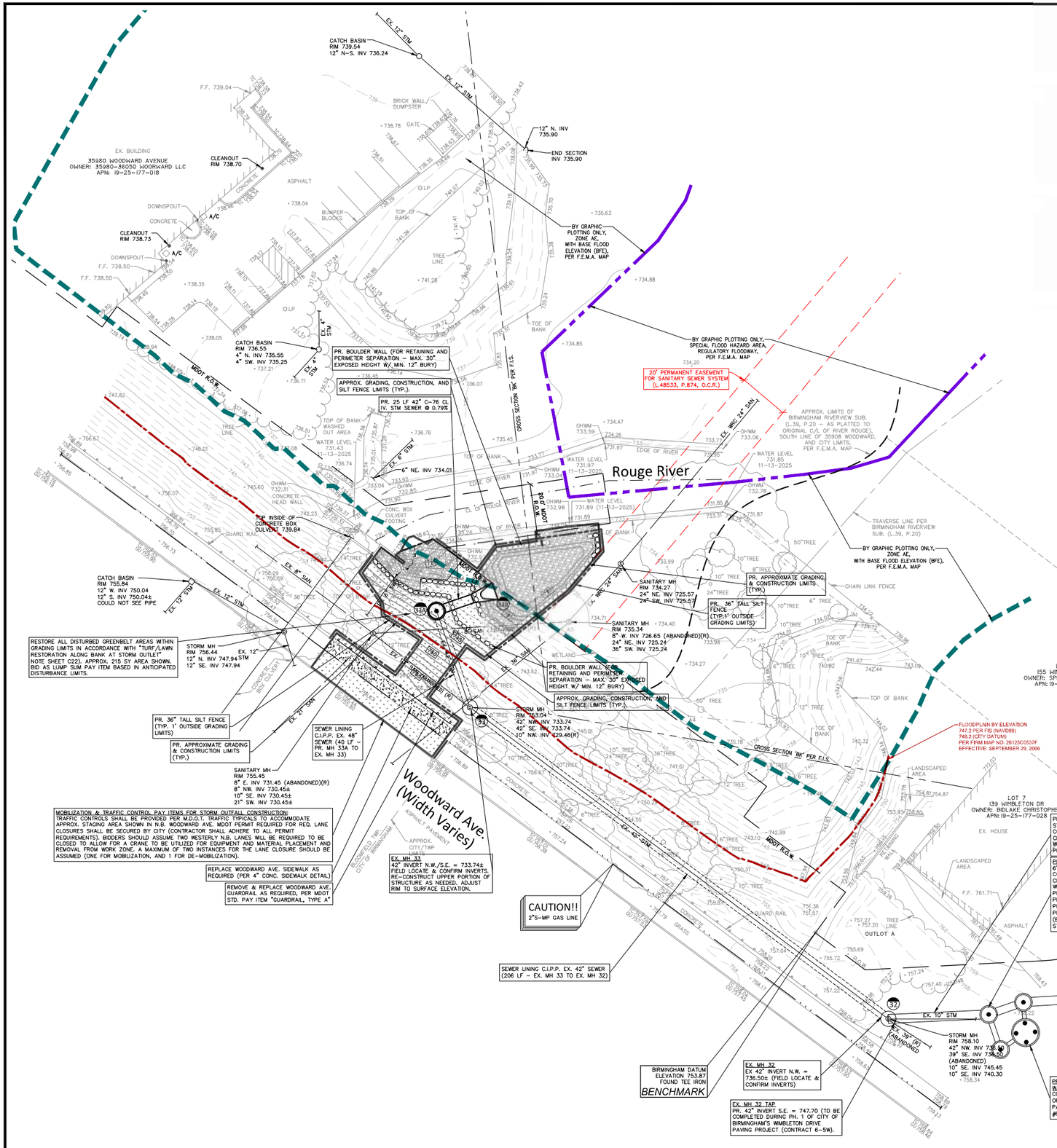
SHEET
Wimbleton Drive Storm
Outfall Removal & SESC
Plan

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'
20 10 0 10 20 30
NFE JOB NO. O979
SHEET NO. C21

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LOCATION MAP
1" = 1,200'

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE HMA 4E ML;
SURFACE COURSE – MDOT BITUMINOUS MIXTURE HMA 5E ML;
BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

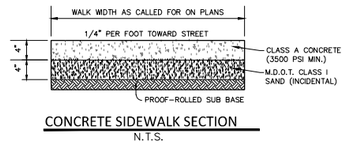
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



CONCRETE SIDEWALK SECTION
N.T.S.

Storm Drainage Structure Schedule

Structure Name	Structure Details
#33A PR. 6' DIA. STORM MH CONSTRUCT ONLINE OF EX. 42" STORM SEWER EX. 42" INV. N/S 733.66± (PER REC-FIELD VERIFY) (MAINTAIN AND C.I.P.P. LINE 42" SOUTH; REMOVE 42" NORTH)	PR. RIM 743.80 PR 42" E. INV. 733.60 EX 42" N. INV. 733.66 EX 42" S. INV. 733.66
#33B PR. 42" PRE-CAST END SECTION W/ BAR-SCREEN (PER DETAIL)	PR 42" W. INV. 733.40

PAVING / RESTORATION LEGEND

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED NATURAL STONE RIP-RAP
- PROPOSED TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET (PER NOTE SHT. C22)
- PROPOSED GUARDRAIL REPLACEMENT
- PROPOSED BOULDER RETAINING WALL

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- SAN. CLEAN OUT
- HYDRANT, GATE VALVE — EXISTING WATERMAIN
- MANHOLE, CATCH BASIN — EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- UTILITY POLE, GUY POLE, GUY WIRE — OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O., MANHOLE — PR. SANITARY SEWER
- HYDRANT, GATE VALVE — PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE
- TC 600.00 — PR. TOP OF CURB ELEVATION
- GU 600.00 — PR. GUTTER ELEVATION
- TW 600.00 — PR. TOP OF WALK ELEVATION
- TP 600.00 — PR. TOP OF PVMT. ELEVATION
- FG 600.00 — FINISH GRADE ELEVATION
- WT 600.00, WB 600.00 — WALL TOP/BOTTOM ELEVATION

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STATE OF MICHIGAN
PAUL TULIKANGAS
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LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
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A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Wimbleton Drive Storm
Outfall Utility Plan

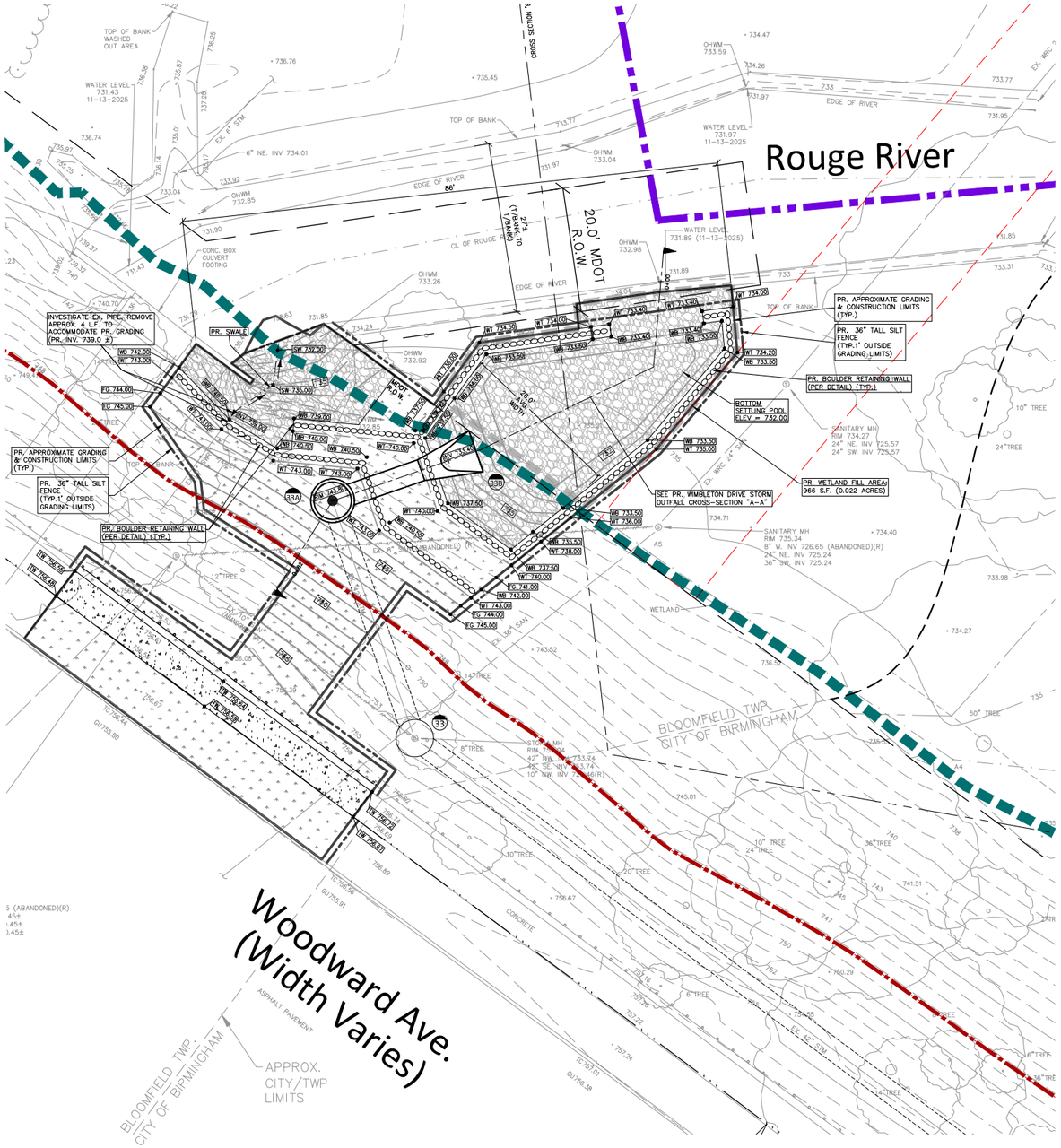
811
Know what's below
Call before you dig.

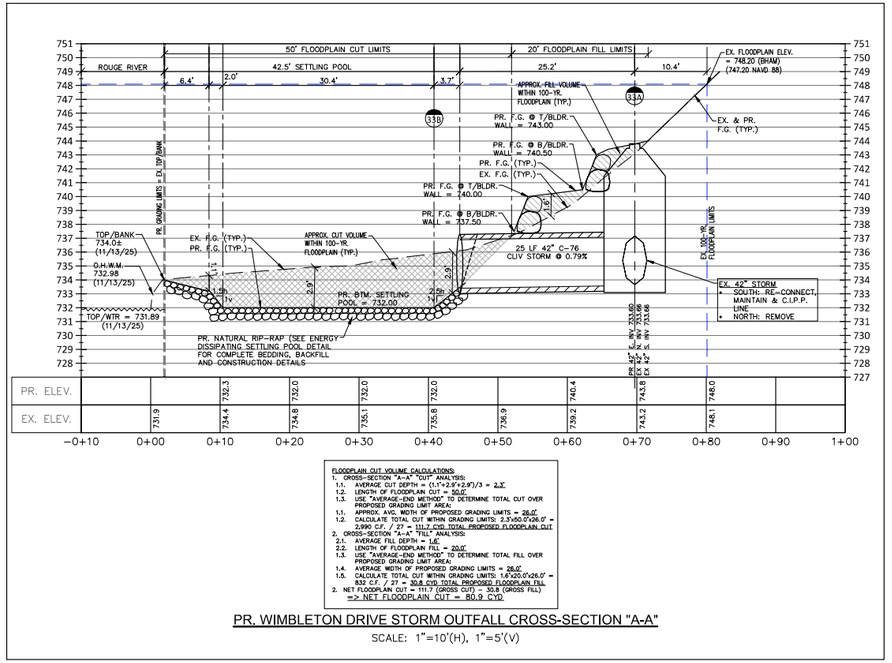
DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. O979
SHEET NO. C22

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FLOODPLAIN CUT VOLUME CALCULATIONS

1. CROSS-SECTION "A-A" "CUT" ANALYSIS:
   - 1.1. AVERAGE CUT DEPTH = (1.1'+2.0'+2.9')/3 = 2.3'
   - 1.2. LENGTH OF FLOODPLAIN CUT = 50.0'
   - 1.3. USE "AVERAGE-END METHOD" TO DETERMINE TOTAL CUT OVER PROPOSED GRADING LIMIT AREA:
     - 1.1. APPROX. AVG. WIDTH OF PROPOSED GRADING LIMITS = 26.0'
     - 1.2. CALCULATE TOTAL CUT WITHIN GRADING LIMITS: 2.3'x50.0'x26.0' = 2,990 C.F. / 27 = 111.7 CYD TOTAL PROPOSED FLOODPLAIN CUT
2. CROSS-SECTION "A-A" "FILL" ANALYSIS:
   - 2.1. AVERAGE FILL DEPTH = 1.4'
   - 2.2. LENGTH OF FLOODPLAIN FILL = 20.0'
   - 1.3. USE "AVERAGE-END METHOD" TO DETERMINE TOTAL FILL OVER PROPOSED GRADING LIMIT AREA:
     - 1.4. AVERAGE WIDTH OF PROPOSED GRADING LIMITS = 26.0'
     - 1.5. CALCULATE TOTAL CUT WITHIN GRADING LIMITS: 1.4'x20.0'x26.0' = 832 C.F. / 27 = 30.8 CYD TOTAL PROPOSED FLOODPLAIN FILL
2. NET FLOODPLAIN CUT = 111.7 (GROSS CUT) − 30.8 (GROSS FILL) => NET FLOODPLAIN CUT = 80.9 CYD

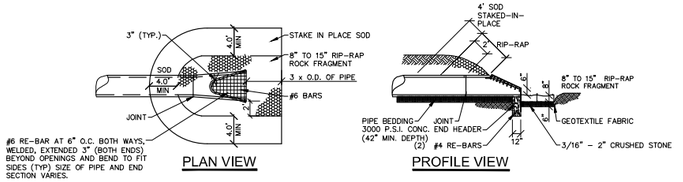
PR. WIMBLETON DRIVE STORM OUTFALL CROSS-SECTION "A-A"

SCALE: 1"=10'(H), 1"=5'(V)

TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET

ALL DISTURBED AREAS SHALL BE RESTORED USING A MINIMUM OF 4" TOPSOIL, SEED, PERMANENT TURF REINFORCEMENT MAT (VMAX SC250 BY NORTH AMERICAN GREEN, OR EQUAL) AND/OR MULCH BLANKET. TURF REINFORCEMENT MAT SYSTEM SHALL BE INSTALLED SPECIFIC TO AREAS SUSCEPTIBLE TO STREAMBANK EROSION, ON STEEPER SLOPES, AND AREAS ADJACENT TO WATER. ALL OTHER AREAS SHALL RECEIVE MULCH BLANKET STABILIZATION IN ACCORDANCE WITH WRC SPECIFICATIONS (STRAW OR COCONUT BLANKET) AND CAPABLE OF MAINTAINING SOIL STABILITY WHILE PROMOTING FAST AND SUSTAINABLE VEGETATIVE GROWTH. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION SPECIFICATIONS, AND UNDER THE OBSERVATION OF AN ON-SITE GEOTECHNICAL ENGINEER.

SEED MIX SHALL BE A SEDGE BANK GHETTO SEED MIX CAPABLE OF SUSTAINED GROWTH IN ALL AREAS, INCLUDING AREAS SUSCEPTIBLE TO CHEMICAL TREATMENT OF PHRAGMITES AND PERMANENT WATER LEVELS. PROVIDE CUT SHEETS OF PROPOSED SEED MIXES TO ENGINEER FOR REVIEW.



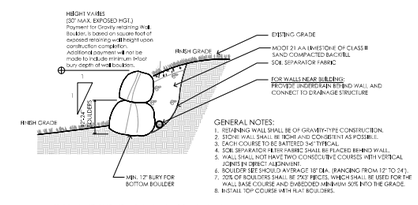
PLAN VIEW

PROFILE VIEW

END SECTION AND BAR SCREEN DETAIL

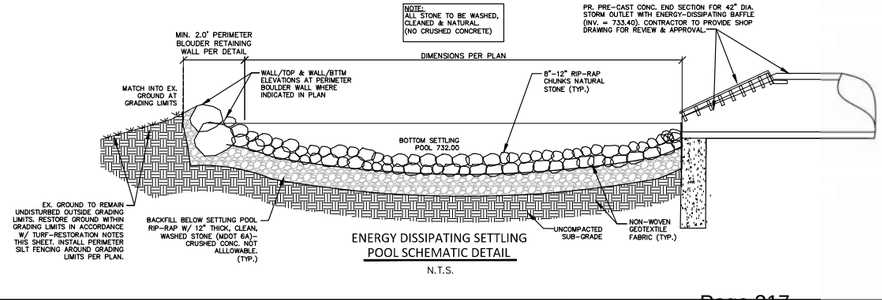
N.T.S.





BOULDER RETAINING WALL

N.T.S.



ENERGY DISSIPATING SETTLING POOL SCHEMATIC DETAIL

N.T.S.

Storm Drainage Structure Schedule

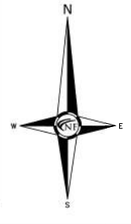
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PAVING / RESTORATION LEGEND

- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED NATURAL STONE RIP-RAP
- PROPOSED TURF/VEGETATION RESTORATION ALONG BANK AT STORM OUTLET (PER NOTE SHT. C22)
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- PROPOSED BOULDER RETAINING WALL

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- HYDRANT / GATE VALVE — SAN. CLEAN OUT
- MANHOLE / CATCH BASIN — EXISTING WATERMAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
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PROJECT

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Contract #6-26(W)

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A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION

Part of the N.E. ¼ of Section 25, T. 2N, R.10E City of Birmingham, Oakland County, Michigan

SHEET

Wimbleton Drive Storm Outfall Grading Plan & Details

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: 1" = 10'

NFE JOB NO. O979
SHEET NO. C23

\\500-2000 Files\\0000-FILES\0979\Office\Construction Documents\0979_ENG-Storm Outfall.dwg, 3/27/2026 3:23 PM

WIMBLETON CLOSED
NO ACCESS FROM WOODWARD
SEEK ALTERNATE ROUTE

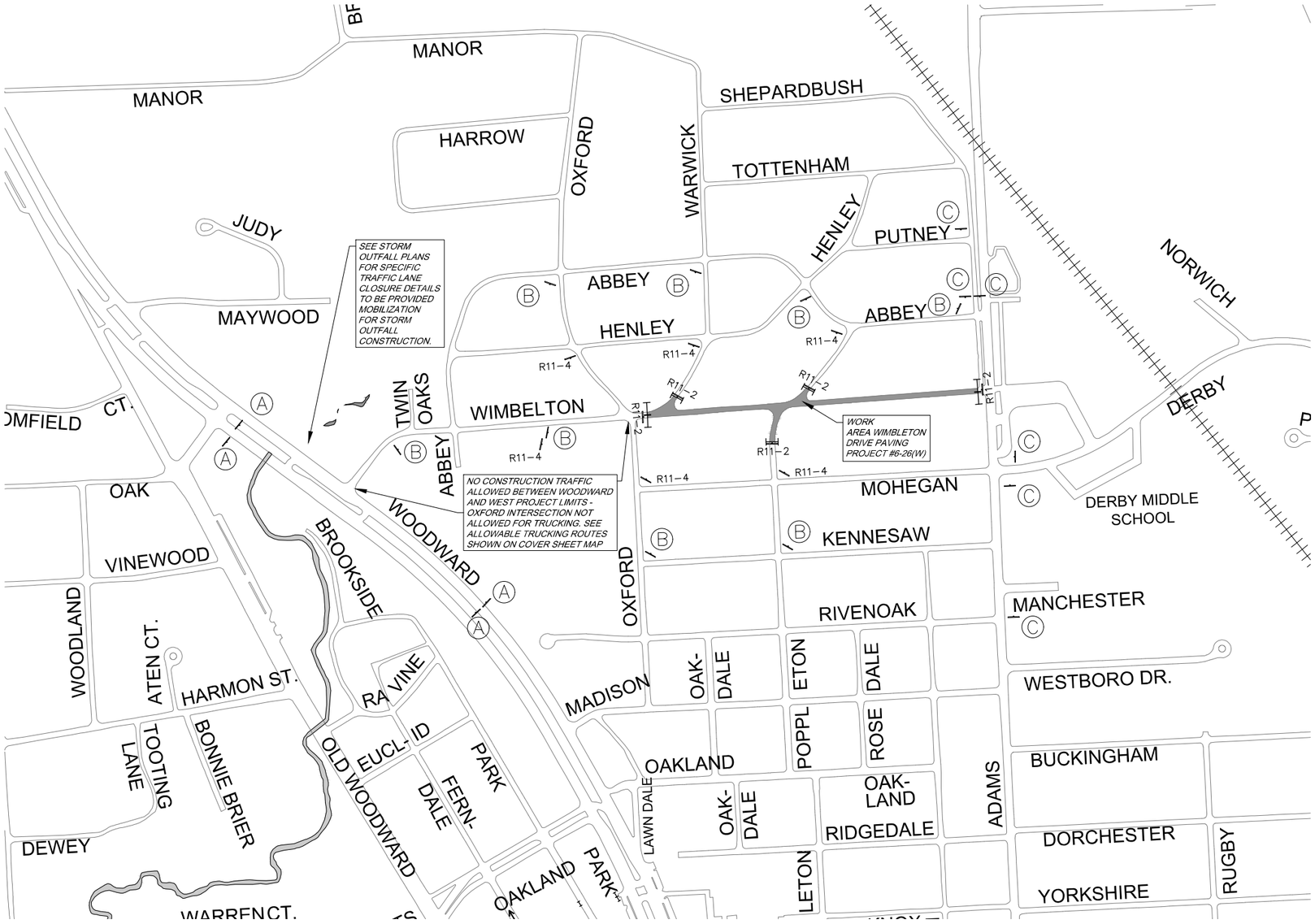
36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED WARWICK TO
ADAMS - SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED
NO ACCESS FROM ADAMS
SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND



ADVANCED WARNING SIGNAGE PLAN: WIMBLETON DRIVE PHASE 2 PROJECT

SYMBOL KEY

⊢	TYPE III BARRICADES
—	ADVANCED WARNING SIGN

SPECIAL ADVANCED WARNING SIGN QUANTITIES

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	WIMBLETON CLOSED - NO ACCESS FROM WOODWARD - SEEK ALTERNATE ROUTE	36"x72"	4
SIGN "B"	WIMBLETON CLOSED WARWICK TO ADAMS - SEEK ALTERNATE ROUTE	36"x72"	8
SIGN "C"	WIMBLETON CLOSED - NO ACCESS FROM ADAMS - SEEK ALTERNATE ROUTE	36"x72"	6

OTHER ADVANCED WARNING SIGN QUANTITIES AS SHOWN

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
R11-2	ROAD CLOSED	60"x30"	5
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	6

NOTES

1. TRAFFIC CONTROL IS A LUMP SUM CONTRACT PAY ITEM, AND SHALL INCLUDE ALL TRAFFIC CONTROL DEVICES, SIGNS, AND MANPOWER LABOR AS REQUIRED TO ADEQUATELY AND SAFELY MAINTAIN TRAFFIC CONTROLS THROUGHOUT THE DURATION OF THE PROJECT. THE DIAGRAM, SIGN DETAILS, AND QUANTITIES PROVIDED HEREIN ARE FOR GENERAL GUIDANCE AND NOT INTENDED TO BE ALL INCLUSIVE OF TRAFFIC CONTROLS WHICH WILL BE REQUIRED TO BE PROVIDED BY THE CONTRACTOR FOR THE ENTIRE PROJECT.
2. PLACE TRAFFIC CONTROL DEVICES AS SPECIFIED, OR AS OTHERWISE DIRECTED BY THE CITY OF BIRMINGHAM, INCLUDING ADVANCE WARNING SIGNS AND BARRICADES NOT SPECIFIED ON THIS DIAGRAM. CONTRACTOR/INSPECTOR MUST ACCOMPANY SIGN SUBCONTRACTOR DURING PLACEMENT OF SIGNS THROUGHOUT VARIOUS TRAFFIC CONTROL CHANGES.
3. ALL SIGNS AND BARRICADING SHALL BE IN ACCORDANCE WITH CURRENT M.M.U.T.C.D. AND M.D.O.T. SPECIFICATIONS AND TRAFFIC TYPICALS, INCLUDING PLACEMENT OF ADDITIONAL REQUIRED SIGNS/BARRICADES NOT DEPICTED ON THESE PLANS TO CONTROL TRAFFIC, LANE CLOSURES, SHIFTS, ETC.
4. ADVANCE WARNING SIGNS AND BARRICADES SHALL REMAIN IN PLACE UNTIL THE NEW ROAD (OR A PORTION THEREOF) IS READY TO BE OPENED FOR TRAFFIC AS DETERMINED BY THE CITY.
5. MAINTAIN SIDEWALKS AND INSTALL & MAINTAIN FENCING & SIGNAGE AS NEEDED TO ENSURE PEDESTRIAN SAFETY. UTILIZE MAINTENANCE AGGREGATE AS REQUIRED.
6. ERECT, REMOVE, AND/OR MAINTAIN ALL ADVANCE WARNING/DETOUR SIGNAGE AS DIRECTED BY THE CITY.
7. TYPE III BARRICADES (LIGHTED) SHALL BE PLACED FOR ALL LANE CLOSURES, AND SHALL INCLUDE A R11-2 OR R11-4 SIGN ON EACH TYPE III BARRICADE WHERE NOTED.
8. ALL SIDEWALK CLOSURES WITHIN CITY LIMITS SHALL HAVE TYPE III BARRICADES AND INCLUDE A SIDEWALK CLOSED SIGN. IF SIDEWALK CLOSURES ARE REQUIRED WITHIN M.D.O.T. RIGHT-OF WAY ON WOODWARD AVENUE (M-1), TYPE II BARRICADES SHALL BE USED.
9. LOCAL RESIDENT TRAFFIC (TWO-WAY) SHALL TYPICALLY BE MAINTAINED DURING CONSTRUCTION.
10. CONTRACTOR SHALL PROVIDE ADDITIONAL ADVANCED WARNING SIGNAGE TO INDICATE WHEN FULL-WIDTH CLOSURES WILL BE REQUIRED IN ISOLATED WORK AREAS.
11. CONTRACTOR SHALL PROVIDE FLAGGING CONTROL AS REQUIRED THROUGHOUT DURATION OF PROJECT TO MAINTAIN SAFETY FOR ALL ROADS OPENED TO TRAFFIC DURING CONSTRUCTION.

NF ENGINEERS
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LAND PLANNERS

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46777 WOODWARD AVE.
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SEAL

STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 057929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY
The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Advanced Warning
Signage (AWS) Traffic
Diagram

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: N.T.S.

NFE JOB NO. O979
SHEET NO. C24

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BIRMINGHAM CONTRACT #6-26(W) - WIMBLETON DRIVE PHASE 2 PROJECT PAY ITEMS

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C01 Utility Plan	SHEET C02 Utility Plan	SHEET C03 Utility Plan	SHEET C04 Utility Plan	SHEET C05 Utility Plan	SHEET C10 Utility Service Plan	SHEET C11 Utility Service Plan	SHEET C12 P&G Plan	SHEET C13 P&G Plan	SHEET C14 P&G Plan	SHEET C15 P&G Plan	SHEET C16 P&G Plan	SHEET C20 SESC Plan	SHEET C21 Storm Outfall Removal-SESC	SHEET C22 Storm Outfall Utility Plan	SHEET C23 Storm Outfall Grading Plan	TOTAL QUANTITY
	DIVISION 1 - SEWER PAY ITEMS																		
1	15" Combined Sewer, PVC PS 115, Trench A	LF	64	161	246														471
2	12" Combined Sewer, PVC SDR 26, Trench A	LF	234	262	104	200													830
3	36" Storm Sewer, CI76, CL-IV, Trench A	LF	321	360															681
4	30" Storm Sewer, CI76, CL-IV, Trench A	LF		100															100
5	21" Storm Sewer, CI76, CL-IV, Trench A	LF		115	230														345
6	18" Storm Sewer, CI76, CL-IV, Trench A	LF	88																88
7	12" Storm Sewer, CI76, CL-IV, Trench A	LF	100	165	252	227	50												794
8	Sewer Service, 6" PVC SDR 23.5	LF						598	559										1,157
9	6" Perforated Pipe Underdrain (No sock)	LF	120	210	120														450
10	New 4'-0" Diameter Combined Manhole	EA	2	3	1														6
11	New 6'-0" Diameter Storm Manhole	EA	3	3															6
12	New 5'-0" Diameter Storm Manhole	EA		1	1														2
13	New 4'-0" Diameter Storm Manhole	EA	1			1													2
14	New 4'-0" Diameter Storm Catch Basin w/ 4' Sump & Sed. Trap	EA	2	4	2	1													9
15	New 2'-0" Diameter Storm Inlet	EA	2	3	2	1													8
16	Sewer Investigation, Laterals	EA						8	8										16
17	Sewer Senice Tap, 6"	EA						19	18										37
18	Sewer Tap, Combined, 15"	EA	1	1															2
19	Sewer Tap, Storm, 10"	EA			1														1
20	Sewer Stub w/ Capped End, Storm, 30"	EA		1															1
21	Sewer Stub w/ Capped End, Storm, 18"	EA	1																1
22	Sewer Stub w/ Capped End, Storm, 12"	EA					1												1
23	Reconstruct Manhole (if and where needed)	VF																	10
24	Remove & Replace Structure Cover (as directed by City)	EA	1	1															2
25	Remove Ex. Sewer Manhole	EA	2	3															5
26	Remove Ex. Drainage Structure	EA	2	2															4
27	Abandon Ex. 15" Combined Sewer	LF		45															45
28	Abandon Ex. 12" Combined Sewer	LF	290	166	250														706
29	Abandon Ex. 8" Combinad Sewer	LF		197	286														483
30	Remove Ex. 18" Combined Sewer	LF	10																10
31	Remove Ex. 10" Storm Sewer	LF	28	41	53	5													127
32	Bulkhead Structure, 18"	EA	1																1
33	Bulkhead Structure, 12" or Less	EA																	2
34	Bulkhead Pipe, Larger than 8"	EA																	10
35	CCTV Sewer Acceptance Inspection	LS																	1
	SUBTOTAL - DIVISION 1 - SEWER PAY ITEMS																		
	DIVISION 2 - WATER MAIN PAY ITEMS																		
36	Remove Hydrant	EA		1		1													2
37	Remove Gate Valve Well	EA																	1
38	Retrofit Ex. Gate Well w/ 12" Gate Valve	EA				1													1
39	12" Gate Valve & Well	EA	1	2	1	1													5
40	8" Gate Valve & Well	EA	1	1			1												3
41	Fire Hydrant Assembly, Complete	EA	1		1	1	1												4
42	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	314	483	352	327													1,476
43	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	98	132			42												272
44	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	6		10	8	8												32
45	12" Water Main Connection to Ex. 12" Water Main	EA	1			1													2
46	8" Water Main Connection to Ex. 4" Water Main	EA	1	1															2
47	New Water Service, 1", Trench A, Copper	LF						180	137										317
48	New Water Service, 1.5", Trench A, Copper	LF							36										36
49	New Water Service", 1", Private Property (Bored), PEX	LF						45											45
50	Water Senice Connection, 1.5"	EA						1	1										2
51	Water Senice Connection, 1"	EA						14	10										24
52	Water Senice Connection, 1", Connection at Meter, 871 Poppleton	EA						1											1
53	Install Curb Stop & Box, 1"	EA						4	3										7
54	Hydra-Stop, Insta-Valve 250, 6"	EA																	1
55	Hydra-Stop, Line-Stop, 6"	EA																	2
56	Hydra-Stop, Line-Stop, 4"	EA																	2
57	Abandon Existing Water Mains, Entire Project	LS																	1
	SUBTOTAL - DIVISION 2 - WATER MAIN PAY ITEMS																		
	DIVISION 3 - PAVING PAY ITEMS																		
58	Earth Excavation	CY								425	850	415	400						2,090
59	Subgrade Undercutting, 21AA Limestone	CY								40	80	40	40						200
60	Subgrade Undercutting, 1"x3" Limestone	CY								40	80	40	40						200
61	Subgrade Geogrid Fabric, Tensar Triax TX130S	SY																	1,250
62	Remove and Salvage Brick Pavers	SF										55		85	85				225
63	Removing Concrete Drive Approach	SY								60	170	45	100	25	25				425
64	Removing Asphalt Drive Approach	SY								65	35	120	40						260
65	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY								35	100	35	25						195
66	Pulverize, Remove, Stockpile, Replace, and Re-Shape Existing Bituminous Pavement	SY								1450	1900	1100	990	390	390				6,220
67	Aggregate Base, MDOT 21AA Limestone, 4"	SY								1450	2380	1050	920	415	415				6,630
68	Capeseal Surface	SY								1400	2300	1010	876	400	400				6,386
69	Bituminous Mixture No. 4EML (Handpatching)	TON											300						300
70	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	LF																	20
71	Concrete Drive Approach, 6" Thick on 6" 21AA Limestone	SY								135	205	165	140	35	35				715
72	Concrete Sidewalk, 6" (Includes Ramps)	SF								135	560		70						765
73	Concrete Sidewalk, 4"	SF								145	305	270	145						865
74	Handicap Ramp Truncated Domes	SF								20	80		10						110
75	Adjust Structure Cover	EA	1	1															2
76	Maintenance Aggregate for Entire Project	LS																	1
	SUBTOTAL - DIVISION 3 - PAVING PAY ITEMS																		
	DIVISION 4 - GENERAL PAY ITEMS																		
77	Mobilization (Max. 5% of Bid)	LS																	1
78	Traffic Maintenance & Control	LS																	1
79	Inspector Crew Days	DAYS																	
80	Water and Sewer Allowance	LS																	1
81	Audio Video Route Survey	LS																	1
82	Salvage Existing Signs	LS																	1
83	New Signs	SF																	80
84	Sign Post, U-Channel	LF																	240
85	Tree Protection, 3" Dia. Or Greater	EA																	55
86	Mulch, 3"	SY																	225
87	Topsoil, 3"	SY								780	1220	710	700	230					3,640
88	Sod, Class A	SY								780	1220	710	700	230					3,640
89	Inlet Filter, Silt Sack	EA																	25
	SUBTOTAL - DIVISION 4 - GENERAL PAY ITEMS																		
	DIVISION 5 - STORM OUTFALL PAY ITEMS																		
90	42" Storm Sewer, CI76, CL-IV, Trench A	LF															25		25
91	New 6'-0" Diameter Storm Manhole, Construct Online	EA															1		1
92	New 42" Dia. End Section w/ Bar Screen	EA															1		1
93	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	LF															246		246
94	Sewer Lining, Pre-Liner, 42" RIPI-CIPP	LF															246		246
95	Sewer Lining, 42" RIPI-CIPP	LF															246		246
96	Cut/Grind Protruding Sewer Leads, Any Material	EA															2		2
97	Cut/Grind Root Intrusion	EA															10		5
98	Cut/Grind Mineral Deposit	EA															10		5
99	Remove Ex. Tree	EA														8			8
100	Remove Ex. 42" Storm Headwall	EA														1			1
101	Remove Ex. 42" Storm Sewer	LF														31			31
102	Earth Excavation, Storm Outfall	CY																220	220
103	Remove & Replace Woodward Ave. Sidewalk	SF														300			300
104	Remove & Replace Woodward Ave. Guardrail	LF														60			60
105	Mobilization, Traffic Maintenance & Control, Storm Outfall	LS																	1
106	Inspector Crew Days, Storm Outfall	DAYS																	
107	Silt Fencing, 30" Height	LF														325			325
108	Lawn Restoration Along Bank at Storm Outlet	LS																	1
109	Gravity Retaining Wall, Boulder	FSF																	500
110	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per detail)	SY																	165
	SUBTOTAL - DIVISION 5 - STORM OUTFALL PAY ITEMS																		

NF ENGINEERS

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SEAL

STATE OF MICHIGAN
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PROJECT
City of Birmingham
Wimbleton Drive Phase 2
Paving Project
Contract #6-26(W)

CLIENT
BIRMINGHAM
A WALKABLE CITY

The City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the N.E. ¼
of Section 25,
T. 2N, R.10E
City of Birmingham,
Oakland County, Michigan

SHEET
Quantities

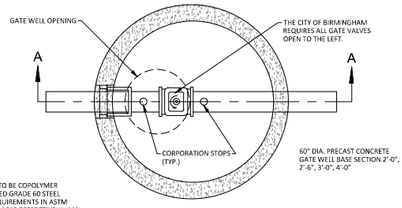
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
03-19-26	BIDS
03-27-26	ADDENDUM 1

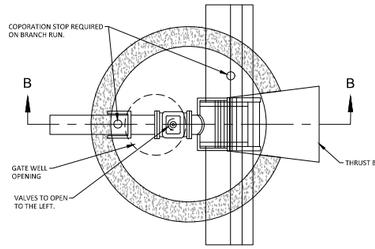
DRAWN BY: A. Panley
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: January 5, 2026
SCALE: N.T.S.

NFE JOB NO. O979
SHEET NO. Q1

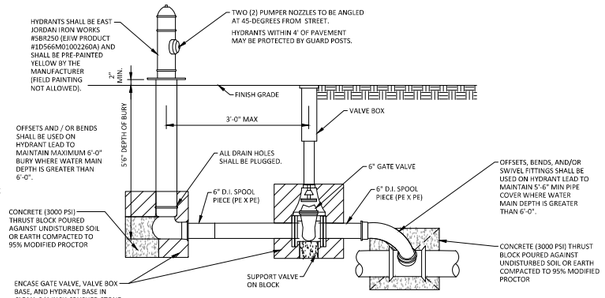
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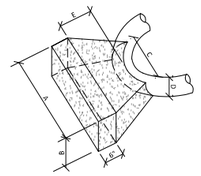
WATER MAIN GATE WELL (TYPICAL), PLAN



WATER MAIN TAPPING SLEEVE, VALVE & WELL (TYPICAL), PLAN

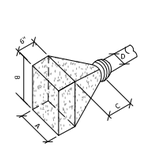


6" HYDRANT SIDE OUTLET



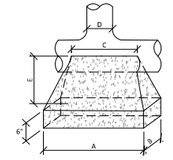
FOR 90° BENDS OR SMALLER

D	A	B	C	E MIN.
20"	8'	6.5'	3.5'	2.5'
16"	6'	4'	2.5'	2'
12"	4'	3'	2'	1.75'
10"	3'	3'	2'	1.75'
8"	3'	2'	2'	1.5'
6"	2'	1.5'	2'	1.25'



FOR PLUGS

D	A	B	C MIN.
20"	7'	5'	2.5'
16"	4'-10"	4'-10"	2'
12"	4'-4"	3'	1'-9"
10"	3'	2'	1.5'
8"	2'-10"	2.5'	1.5'
6"	1.5'	2.5'	1.5'

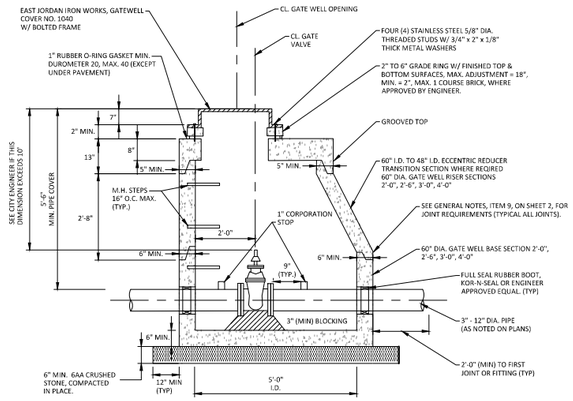


FOR TEES

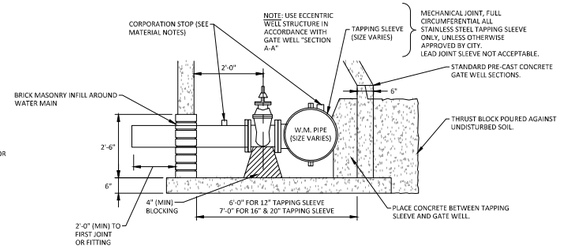
D	A	B	C	E MIN.
20"	6.5'	4.5'	3.5'	3'
16"	4'-8"	4'-8"	2.5'	2.75'
12"	4'	3'	2.5'	2.5'
10"	3'	2'	2'	2.25'
8"	2.5'	2'	2'	2.25'
6"	2'	2'	2'	2.25'

NOTE:
3000 PSA CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.

THRUST BLOCK DETAILS

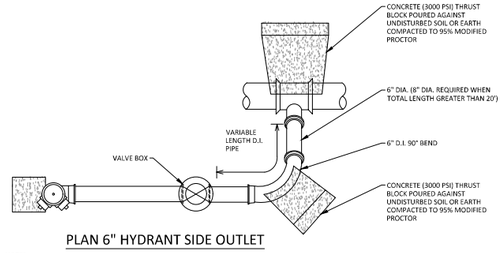


3" THRU 12" GATE WELL ("SECTION A-A")



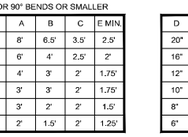
WATER MAIN TAPPING SLEEVE, VALVE & WELL ("SECTION B-B")

NOTES:
1. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP WITH BRONZE SADDLE, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
2. THE CITY OF BIRMINGHAM DOES NOT ALLOW SIZE ON SIZE TAPPING.

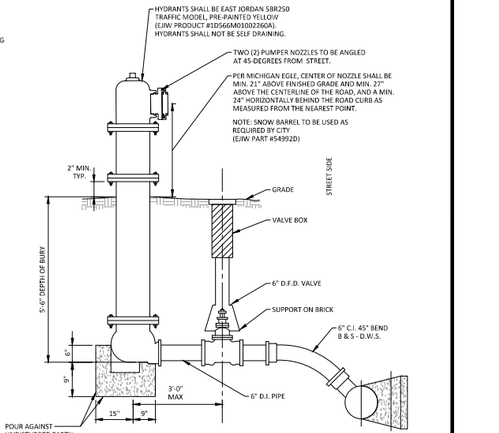


PLAN 6" HYDRANT SIDE OUTLET

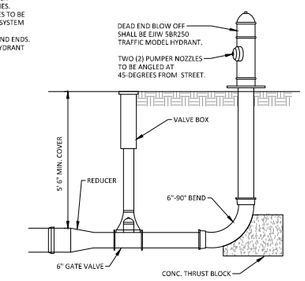
NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES.
2. ALL HYDRANTS, COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA-LUG).
3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS, AND ENDS.
4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR-BLUE.



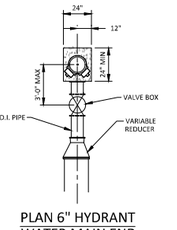
BOTTLE SLEEVE



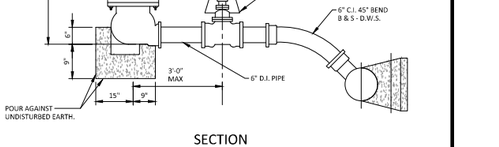
SECTION



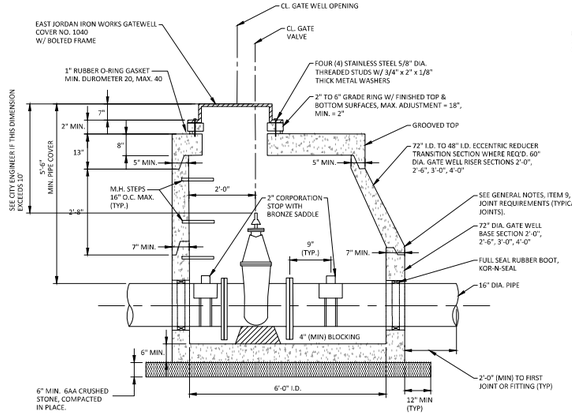
DEAD END BLOWOFF CONNECTION



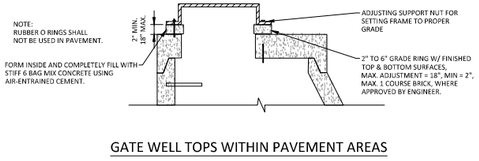
PLAN 6" HYDRANT WATER MAIN END



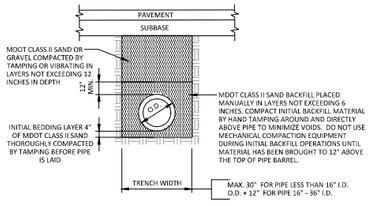
EJIW #5BR250 HYDRANT DETAIL



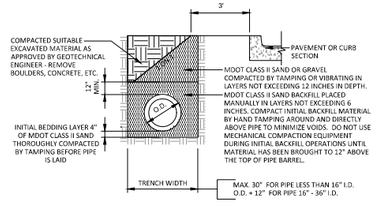
16" GATE WELL ("SECTION A-A")



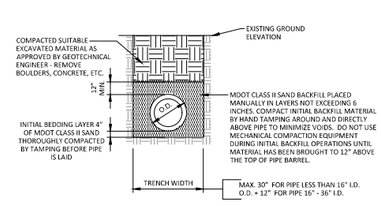
GATE WELL TOPS WITHIN PAVEMENT AREAS



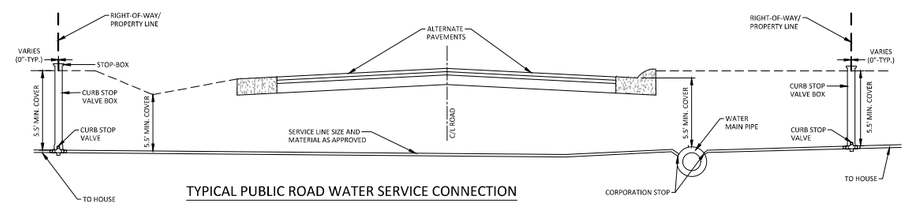
TRENCH DETAIL "A" WATER MAIN UNDER PAVEMENT



TRENCH DETAIL "A" WATER MAIN WITHIN INFLUENCE OF PAVEMENT

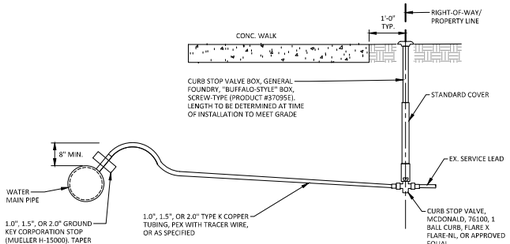


TRENCH DETAIL "B" WATER MAIN OUTSIDE INFLUENCE OF PAVEMENT

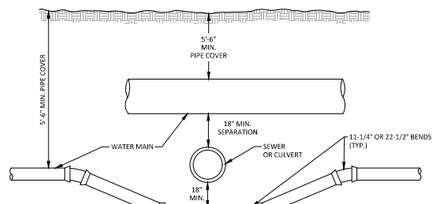


TYPICAL PUBLIC ROAD WATER SERVICE CONNECTION

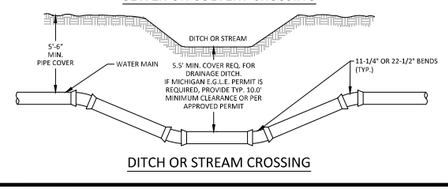
NOTES:
1) WATER SERVICE CURB STOP SHALL BE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.), TYPICALLY DIRECTLY ON THE ON THE PROPERTY/ R.O.W. LINE.
2) FOR NEW RESIDENTIAL CONSTRUCTION, THE LATERAL LOCATION SHALL BE PER THE APPROVED PLAN.
3) FOR LATERAL LINE REPLACEMENT WITHIN THE PUBLIC R.O.W., THE LATERAL LOCATION WILL BE FIELD DETERMINED BASED ON THE CONNECTION LOCATION TO THE EXISTING SERVICE LINE AT THE R.O.W. LINE. THE ALIGNMENT OF THE SERVICE LINE MAY REQUIRE ADJUSTMENT TO AVOID TREES WITHIN THE R.O.W. TO THE MAXIMUM EXTENT PRACTICABLE, AS APPROVED BY THE CITY.
4) SERVICE TAP LOCATION AT THE WATER MAIN SHALL BE AT CLOCK POSITION 10:30 OR 1:30 UNLESS OTHERWISE NOTED PER APPROVED PLAN.



WATER SERVICE CONNECTION (TYPICAL)



SEWER OR CULVERT CROSSING



DITCH OR STREAM CROSSING

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Water Main Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	WM-1

WATER MAIN GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE: 1) CITY OF BIRMINGHAM ENGINEERING AND D.P.S DEPARTMENTS, 2) DESIGN ENGINEER, 3) OWNER / DEVELOPER, 4) OTHER PUBLIC AGENCIES HAVING JURISDICTION, AND 6) FRANCHISE UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER.
3. CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
4. CONTRACTOR SHALL COORDINATE ALL REQUIRED WATER MAIN SHUT-DOWNS WITH THE CITY OF BIRMINGHAM ENGINEERING AND D.P.S. DEPARTMENTS TO ALLOW SUFFICIENT TIME IN ADVANCE OF CONSTRUCTION TO ALLOW FOR RESIDENT AND/OR PROPERTY OWNER NOTIFICATIONS, AND FOR THE CITY TO DEVELOP A SHUT-DOWN PROTOCOL. CONTRACTOR COORDINATION IS REQUIRED TO ASSIST THE CITY IN THE DEVELOPMENT OF THE SHUT-DOWN PROTOCOL TO ENSURE IT ALIGNS WITH THE CONTRACTOR'S PROPOSED MEANS AND METHODS. ANY EXERCISING OF EXISTING VALVES THAT ARE REQUIRED TO PERFORM THE SHUT-DOWN SHALL BE COMPLETED BY THE CITY D.P.S. DEPARTMENT WITH A MINIMUM OF 24-HOUR ADVANCED NOTICE.
5. ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
6. ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
7. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, DRIVEWAYS, AND/OR SIDEWALKS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY).
8. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
9. WHERE WATER MAINS MUST DIP TO PASS OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED.
10. ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AND SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATIONS FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
11. CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON THE DETAIL SHEET (FOR EXAMPLE, PROVIDE 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS OR HER EXPENSE.
12. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF BIRMINGHAM, THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), AND THE DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH.
13. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM (AS INDICATED IN PLANS AND SPECIFICATIONS) IS APPROVED BY THE CITY OF BIRMINGHAM.
14. ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHALL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410.
15. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND OR GRAVEL TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

WATER MAIN MATERIALS NOTES

1. WATER SUPPLY SYSTEM PIPING (3-INCH OR LARGER) SHALL BE DUCTILE IRON UNLESS OTHERWISE APPROVED BY THE CITY OF BIRMINGHAM.
2. ALL FITTINGS AND MATERIALS TO BE LEAD FREE.
3. USE OF HDPE MAY BE ALLOWED IN SOME LIMITED CASES (AS APPROVED BY CITY.) TWO TRACER WIRES WILL BE REQUIRED. OCWRC STANDARDS AND DETAILS SHALL BE USED WHEN HDPE IS APPROVED FOR USE.
4. ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
5. DUCTILE IRON PIPE SHALL BE PRESSURE-CLASS CLASS 52 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER.
6. DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE CEMENT MORTAR LINED AND BITUMINOUS SEAL-COATED, IN ACCORDANCE WITH AWWA C104 (ANSI A21.4), LATEST REVISION.
7. JOINTS SHALL BE MECHANICAL OR PUSH-ON JOINTS FOR DUCTILE IRON WATER MAIN AND SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI AS21.11), LATEST REVISION.
8. FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
9. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED 350 PSI FOR PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
10. WHEN CONNECTING TO EXISTING WATER MAINS, OVERSIZED FITTINGS MAY BE REQUIRED TO MATCH THE OUTER DIAMETER OF THE OLDER WATER MAINS.
11. INSTALL BRASS WEDGES AT ALL PUSH-ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH DIAMETER AND LESS, AND FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
12. ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA CAAA LOW ALLOY STEEL COATED WITH COAL TAR AND POLY-WRAPPED WHEN SPECIFIED.
13. ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER-SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
14. TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE DOUBLE-CHECK VALVE BACKFLOW-PREVENTER WITH CURRENT CERTIFICATION.
15. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA STANDARD C105/A21.5-10. POLYETHYLENE MATERIAL SHALL BE TYPE 1, CLASS A, GRADE E-1, AND HAVE A MINIMUM THICKNESS OF 0.008" (8-MILS). FLOW RATE SHALL BE 0.4 MAXIMUM, TENSILE STRENGTH SHALL BE 1200 PSI MINIMUM, AND ELONGATION SHALL BE 300%.

HYDRANT REQUIREMENTS

1. ALL HYDRANTS SHALL BE EAST JORDAN IRON WORKS 5BR250 TRAFFIC MODEL , TWO-WAY WITH TWO (2) 4-1/2" PUMPER NOZZLE FITTINGS. STANDARD BARREL (EJIW PART NUMBER 54948D) OR SNOW BARREL (EJIW PART NUMBER 54992D) TO BE USED AS REQUIRED BY CITY. ALL HYDRANTS SHALL BE CITY OF BIRMINGHAM STANDARD, AS DETAILED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE. PER MANUFACTURER, "TRAFFIC-MODEL" HYDRANTS WITH WITH BREAKAWAY FLANGE SHALL BE INSTALLED WITH A 6" THICK CONCRETE COLLAR (2' WIDTH x 2' DEPTH), CENTERED AROUND THE FINISHED GRADE OF THE HYDRANT, WHERE HYDRANTS ARE INSTALLED IN SANDY SOILS OR CONNECTED TO PVC OR HDPE WATER MAINS.
2. HYDRANTS SHALL BE RATED FOR 250 PSI WORKING PRESSURE.
3. HYDRANTS SHALL HAVE A MINIMUM 5-1/4" VALVE OPENING.
4. THE OPERATING NUT SHALL BE A ONE-PIECE DESIGN, MANUFACTURED OF ASTM B-584 BRONZE. IT SHALL BE 1-1/8" PENTAGON - POINT TO FLAT IN SIZE/SHAPE.
5. THE DIRECTION OF OPENING SHALL BE LEFT. AN ARROW SHALL BE CAST ON THE TOP TO THE HYDRANT TO INDICATE THE OPENING DIRECTION.
6. HYDRANTS SHALL HAVE A DEPTH OF BURY OF 5'6", UNLESS OTHERWISE NOTED.
7. ALL HYDRANTS SHALL BE PAINTED YELLOW ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF YELLOW PAINT AS FURNISHED FROM THE MANUFACTURER (FIELD PAINTING NOT ALLOWED). HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT.
8. ALL FIRE HYDRANT JOINTS SHALL BE TOTALLY RESTRAINED BY THE USE OF MEG-A-LUGS OR OTHER APPROVED RESTRAINED JOINT. THRUST BLOCKS ARE ALSO REQUIRED.
9. ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

VALVE AND SLEEVE NOTES

1. GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES, SHALL BE RESILIENT SEAT WEDGE TYPE WITH MECHANICAL JOINTS AND NON-RISING STEM.
2. ALL GATE VALVES SHALL BE FURNISHED AND INSTALLED SUCH THAT THEY OPEN WHEN TURNED "LEFT" OR COUNTER-CLOCKWISE.
3. ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED.
4. ALL GATE WELL COVERS SHALL BE CITY OF BIRMINGHAM STANDARD AS DETAILED.
5. ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH AN EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY AN EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
6. BUTTERFLY VALVES MAY BE USED FOR VALVES GREATER THAN 16-INCH DIAMETER AND SHALL BE MODEL 2F11 AS MANUFACTURED BY HENRY PRATT COMPANY OR APPROVED EQUAL.
7. TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EAST JORDAN IRON WORKS WITH RESILIENT SEATED GATE VALVES AS APPROVED BY THE CITY OF BIRMINGHAM.
8. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL.

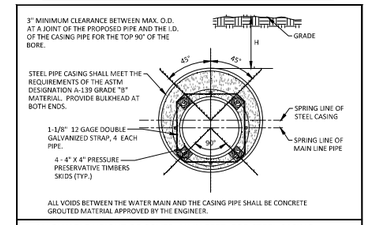
WATER SERVICE (DOMESTIC SUPPLY AND FIRE SUPPRESSION NOTES

14. FOR DOMESTIC SUPPLY AND FIRE SUPPRESSION BUILDING WATER SERVICES: A SINGLE TAP IS ALLOWED ON THE WATER MAIN, WHICH SHALL SPLIT INTO SEPARATE DOMESTIC AND FIRE SUPPRESSION LINES OUTSIDE OF THE BUILDING, SHALL BE USED UNLESS OTHERWISE APPROVED BY CITY.
16. VALVES TO BE INSTALLED ON EACH INDIVIDUAL LEAD ON THE EXTERIOR OF THE BUILDING.
17. EASEMENTS FOR WATER MAIN LEADS REQUIRED UP TO THE EXTERIOR SHUT OFF VALVE.
18. CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000. ALL STOPS SHALL BE CONSTRUCTED OF HEAVY-DUTY BRASS COMPONENTS MEETING THE REQUIREMENT OF ASTM B62. ALL STOPS SHALL HAVE AN AWAA TAPER THREADED INLET WITH COPPER FLARE STRAIGHT CONNECTION OUTLET. CORPORATION STOPS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C800.
19. CURB STOP VALVES SHALL BE MCDONALD, TYPE 76100, 1 BALL CURB, FLARE x FLARE-NL. TYPICAL RESIDENTIAL CURB STOP VALVE BOXES SHALL BE BY GENERAL FOUNDRY, BUFFALO STYLE BOX, SCREW-TYPE (PRODUCT #37095E). WHERE CURB STOP VALVES WILL BE LOCATED WITHIN PAVEMENT, A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX SHALL BE FURNISHED AND INSTALLED TO PROVIDE A RIM ELEVATION FLUSH WITH THE SURROUNDING PAVEMENT. VALVE BOXES SHALL BE EJ VALVE BOX NO. 8560 OR APPROVED EQUAL, AND SHALL INCLUDE A VALVE BOX RISER (EJ NO. 8500) AND VALVE BOX DROP LID W/ TWO PICKHOLES (EJ NO. 6800) WITH "WATER" LETTERING.

ACCEPTANCE OF NEW WATER MAINS

1. PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
   - 1.1) PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH CITY OF BIRMINGHAM AND OAKLAND CUNTY REQUIREMENTS
   - 1.2) ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE CITY OF BIRMINGHAM,
   - 1.3) THE CITY OF BIRMINGHAM MUST BE PROVIDED WITH THE BILL OF SALE.
   - 1.4) ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE CITY OF BIRMINGHAM.
   - 1.5) THE CITY OF BIRMINGHAM MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF BIRMINGHAM FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN, AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
3. THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE CITY OF BIRMINGHAM AND OAKLAND COUNTY.
4. THE WATER MAIN SHALL PASS A TEST OF 150 PSI FOR A TWO (2) HOUR PERIOD. WATER LOSS SHALL NOT EXCEED A RATE OF 11.65 U.S. GALLONS PER INCH DIAMETER, PER MILE OF WATERLINE IN TWENTY-FOUR (24) HOURS.
5. WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3 1/2 INCH DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I., OR HIGHER.
6. PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTION TO THE EXISTING WATER SUPPLY SYSTEM.

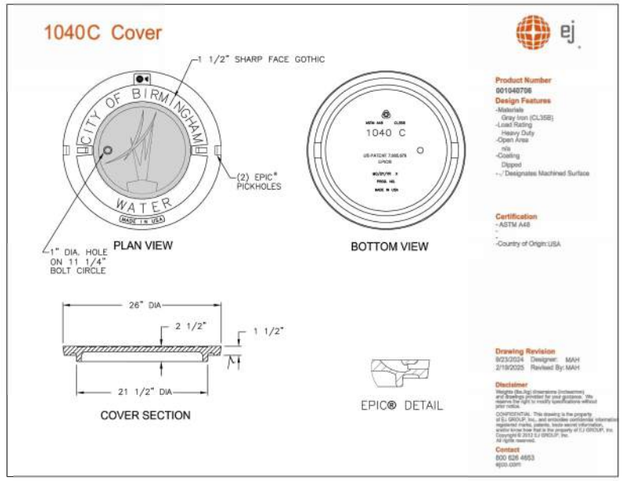
TYPICAL WATER MAIN TUNNEL CASING DETAIL



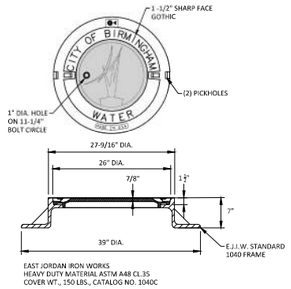
ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

WALL THICKNESS (IN.)		STEEL CASING OUTSIDE DIAMETER (IN.)									
FRACT.	DEC.	12	14	16	18	20	24	28	30	36	42
3/8	0.1875	39	30	24	21	19	17	16			
1/4	0.250	50	50	39	31	27	21	19	18	16	
5/16	0.3125			50	48	39	28	23	21	18	17
3/8	0.375				50	50	39	29	27	22	19
7/16	0.4375						50	39	34	26	21
1/2	0.500							50	44	31	25
9/16	0.5625								50	39	30
5/8	0.625									48	35

1. FOR 36" WATER MAIN PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.



CITY OF BIRMINGHAM - GATE WELL COVER
(FURNISH & INSTALL W/ STANDARD EJIW 1040 FRAME)



CITY OF BIRMINGHAM GATE WELL
COVER & STANDARD FRAME

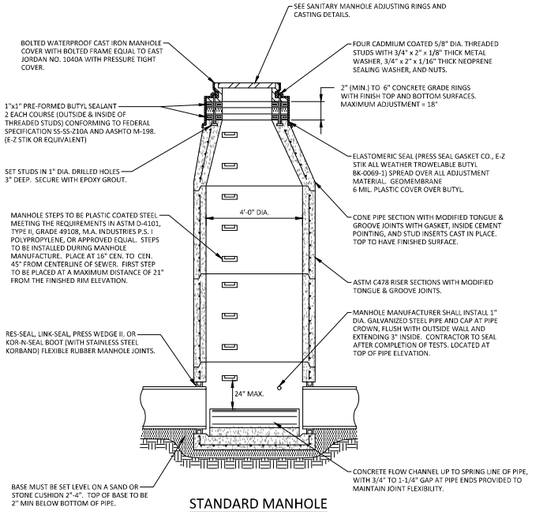
TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

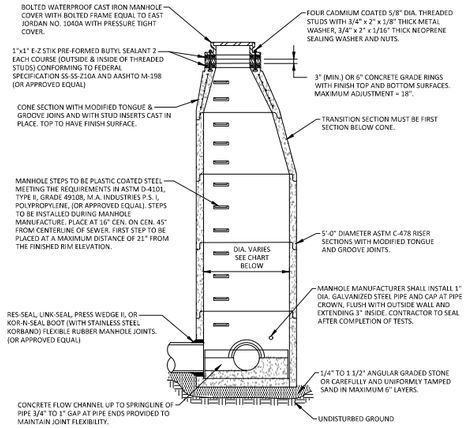
Water Main Standard Notes & Details
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ISSUE DATE:	SCALE:	SHEET NO.
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STANDARD MANHOLE

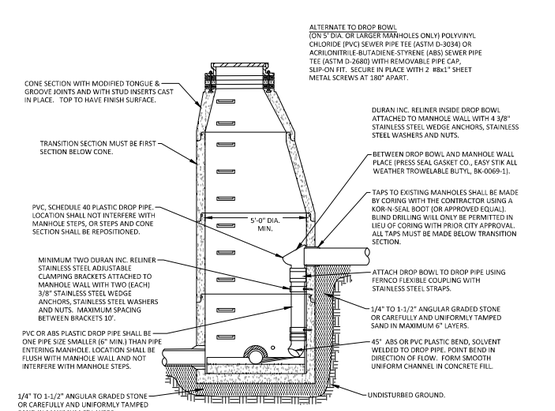
SEWER LESS THAN 20' DEEP -
PIPE DIAMETER 18 INCHES OR LESS



STANDARD OVERSIZED MANHOLE

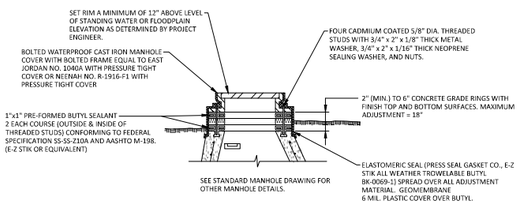
MANHOLE SIZING CHART

MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.	MAX. PIPE SIZE FOR RIGHT ANGLE INST.
5'	36"	24"
6'	42"	36"
7'	60"	42"

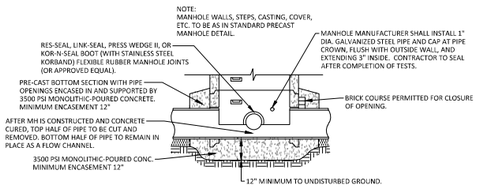


INTERIOR DROP CONNECTION

SEWER SIZE	DROP SIZE	MH SIZE
UP TO 10"	8"	5'
UP TO 18"	10"	5'

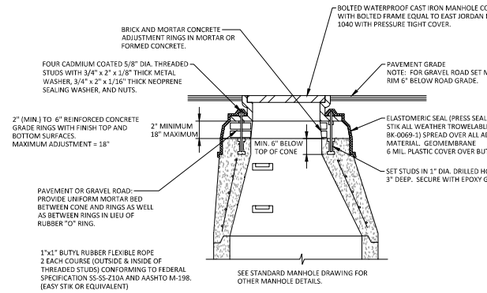


MANHOLE WITHIN FLOOD PRONE AREAS

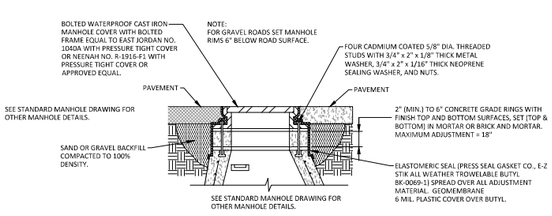


MANHOLE CONSTRUCTED OVER EXISTING SEWER

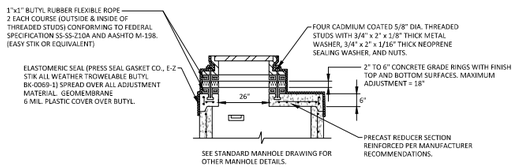
FOR LOCAL SANITARY SEWER EXTENSION CONNECTING
DIRECTLY OR INDIRECTLY TO OCWRC SYSTEMS



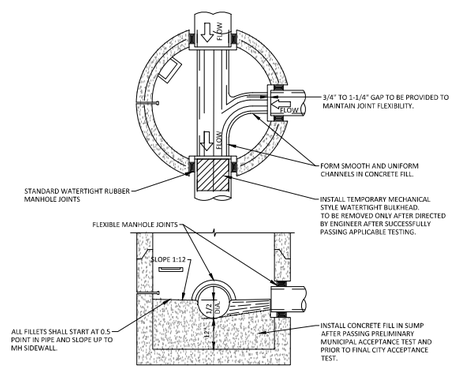
SANITARY MANHOLE ADJUSTING RINGS & CASTING DETAIL



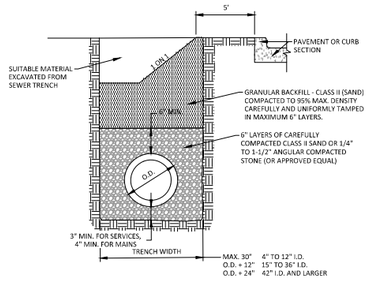
MANHOLE TOPS WITHIN PAVEMENT AREAS



FLAT TOP MANHOLE

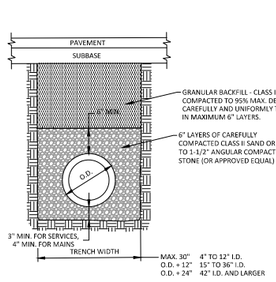


SUMP MANHOLE FOR TESTING, CLEANING AND DEWATERING



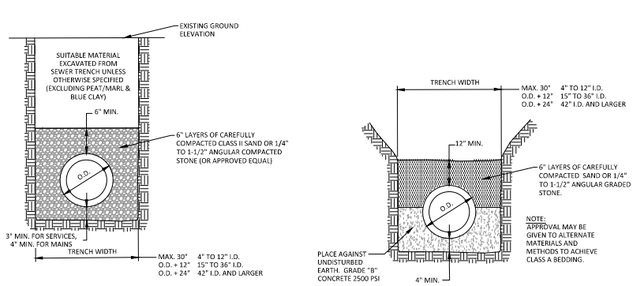
TRENCH DETAIL "A"

SEWER UNDER ROAD BED OR WITHIN
THE INFLUENCE OF ROAD BED



TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED



CONCRETE CRADLE

BIRMINGHAM
A WALKABLE CITY

City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Sanitary & Combined Sewer Standard Notes & Details 1 of 2

ISSUE DATE:	SCALE:	SHEET NO.
01-22-26	NTS	SS-1

SANITARY & COMBINED SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY & COMBINED SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.

2. AT ALL CONNECTIONS AND BEFORE START OF CONSTRUCTION, THE CONTRACTORS MUST OBTAIN THE REQUIRED CITY OF BIRMINGHAM, WRC SEWER INSPECTION, AND MICHIGAN E.G.L.E. PART 41 PERMITS. THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. FINAL ACCEPTANCE TESTS MUST BE WITNESSED BY CITY PERSONNEL AND MUST BE SCHEDULED IN ADVANCE.

3. NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER (OCWRC) STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY THE CITY MAY BE USED FOR SANITARY & COMBINED SEWER CONSTRUCTION.

4. AT ALL CONNECTIONS TO AN EXISTING SEWER, OR EXTENSION THERETO, A WATERTIGHT BULKHEAD WITH A CAPPED ONE INCH DIAMETER PIPE TO PERMIT MEASURING INFILTRATION SHALL BE PROVIDED. A TEMPORARY 12-INCH DEEP SUMP SHALL ALSO BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL.

5. AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.

6. ALL SANITARY & COMBINED SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.

7. ALL SANITARY & COMBINED SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.

8. ALL SANITARY & COMBINED SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.

9. SANITARY AND COMBINED SEWER MAIN PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):

   A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
   - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
   - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.

   B. POLYVINYL CHLORIDE PIPE (PVC):
   - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
   - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.)
   - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE) (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
   - PVC COMPOUNDS TO MEET ASTM D-1784.

10. SANITARY AND COMBINED MANHOLE STRUCTURE REQUIREMENTS:
   - ALL NEW MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS, PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - RES-SEAL, LINK-SEAL, PRESS WEDGE II, OR KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.

11. SANITARY SEWER LEAD CONNECTIONS TO TAP INTO MAINLINE, NOT TAP AT MANHOLE. PIPE SHALL BE POLYVINYL CHLORIDE PIPE (PVC) - ASTM D-2241, SDR 23.5, 6" DIAMETER. PVC COMPOUNDS TO MEET ASTM D-1784.

12. SANITARY LEADS ARE PRIVATE, UP TO THE CONNECTION POINT TO THE MAINLINE PUBLIC SEWER, INCLUDING THE CONNECTION.

13. ALL NEW MANHOLES SHALL HAVE CITY APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE- CAST MANHOLE CONE SECTIONS SHALL BE CITY APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS, AS INDICATED.

14. AT ALL CONNECTIONS TO MANHOLES, INTERIOR DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES.

15. TAPS TO EXISTING MANHOLES SHALL BE MADE BY CORING. THE CONTRACTOR SHALL PLACE A KOR-N-SEAL BOOT (OR APPROVED EQUAL) AFTER CORING IS COMPLETED. BLIND DRILLING WILL NOT BE PERMITTED IN LIEU OF CORING.

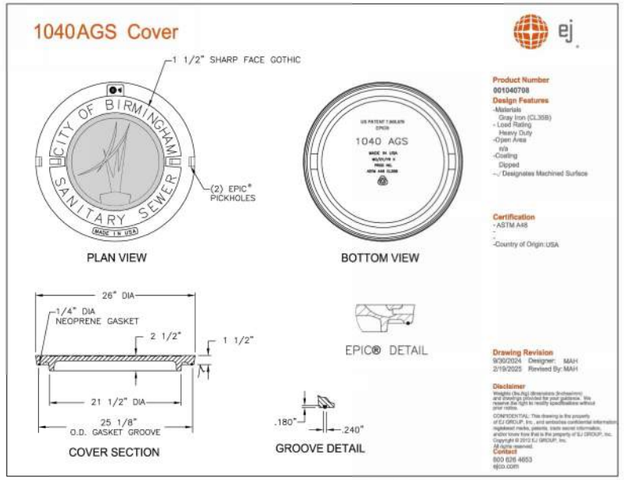
16. NEW MANHOLES CONSTRUCTED DIRECTLY ON CITY OR WRC SEWERS SHALL BE PROVIDED WITH APPROPRIATE LETTERED MANHOLE COVERS. NEW MANHOLES BUILT OVER AN EXISTING SANITARY SEWER SHALL HAVE MONOLITHIC POURED BOTTOMS.

17. NO GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.

18. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.

19. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY OR COMBINED SEWER AND WATER MAIN.

20. CLEANOUTS FOR SANITARY SEWER LEADS WITHIN PAVED SURFACE SHALL HAVE TRAFFIC RATED FRAME AND CASTING.



CITY OF BIRMINGHAM MANHOLE COVER - SANITARY SEWER



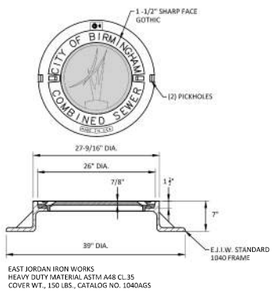
CITY OF BIRMINGHAM MANHOLE COVER - COMBINED SEWER

CITY OF BIRMINGHAM SANITARY SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.

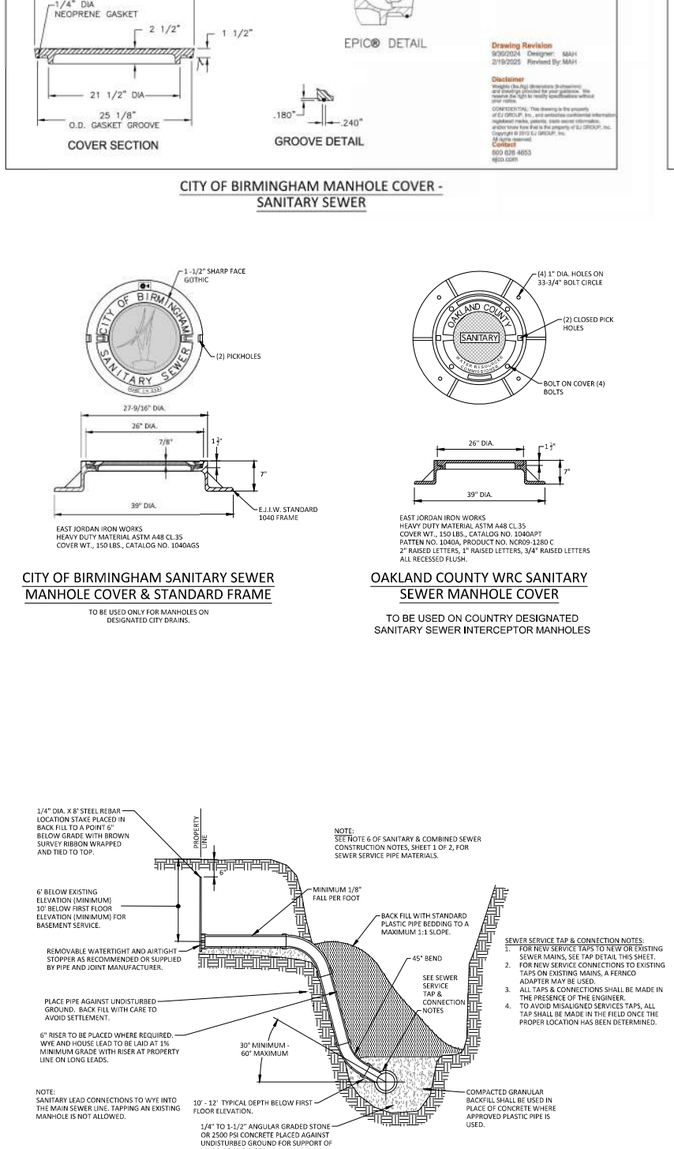
OAKLAND COUNTY WRC SANITARY SEWER MANHOLE COVER

TO BE USED ON COUNTRY DESIGNATED SANITARY SEWER INTERCEPTOR MANHOLES

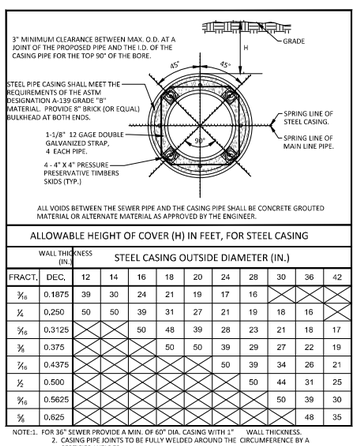


CITY OF BIRMINGHAM COMBINED SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



TYPICAL HOUSE LEAD DETAIL

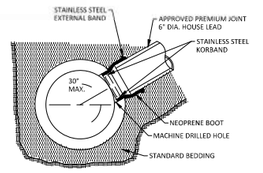


ALLOWABLE HEIGHT OF COVER (H) IN FEET, FOR STEEL CASING

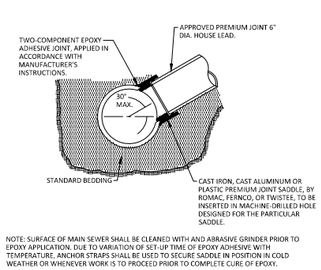
FRACT.	DEC.	WALL THICKNESS (IN.)	STEEL CASING OUTSIDE DIAMETER (IN.)									
			12	14	16	18	20	24	28	30	36	42
3/16	0.1875		39	30	24	21	19	17	16			
1/4	0.250		50	50	39	31	27	21	19	18	16	
5/16	0.3125				50	48	39	28	23	21	18	17
3/8	0.375					50	50	39	29	27	22	19
7/16	0.4375							50	39	34	26	21
1/2	0.500								50	44	31	25
9/16	0.5625									50	39	30
5/8	0.625										48	35

NOTE:1. FOR 36" SEWER PROVIDE A MIN. OF 60" DIA. CASING WITH 1" WALL THICKNESS.
2. CASING PIPE JOINTS TO BE FULLY WELDED AROUND THE CIRCUMFERENCE BY A CERTIFIED WELDER.

TYPICAL SEWER TUNNEL CASING DETAIL



SEWER TAP USING KOR-N-TEE
(ALLOWABLE FOR SEWER MAINS 10" DIA. OR LARGER)



NOTE: SURFACE OF MAIN SEWER SHALL BE CLEANED WITH AND ABRASIVE GRINDER PRIOR TO EPOXY APPLICATION. DUE TO VARIATION OF SET-UP TIME OF EPOXY ADHESIVE WITH TEMPERATURE, ANCHOR STRAPS SHALL BE USED TO SECURE SADDLE IN POSITION IN COLD WEATHER OR WHENEVER WORK IS TO PROCEED PRIOR TO COMPLETE CURE OF EPOXY.

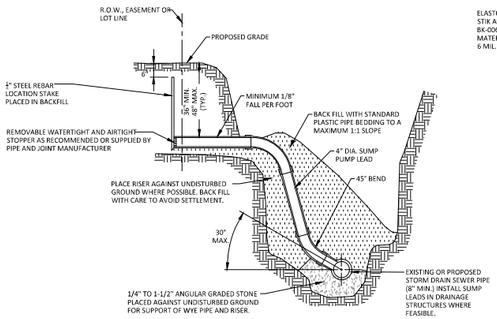
SEWER TAP USING TAPPING SADDLE
(ALLOWABLE FOR ALL SIZES OF MAIN SEWER PIPES

BIRMINGHAM
A WALKABLE CITY

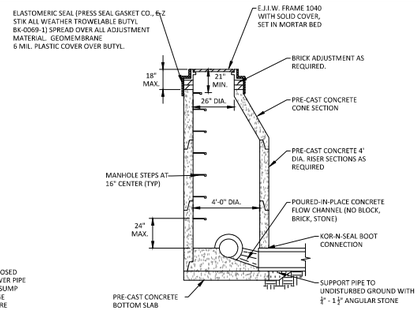
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Sanitary & Combined Sewer
Standard Notes & Details 2 of 2

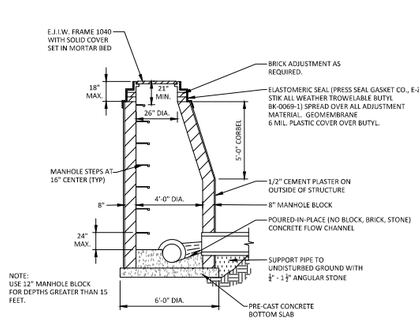
ISSUE DATE:	SCALE:	SHEET NO.
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HOUSE LEAD DETAIL FOR 4" DIA. PLASTIC SUMP PUMP LEADS

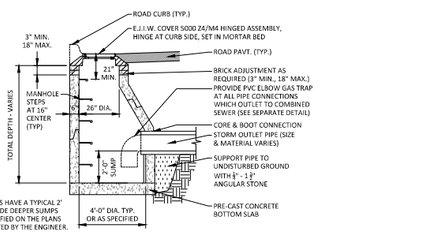


PRE-CAST MANHOLE

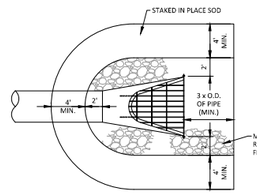


STANDARD MANHOLE DETAILS

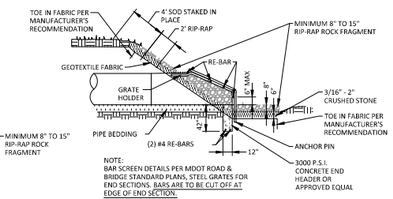
BLOCK MANHOLE



PRE-CAST CATCH BASIN DETAIL (IN ROAD CURB LINE)

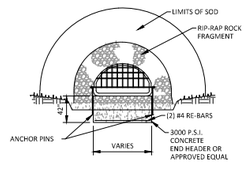


PLAN VIEW



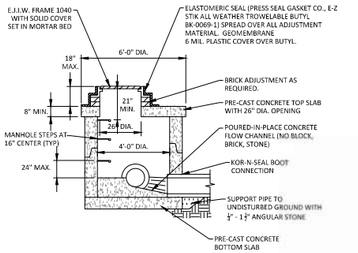
NOTE: BAR SCREEN DETAILS PER MDOT ROAD & BRIDGE STANDARD PLANS, STEEL GRATES FOR END SECTIONS. BARS ARE TO BE CUT OFF AT EDGE OF END SECTION.

PROFILE VIEW

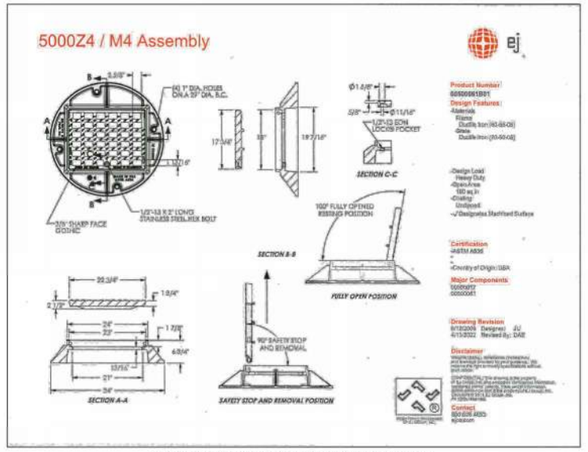


END VIEW

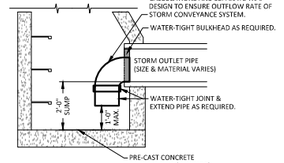
END SECTION AND BAR SCREEN DETAIL



PRE-CAST LOW HEAD MANHOLE DETAIL

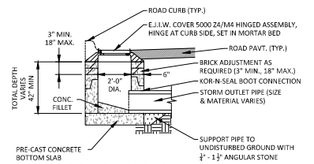


CITY OF BIRMINGHAM CATCH BASIN & INLET FRAME & COVER - STORM SEWER



PVC ELBOW GAS TRAP

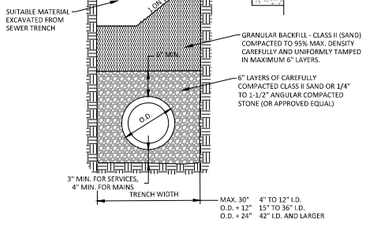
NOTE: REQUIRED AT ALL STORM PIPE CONNECTIONS WHICH OUTLET TO COMBINED SEWER



PRE-CAST INLET DETAIL (IN ROAD CURB LINE)

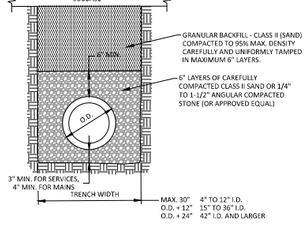
STORM DRAIN SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM. ALL STORM SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE CITY OF BIRMINGHAM.
2. ALL STORM DRAIN SEWER PIPE SIX (6) INCHES IN DIAMETER AND LARGER SHALL BE INSTALLED IN CONFORMANCE WITH CITY OF BIRMINGHAM TRENCH DETAILS CONTAINED HEREIN, TRENCH DETAIL "A" OR "B", INCLUDING BEDDING AND BACKFILL AT A MINIMUM OF 6 INCHES ABOVE THE TOP OF PIPE WITH NATURAL STONE CONFORMING TO M.D.O.T. 6A GRADATION REQUIREMENTS.
3. ALL STORM DRAIN SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH TRENCH "A" DETAIL AT ALL LOCATIONS UNDERNEATH OR WITHIN THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, OR BUILDINGS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT.
4. ALL STORM DRAIN SEWER PIPE MAY BE INSTALLED IN ACCORDANCE WITH TRENCH DETAIL "B" IN LOCATIONS OUTSIDE THE INFLUENCE OF EXISTING OR PROPOSED PAVEMENT AREAS.
5. STORM DRAIN SEWER DRAINAGE PIPE SHALL BE THE TYPE, CLASS, AND SIZE AS SHOWN ON THE APPROVED ENGINEERING PLANS, AND SHALL MEET THE FOLLOWING CRITERIA (ANY DEVIATIONS FROM THESE SPECIFICATIONS REQUIRE PRIOR APPROVAL BY THE CITY):
   - A. REINFORCED CONCRETE PIPE (RCP): ASTM C-76, CLASS IV:
     - ALL REINFORCED CONCRETE PIPE SHALL HAVE MODIFIED GROOVED TONGUE JOINTS WITH O-RING TYPE RUBBER GASKET, PER A.S.T.M. SPECIFICATIONS C443.
     - THE INSIDE JOINTS OF PIPE SIZES OVER 27" DIAMETER SHALL BE POINTED UP WITH MORTAR UPON COMPLETION OF BACKFILLING OPERATIONS.
   - B. POLYVINYL CHLORIDE PIPE (PVC):
     - PVC SDR 23.5 SEWER PIPE: PER ASTM D-3034 (6" DIA.)
     - PVC SDR 26 SEWER PIPE: PER ASTM D-3034 (8"-15" DIA.) AND ASTM F-679 (18" TO 24" DIA.
     - PVC SCHEDULE 40 SEWER PIPE:ASTM D-1785 "STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC PIPE", SCHEDULES 40, 80, AND 120.
     - PVC COMPOUNDS TO MEET ASTM D-1784
   - C. HIGH-DENSITY POLYETHYLENE PIPE (HDPE):
     - 4" OR 6" DIAMETER ALLOWABLE FOR PAVEMENT UNDERDRAIN APPLICATIONS.
     - SINGLE WALL, CORRUGATED , PERFORATED PIPE SUITABLE TO TRAFFIC LOADING APPLICATIONS.
     - PIPE SHALL MEET AASHTO M252, TYPE C OR CP
     - JOINTS SHALL MEET SOIL-TIGHT REQUIREMENTS PER AASHTO M252 OR M294
   - D. CORRUGATED STEEL PIPE REQUIREMENTS (CSP) (ONLY ALLOWED FOR USE IN SMALL DIAMETER (15" DIA. OF LESS) DRAINAGE CULVERTS):
     - CORRUGATED STEEL PIPE SHALL BE PROVIDED CORRESPONDING TO THE DIAMETER OR ARCH SHAPE (RISE AND SPAN) AS SPECIFIED ON THE PLANS.
     - ALL CORRUGATED STEEL PIPE SHALL BE GALVANIZED AND COATED WITH BITUMINOUS ASPHALT TO RETARD CORROSION. AS AN ALTERNATE TO THIS REQUIREMENT, AN ALUMINIZED STEEL PIPE, OR APPROVED EQUAL, MAY BE SUBSTITUTED.
     - ALL CORRUGATED STEEL PIPE SHALL BE JOINED TOGETHER WITH A WATERTIGHT CIRCUMFERENTIALLY CORRUGATED STEEL COUPLING BAND FURNISHED WITH TWO (2) RUBBER GASKETS.
     - CORRUGATED STEEL PIPE SHALL HAVE WELDED SEAMS WITH HELICAL CORRUGATIONS. EACH END OF THE HELICAL CORRUGATED PIPE SHALL BE RE-ROLLED TO AN ANNULAR CONFIGURATION TO ACCOMMODATE THE WATERTIGHT COUPLING BAND DESCRIBED HEREIN. RIVETED OR LOCK SEAM PIPE IS UNACCEPTABLE.
6. STORM MANHOLE, CATCH BASIN, AND INLET STRUCTURE NOTES AND REQUIREMENTS:
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES ARE TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS.
   - ALL NEW CATCH BASINS, INLETS, AND MANHOLES SHALL HAVE CITY-APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS.
   - MANHOLES SHALL BE OF PRECAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE CITY-APPROVED MODIFIED ECCENTRIC CONE TYPE.
   - TAPS THROUGH MANHOLE JOINTS OR CONE SECTIONS ARE PROHIBITED UNLESS OTHERWISE APPROVED.
   - ALL MANHOLE, CATCH BASIN, OR INLET STRUCTURE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2146 TYPE II, GRADE 49108, MA. INDUSTRIES P.S.I. POLYPROPYLENE, (OR APPROVED EQUAL). STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" CENTERS 45° FROM CENTERLINE OF SEWER.
   - CONE SECTION WITH MODIFIED GROOVE TONGUE JOINTS AND WITH STUD INSERTS CAST IN PLACE. TOP TO HAVE FLUSH SURFACE.
   - ASTM C-478 RISER SECTION WITH MODIFIED GROOVE TONGUE JOINTS.
   - KOR-N-SEAL BOOT (WITH STAINLESS STEEL KORBAND) FLEXIBLE RUBBER MANHOLE JOINTS AT ALL PIPE CONNECTIONS.
   - PRECAST CONCRETE BASE MUST BE SET LEVEL ON A SAND CUSHION OF NOT LESS THAN 2" OR MORE THAN 4". FOR MANHOLES, TOP OF BASE TO BE 2" MIN BELOW BOTTOM OF SEWER PIPE.
   - ON PRECAST MANHOLES BOTTOM SECTION SHALL BE ACCURATELY SET PLUMB.
7. ALL END SECTIONS 18" AND LARGER SHALL BE PROVIDED WITH A GALVANIZED BAR SCREEN.
8. STANDARD RIP-RAP SHALL BE 8"-15" FRAGMENTED NATURAL ROCK. HEAVY RIP-RAP SHALL BE 16"-24" FRAGMENTED NATURAL ROCK. (NO BROKEN CONCRETE SHALL BE ALLOWED)
9. SUMP PUMP LEAD REQUIREMENTS:
   - SUMP PUMP LEADS CONNECTED TO A MANHOLE SHALL BE CORED AND BOOTED.
   - SUMP PUMP MAINS AND LEADS SHALL BE SDR 23.5, SCHEDULE 40, NON PERFORATED, SOLID WALL, ABS TRUSS, PVC TRUSS, ADS N-12 WT, OR APPROVED EQUAL, WITH PREMIUM JOINTS.
   - ENDS OF ALL 4" SUMP PUMP LEADS SHALL BE TEMPORARILY CAPPED AND THEIR LOCATION STAKED, WITNESSED AND RECORDED.
   - ALL SUMP PUMP LEADS TO BE TAKEN TO THE PROPERTY LINE, EASEMENT LINE OR AS INDICATED ON THE PLAN.
   - SUMP PUMP MAINS MUST HAVE A CLEANOUT WITH A MINIMUM INSIDE DIAMETER OF 24", CONSTRUCTED AT CHANGES OF ALIGNMENT, ENDS OF SUMP PUMP MAINS OR AS INDICATED ON THE PLAN.



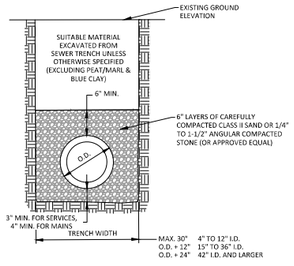
TRENCH DETAIL "A"

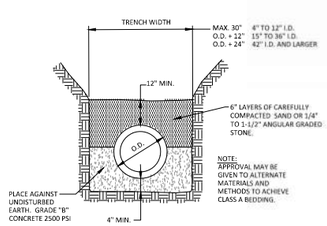
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED



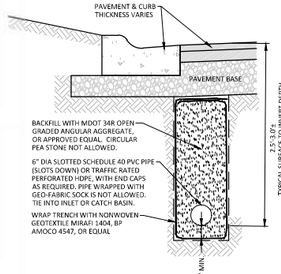
TRENCH DETAIL "B"

SEWER NOT UNDE ROAD BED





CONCRETE CRADLE



6" PERFORATED UNDERDRAIN TRENCH DETAIL

PIPE SCHEDULE

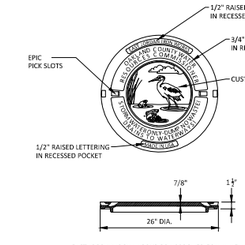
WITHIN 1 ON 1 ZONE OF INFLUENCE OF ROADWAY MEASURED FROM BACK OF CURB.	< 3' COVER 3' - 10' COVER > 10' COVER	C76 - CL V C76 - CL IV C76 - CL V OR APPROVED EQUAL
OUTSIDE ZONE OF INFLUENCE OR ROADWAY, IN REAR YARD OR GREENBELT.	SMOOTH LINED CORRUGATED HDPE, CPVC A 2000, C-76 CL IV OR V, SCH. 40 PVC, SDR 23.5, SDR 26, CSP, OR APPROVED EQUAL	
DRIVE CULVERTS	C-76 CL IV OR CORRUGATED METAL PIPE (CMP)	

NOTES:
1. ALL PIPE TO BE INSTALLED PER MANUFACTURER RECOMMENDED STANDARDS AND AS SHOWN ON PLANS.
2. ALL PIPE SHALL BE FURNISHED WITH PREMIUM JOINTS.

TYPICAL M.H. GRATES

APPLICATION	GRATE ID NUMBER
CURB AND GUTTER	EJIW 5000 Z4/M4 HINGED (SEE DETAIL THIS SHEET)
PAVEMENT	EJIW 1040-M1
GREEN BELT	EJIW 1040-N
DITCH	EJIW 6508 EJIW 6517

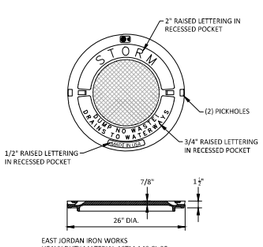
OR APPROVED EQUAL



EAST JORDAN IRON WORKS OR APPROVED EQUAL HEAVY DUTY MATERIAL ASTM A48 CL 35B CATALOG NO. 1040A PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD. 2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS ALL IN RECESSED POCKET.

OAKLAND COUNTY WRC STORM SEWER MANHOLE COVER

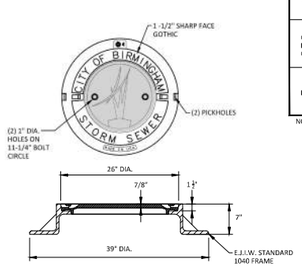
TO BE USED ONLY FOR MANHOLES ON DESIGNATED COUNTRY DRAINS



EAST JORDAN IRON WORKS HEAVY DUTY MATERIAL ASTM A48 CL 35 COVER WT., 150 LBS., CATALOG NO. 1040A 2" HIGH RAISED LETTERS, 3/4" WIDE RAISED LETTERS ALL RECESSED FLUSH.

PRIVATE STORM SEWER MANHOLE COVER

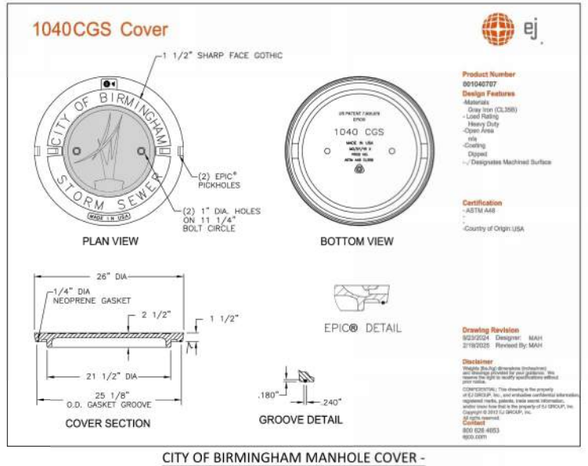
TO BE USED ON ALL STORM SEWER MANHOLES OTHER THAN COUNTY OR CITY DESIGNATED DRAINS.



EAST JORDAN IRON WORKS HEAVY DUTY MATERIAL ASTM A48 CL 35 COVER WT., 150 LBS., CATALOG NO. 1040CGS

CITY OF BIRMINGHAM STORM SEWER MANHOLE COVER & STANDARD FRAME

TO BE USED ONLY FOR MANHOLES ON DESIGNATED CITY DRAINS.



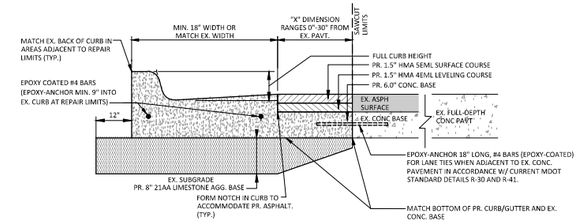
CITY OF BIRMINGHAM MANHOLE COVER - STORM SEWER

BIRMINGHAM
A WALKABLE CITY

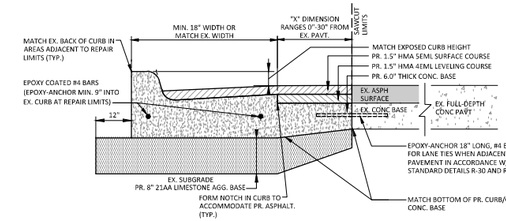
City of Birmingham Engineering Department
151 Martin Street
Birmingham, MI 48012
248-530-1800
www.bhamgov.org

Storm Drain Sewer Standard Notes & Details 1 of 1

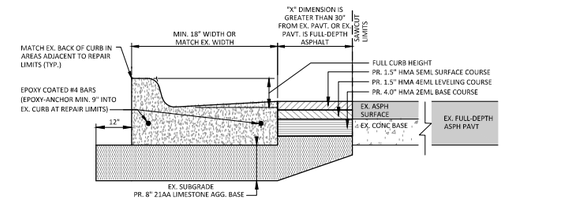
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01-22-26	NTS	SD-1



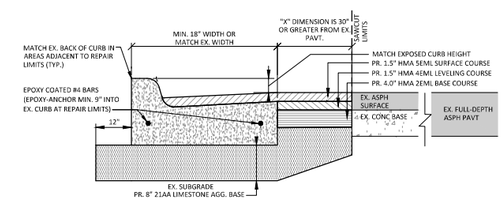
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



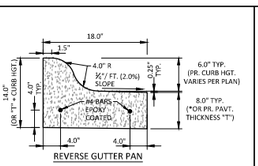
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH CONCRETE OR COMPOSITE PAVEMENT)



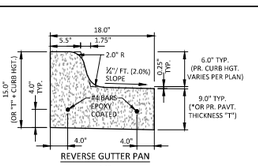
CONCRETE CURB & GUTTER INSTALLATION, TYPE 1 (EXPOSED GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



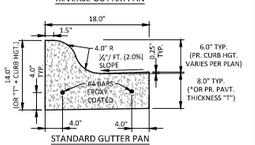
CONCRETE CURB & GUTTER INSTALLATION, TYPE 2 (OVERLAID GUTTER PAN)
(WHERE ADJACENT TO EX. FULL-DEPTH ASPHALT OR COMPOSITE PAVEMENT)



REVERSE GUTTER PAN



REVERSE GUTTER PAN



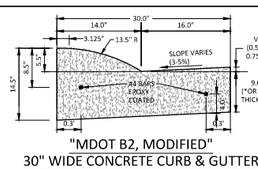
STANDARD GUTTER PAN

"BIRMINGHAM ROLL"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL



STANDARD GUTTER PAN

"MDOT F2, MODIFIED"
18" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

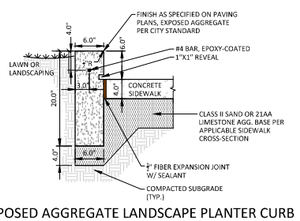


"MDOT B2, MODIFIED"
30" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

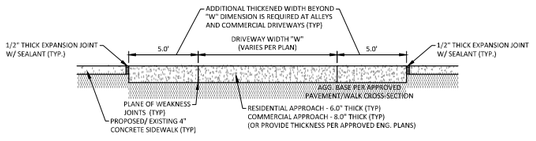
"MDOT D2, MODIFIED"
24" WIDE CONCRETE CURB & GUTTER
DIMENSIONAL CROSS-SECTION DETAIL

CONCRETE CURB & GUTTER NOTES

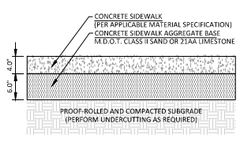
1. REFER TO M.D.O.T. STANDARD PLAN R-30 (CURRENT VERSION) FOR TYPICAL CURB AND GUTTER DETAILS, WHICH SHALL BE USED EXCEPT AS MODIFIED HEREIN, OR UPON DIRECTION BY THE ENGINEER.
2. PER M.D.O.T. STANDARD PLAN R-30, EPOXY-COATED #4 LANE TIES SHALL BE INSTALLED WHEN CONCRETE CURB & GUTTER IS INSTALLED ADJACENT TO EXISTING OR PROPOSED FULL-DEPTH CONCRETE PAVEMENT. LANE TIES MAY BE OMITTED WHEN CURB IS FORMED INTEGRAL TO A CONCRETE PAVEMENT CROSS-SECTION.
3. ALL CONCRETE CURB & GUTTER INSTALLED WITHIN M.D.O.T.- OR ROAD COMMISSION FOR OAKLAND COUNTY (R.C.O.C.) PUBLIC RIGHT-OF-WAYS SHALL ADHERE TO STANDARDS AND SPECIFICATIONS OF APPROVED PERMITS REQUIRED TO COMPLETE THE WORK'S THE GOVERNING AGENCIES.
4. ALL PROPOSED CONCRETE CURB & GUTTER SHALL PROVIDE THE TYPICAL CURB HEIGHTS FOR EACH TYPE OF CURB AS SHOWN IN THE DIMENSIONAL CROSS-SECTION DETAILS, EXCEPT AT LOCATIONS WHERE CURB & GUTTER IS REQUIRED TO MATCH EXISTING OR WHERE ALTERNATE CURB HEIGHTS ARE SPECIFIED ON THE PLANS.
5. PREPARE THE EXISTING AGGREGATE SUBBASE LAYER BELOW CURB AND GUTTER BY CONDITIONING, GRADING, AND/OR RE-SHAPING THE SUBBASE, AND FURNISHING, PLACING, AND COMPACTING SUPPLEMENTAL THICK 21AA AGGREGATE BASE TO ACHIEVE PROPOSED PLAN GRADE. ALL NECESSARY PREPARATION WORK SHALL BE INCLUDED IN APPLICABLE PAY ITEMS FOR CONCRETE CURB & GUTTER.
6. PER THE DIMENSIONAL CROSS-SECTION DETAILS, THE PROPOSED PAVEMENT THICKNESS,"T" IS EQUAL TO THE THICKNESS OF PROPOSED FULL-DEPTH CONCRETE PAVEMENT ADJACENT TO THE CURB & GUTTER, POURED SEPARATELY OR INTEGRAL. THE PROPOSED SLOPE WITHIN THE GUTTER PAN IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.
7. TYPICAL USE OF THE VARIOUS TYPES OF CONCRETE CURB AND GUTTER ARE AS FOLLOWS (OR IN ACCORDANCE WITH THE APPROVED PLANS OR PER DIRECTION BY THE ENGINEER):
   - 7.A. "BIRMINGHAM ROLL" DETAIL: LOCAL RESIDENTIAL STREETS
   - 7.B. "MDOT F2, MODIFIED" DETAIL: RESIDENTIAL, COMMERICAL & INDUSTRIAL COLLECTOR STREETS
   - 7.C. "MDOT D2, MODIFIED" DETAIL: MOUNTABLE CURB APPLICATIONS
   - 7.D. "MDOT B2, MODIFIED" DETAIL: DRIVEWAY OR ROADWAY MEDIANS



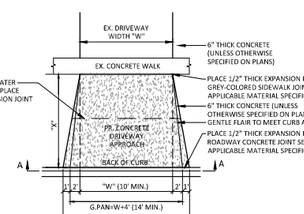
EXPOSED AGGREGATE LANDSCAPE PLANTER CURB



THICKENED CONCRETE SIDEWALK THRU DRIVEWAY APPROACH



4" CONCRETE SIDEWALK



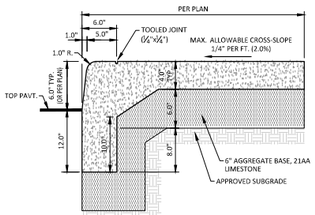
CONCRETE DRIVEWAY APPROACH - DETAIL 'L'



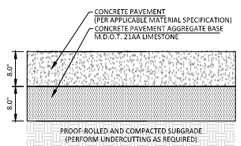
MDOT DRIVEWAY OPENING DETAIL 'M'



6" CONCRETE SIDEWALK



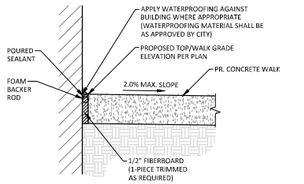
MONOLITHIC CURB AND WALK



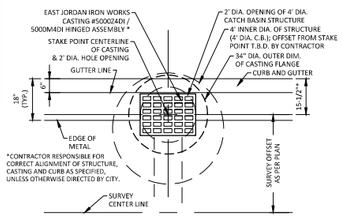
8" CONCRETE PAVEMENT

GENERAL PAVEMENT REMOVAL & CONSTRUCTION NOTES

1. PAVEMENTS SHALL BE OF THE TYPE, THICKNESS, AND CROSS-SECTIONS AS INDICATED HEREIN OR AS PROPOSED ON THE APPROVED ENGINEERING PLANS.
2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF BIRMINGHAM AND THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT WHERE MODIFIED OR SUPPLEMENTED HEREIN, OR ON THE APPROVED ENGINEERING PLANS.
3. ALL PAVING CONSTRUCTION OCCURRING WITHIN THE CITY OF BIRMINGHAM PUBLIC RIGHT-OF-WAY (R.O.W.) REQUIRES THAT THE DEVELOPER OR CONTRACTOR NOTIFY THE CITY ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE, SO THAT THE CITY MAY PROVIDE INSPECTION IF REQUIRED.
4. CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
5. FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.
6. ALL PAVEMENTS CALLED FOR FULL-DEPTH REMOVAL AND REPLACEMENT SHALL BE SAWCUT FULL-DEPTH THROUGH THE PAVEMENT SECTION PRIOR TO REMOVAL.
7. BRICK PAVER WALKS OR DRIVEWAYS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY (R.O.W.) SHALL BE REMOVED AS DIRECTED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER IN ADVANCE TO DETERMINE WHETHER THE REMOVED BRICK PAVER MATERIALS SHALL BE SALVAGED AND RETURNED TO THE OWNER OR DISPOSED OF.
8. IN ANY LOCATIONS WHERE ADJACENT PAVEMENTS ARE DAMAGED BEYOND THE PLANNED REMOVAL LIMITS, THE CONTRACTOR SHALL REPLACE THE PAVEMENTS "IN KIND" TO MATCH EXISTING MATERIAL(S), THICKNESS, UNDERLYING AGGREGATE BASE MATERIAL, AND OVERALL PAVEMENT CROSS-SECTION, AT NO ADDITIONAL COST TO THE CITY OR OWNER.
9. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, AND UPON REVIEW AND APPROVAL BY THE CITY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE. CONTRACTORS SHALL COORDINATE WITH THE CITY DEPARTMENT OF PUBLIC SERVICES (DPS) IN ADVANCE OF CUTTING TREE ROOTS TO DETERMINE IF DPS REQUIRES PERSONNEL TO BE ON SITE TO WITNESS THE TREE CUTTING WORK.
10. SOILS, ROCKS, OR OTHER MISCELLANEOUS DEBRIS WHICH ARE REQUIRED TO BE REMOVED TO COMPLETE THE PROPOSED CONSTRUCTION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, AND LEGALLY DISPOSED OF, UNLESS DIRECTED OTHERWISE FROM THE CITY.
11. PAVEMENT SUBGRADE AND BASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
12. EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS (INCLUDED IN PAVING WORK).
13. ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
14. FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



EXPANSION JOINT DETAIL AT BUILDING



CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

AMERICANS WITH DISABILITIES ACT (A.D.A.) SIDEWALK, RAMP & LANDING COMPLIANCE NOTES

SIDEWALK FLAGS, RAMPS, AND LANDINGS SHALL BE INSTALLED AS INDICATED ON THE PLANS AND AS FOLLOWS:

SIDEWALK REQUIREMENTS:

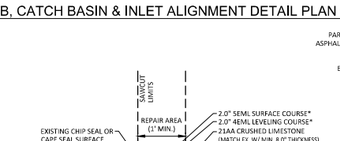
1. THE RUNNING SLOPE OF CONSTRUCTED WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5.0%).
2. THE CROSS-SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48 (2.0%).
3. CHANGES IN LEVEL OF 1/4 INCH (0.02 FEET) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.
4. SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

RAMP REQUIREMENTS:

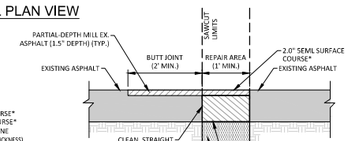
5. CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.
7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 (2.0%).
8. THE LONGITUDINAL SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:12 (8.3%).
9. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 (10.0%).
10. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.
11. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20 (5.0%). THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL.
12. CURB RAMPS WITH A RUNNING SLOPE EQUAL OR LESS THAN 1:20 DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 1:48 PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL
13. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
14. WHEN 60 INCH (5 FOOT) MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 48 INCHES (4 FEET) AND LANDINGS TO NOT LESS THAN 48" x 48" (4' x 4').
15. DIAGONAL OR CORNER TYPE CURB RAMPS WITH RETURNED CURBS OR OTHER WELL-DEFINED EDGES SHALL HAVE THE EDGES PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE A CLEAR SPACE 48 INCHES (4 FEET) MINIMUM OUTSIDE ACTIVE TRAFFIC LANES OF THE ROADWAY. DIAGONAL CURB RAMPS PROVIDED AT MARKED CROSSINGS SHALL PROVIDE THE 48 INCHES (4 FEET) MINIMUM CLEAR SPACE WITHIN THE MARKINGS. DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 24 INCHES (2 FEET) LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.
16. SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COURSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.
17. DETECTABLE WARNING SURFACE COVERAGE IS 24 INCHES (2 FEET) MINIMUM IN THE DIRECTION OF RAMP / PATH TRAVEL AND THE FULL WIDTH OF THE RAMP / PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2 INCHES MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.
18. DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND / OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.
19. RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. SEE BELOW FOR LANDING REQUIREMENTS.

LANDING / TURNING SPACE REQUIREMENTS:

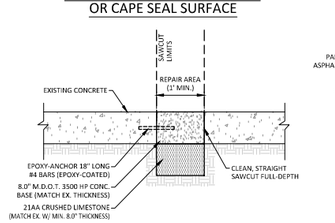
20. LANDINGS SHALL BE REQUIRED AT TOP OF CURB RAMPS AND TOP AND BOTTOM OF CURB RAMPS AND OTHER SIDEWALK RAMPS (SIDEWALKS WITH LONGITUDINAL SLOPE OF 5.0% OR GREATER).
21. LANDINGS SHALL BE PROVIDED WITH SLOPES NOT STEEPER THAN 1:48 (2.0%) IN ALL DIRECTIONS.
22. THE LANDING CLEAR LENGTH SHALL BE 36 INCHES (3 FEET) MINIMUM. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES, LEADING TO THE LANDING.
23. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING AREA WITH DIMENSIONS OF 60 INCHES (5 FEET) MINIMUM BY 60 INCHES (5 FEET) MINIMUM.
24. TURNING SPACES, SUCH AS KEY FLAGS WHERE TWO SEPARATE SIDEWALK DIRECTIONAL ALIGNMENTS INTERSECT, SHALL MEET THE SAME REQUIREMENTS AS LANDINGS AS DEFINED ABOVE.



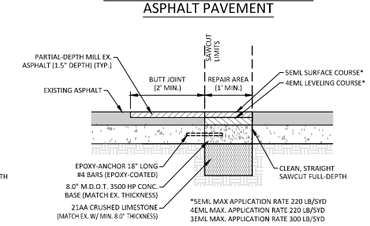
REPAIRS IN EXISTING CHIP SEAL OR CAPE SEAL SURFACE



REPAIRS IN EXISTING FULL-DEPTH ASPHALT PAVEMENT



REPAIRS IN EXISTING FULL-DEPTH CONCRETE PAVEMENT



REPAIRS IN EXISTING COMPOSITE PAVEMENT

PAVEMENT MATERIAL SPECIFICATIONS

AGGREGATE BASE:

1. ROAD PAVEMENTS, CURB & GUTTER, AND COMMERCIAL/INDUSTRIAL DRIVEWAYS
   - 1.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 8.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
2. RESIDENTIAL DRIVEWAYS
   - 2.A. PROVIDE CRUSHED LIMESTONE CONFORMING TO MDOT 21AA GRADATION REQUIREMENTS (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.
3. CONCRETE SIDEWALKS
   - 3.A. PROVIDE CRUSHED LIMESTONE (MDOT 21AA GRADATION) OR MDOT CLASS II SAND (MINIMUM 6.0" THICKNESS), COMPACTED TO MIN. 95% DRY DENSITY.

HOT MIX ASPHALT (H.M.A.) MIXTURES:

2. UNLESS OTHERWISE SPECIFIED ON THE APPROVED ENGINEERING PLANS, THE FOLLOWING HOT MIX ASPHALT (H.M.A.) MIXTURES SHALL BE USED FOR NEW ASPHALT PAVEMENT CONSTRUCTION AND ASPHALT ROAD REPAIRS:
   - 2.A. SURFACE COURSE: MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE OF 220 LB/SYD.)
   - 2.B. LEVELING COURSE: MDOT

WIMBLETON DRIVE PHASE 2 PROJECT

BIRMINGHAM

A WALKABLE CITY

CONTRACT #6-26(W)

CITY OF BIRMINGHAM

ENGINEERING DEPARTMENT

Contractor's Name: Anglin Civil, LLC

AIA Document A310™ – 2010

Bid Bond

CONTRACTOR:
(Name, legal status and address)

Anglin Civil, LLC
13000 Newburgh Rd.
Livonia, MI 48150

SURETY:
(Name, legal status and principal place of business)

RLI Insurance Company
9025 N. Lindbergh Dr.
Peoria, IL 61615

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:
(Name, legal status and address)

City of Birmingham
151 Martin St.
Birmingham, MI 48009

BOND AMOUNT: FIVE PERCENT OF BID AMOUNT (5%)

PROJECT: Wimbleton Drive Phase 2 Project - Contract #6-26(W)
(Name, location or address, and Project number, if any)

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 9th April 2026

(Witness)

(Witness)

Anglin Civil, LLC
(Principal) (Seal)

Director of Construction
(Title)

RLI Insurance Company
(Surety) (Seal)

Courtney Saunders, Attorney-In-Fact

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured

AIA Document A310Tu– 2010. Copyright ©1963, 1970 and 2010 by The American Institute of Architects. All rights reserved. WARNING: This AIA Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.
0111D

POWER OF ATTORNEY

RLI Insurance Company
Contractors Bonding and Insurance Company

9025 N. Lindbergh Dr. Peoria, IL 61615
Phone: 800-645-2402

Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes executed, but may be detached by the approving officer if desired.

That **RLI Insurance Company and/or Contractors Bonding and Insurance Company**, each an Illinois corporation, (separately and together, the "Company") do hereby make, constitute and appoint:

Angelo G. Zervos, Courtney Saunders, jointly or severally

in the City of Coconut Creek, State of Florida its true and lawful Agent(s) and Attorney(s) in Fact, with full power and authority hereby conferred, to sign, execute, acknowledge and deliver for and on its behalf as Surety, in general, any and all bonds and undertakings in an amount not to exceed Twenty Five Million Dollars ($25,000,000.00) for any single obligation.

The acknowledgment and execution of such bond by the said Attorney in Fact shall be as binding upon the Company as if such bond had been executed and acknowledged by the regularly elected officers of the Company.

RLI Insurance Company and/or Contractors Bonding and Insurance Company, as applicable, have each further certified that the following is a true and exact copy of a Resolution adopted by the Board of Directors of each such corporation, and is now in force, to-wit:

> "All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or Agents who shall have authority to issue bonds, policies or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

IN WITNESS WHEREOF, the **RLI Insurance Company and/or Contractors Bonding and Insurance Company**, as applicable, have caused these presents to be executed by its respective Vice President with its corporate seal affixed this 19th day of May, 2023.

CONTRACTORS BONDING AND INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI Insurance Company
Contractors Bonding and Insurance Company

By: _____
Barton W. Davis — Vice President

State of Illinois
County of Peoria } SS

On this 19th day of May, 2023, before me, a Notary Public, personally appeared Barton W. Davis, who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the **RLI Insurance Company and/or Contractors Bonding and Insurance Company** and acknowledged said instrument to be the voluntary act and deed of said corporation.

By: _____
Catherine D. Geiger — Notary Public

CATHERINE D. GEIGER
OFFICIAL SEAL
Notary Public - State of Illinois
My Commission Expires
December 05, 2026

CERTIFICATE

I, the undersigned officer of **RLI Insurance Company and/or Contractors Bonding and Insurance Company**, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the **RLI Insurance Company and/or Contractors Bonding and Insurance Company** this 9th day of April, 2026.

RLI Insurance Company
Contractors Bonding and Insurance Company

By: _____
Jeffrey D Fick — Corporate Secretary

09E8577020211

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WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)
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ADVERTISEMENT

CITY OF BIRMINGHAM, MICHIGAN
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

Sealed proposals endorsed "WIMBLETON DRIVE PHASE 2 PROJECT - Contract #6-26(W)" will be received from contractors by the City of Birmingham, at the office of the City Clerk, located at 151 Martin Street, Birmingham, Michigan, until **2:00 P.M. local time, on Thursday, April 9th, 2026.** The proposals will be opened and publicly read aloud at that time. Bids submitted after the exact time specified for receipt will not be considered.

A pre-bid meeting will be held at the Birmingham City Hall building (151 Martin Street, Birmingham, MI 48009) on **Friday, March 27th, 2026**, between **8:00-9:00 am**. Bidders should meet on the 2nd floor, near the engineering department at the east end of the building. **Attendance for the pre-bid meeting is OPTIONAL, but recommended for general contract bidders.**

General Description of Work: This project includes sewer lining, replacement of storm and combined sewers, water main, and pavements within the work area.

Major work items include: approximatley 3,184 linear feet of mainline sewer installation; 1,157 linear feet of sanitary service replacement, 1,780 linear feet of new water main; 317 linear feet of water service replacement; 6,300 square yards of pavement pulverization, re-grading, new aggregate base, and capeseal pavement surface instalaltion; 715 square yeards of new concrete driveway approaches; 1,570 square feet of new concrete sidewalks; 3,640 square yards of lawn restoration; and other items to make a complete project on Wimbleton Drive, between Warwick and Adams.

The project also involves construction of a new storm sewer outfall at the Rouge River, located north of Wimbeton Drive, on the east side of Woodward Avenue. The work will involve sewer lining, new 42" storm sewer installation, earth excavation, and construction of a rip-rap settling pool adjacent to the Rouge River.

Bidders shall review and comply with all Contract Documents, and supplemental information, as defined in the Information For Bidders.

Bidding documents for this project must be obtained electronically through the Michigan Inter-governmental Trade Network (MITN), which may be accessed at https://www.bidnetdirect.com/mitn. Vendors wishing to obtain copies of the bidding documents will need to register through the MITN website. Electronic versions of bidding documents will be posted to MITN starting **Thursday, March 19th, 2026**.

The successful bidder shall be required to post bonds, and to comply with the contract requirements of the City Charter. Bids are firm, and no bid may be withdrawn for a period of sixty (60) days after opening of bids.

Procurement for the City of Birmingham will be handled in a manner providing fair opportunity for all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be

in the best interest of the City of Birmingham. The City reserves the right to reject any and all bid proposals, to waive any irregularity in any of the bid proposals submitted, and to accept any proposal which it shall deem to be the most favorable to the interest of the City.

A certified check or bid bond in the amount of five percent (5%) of the base bid must accompany each bid proposal.

ALEXANDRIA BINGHAM
CITY CLERK

Published in:
MITN

WIMBLETON DRIVE PHASE 2 PROJECT #6-26(W)

SWORN STATEMENT OF QUALIFICATIONS

In order to provide the City of Birmingham with Contractors and Subcontractors who will carry out the work in a timely and satisfactory manner, a Sworn Statement of Qualifications must be submitted to the Engineering Division, City of Birmingham, before the close of business at **5:00 p.m., Thursday, April 2nd, 2026**. The qualifications of the General Contractor and Subcontractors to be used on the project will be reviewed on the basis of the proposed bidder's past performance on sewer, water main, and/or paving work of a similar nature for the City of Birmingham and other owners. Those bidders and bidders' subcontractors who are determined not to be suitable to bid on any work shall be notified in writing of the determination before the bids are opened.

The Bidder must answer all questions. If more space is needed to complete a question, attach a separate sheet.

Name: Anglin Civil, LLC

Address: 13000 Newburgh Road, Livonia, Michigan 48150

Telephone: (734)464-2600 Fax: N/A Email: n.faust@anglincivil.com Website: www.anglincivil.com

Number of Years Operating Under Your Present Name: 19 year

General Nature of Work Performed: Anglin Civil's General Nature of Work Performed includes site clearing, and preparation, mass earthwork and grading, installation of underground utilities, roadway and pavement construction, structural concrete, and infrastructure improvements for municipal and commercial projects.

Number of construction crews **employed by your company** relating to the type of work under this contract: 5 crews

Number of construction personnel that constitutes a crew (foreman, pipe layers, excavator, and loader operators, etc.): 7 man crew

Number of construction crews the company **will place on site full-time** in order to complete this project, in its entirety, within the designated time frame: 1 crew

The undersigned states that he/she has performed sewer and/or paving work similar in character and condition to that described in the Proposal. List three (3) projects that have been completed over the last three (3) years, including all work performed for the City of Birmingham. The contract amount must be, at minimum, within 50% of the engineer's estimate, except for work that was performed for the City of Birmingham. References provided below the 50% minimum will not be accepted.

REFERENCE PROJECT #1:

Project Name: Wyandotte Downtown Infrastructure Project

Owner: Wyandotte Downtown Development Authority

Contact Person: Dennis Farmer Telephone No.: (248)844-5400

Contract Amount: $ 9,150,642.74

Final Contract Price: $ 9,150,642.74

Date Completed: 2025

Description of Work Performed:

Anglin Civil performed comprehensive site and civil infrastructure improvements as part of the Wyandotte Downtown Infrastructure Prcject. The work consisted of multi-phase rehabilitation, resurfacing, and reconstruction of nine public parking lots and adjacent alleys. Scope of work included site demo, pavement removal, pipe removal, earthwork operations, underground utilities, and electrical improvements.

REFERENCE PROJECT#2:

Project Name: Grosse Ile Taxiway Reconstruction

Owner: Grosse Ile Township

Contact Person: Nic Makhlouf Telephone No.: (734)743-2215

Contract Amount: $ 5,036,367.50

Final Contract Price: $ 5,036,367.50

Date Completed: 2024

Description of Work Performed:

Anlin Civil completed comprehensive airfield reconstruction improvements for the Taxiway A East Reconstruction and Lighting Installation Project at the Grosse Ile Municipal Airport. The project consisted of full depth reconstruction of an existing taxiway, including demo of existing concrete and asphalt pave-ment, removal of underground, installation of new asphalt, concrete pipe, new sewer systems, underdrain, and airfield electrical systems.

REFERENCE PROJECT #3:

Project Name: AOC Levan Knoll Park Improvements

Owner: Alliance of Rouge Communities

Contact Person: Noel Mullet Telephone No.: (248)207-3004

Contract Amount: $ 4,162,683.00

Final Contract Price: $ 4,162,683.00

Date Completed: 2025

Description of Work Performed:

Anglin Civil successfully completed the Rouge AOC Riverview Park Levan Knoll Habitat Restoration Project, the scope of work included site preparation, clearing and grubbing, road and path demolition, earthwork and grading, underground utilities, site restoration, wetland creation, boardwalks, pathway improvements, asphalt and concrete improvements.

List major work presently under contract:

Name of Project	Percent Complete	Owner	Engineer	Contract Amount
Eureka Rd Corridor Frank & Poet Drain	11 %	City of Taylor	Wade Trim	$18,125,303.88
Six Mile Storm Water Improvements	70 %	Township of Salem	Stantec	$4,754,673.16
Inkster Park Restoration	7 %	Alliance of Rouge Communities	ECT	$2,846,525.00
Minock Park	75 %	City of Detroit	OHM Advisors	$912,142.08
Clinton River Trail Washout	35 %	City of Rochester Hills	AEW	$911,721.78

SUBCONTRACTOR INFORMATION:

The Bidder agrees to use the following subcontractors for the performance of the work of their respective trades for this project, unless otherwise approved in writing by the Owner prior to signing of the contract. Contractor shall include, at a minimum, the subcontractor that will perform any work with a total value of 25% or more of the contract total value.

Name, Address & Telephone Number of Subcontractor	Type of Work By Subcontractor	Percentage of Contract Value by Subcontractor
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

CONTRACTOR QUESTIONAIRE:

Have you, at any time, failed to complete a contract?

___ Yes _X_ No

Are there any judgements, claims or suits pending by or outstanding against you?

___ Yes _X_ No

If the answer to either question is Yes, submit details on separate sheet.

N/A

List all judgments against your firm due to construction contracts in the last three (3) years. Include separate pages if necessary. N/A

CERTIFICATION

I hereby certify that the above information is true and correct this 6th day of April, 2026.

By: Anglin Civil, Nic Faust

Signature and Title: Director of Construction

Written Name: Nic Faust

Address: 13000 Newburgh Road,
Livonia, Michigan 48150

STATE OF MICHIGAN)
) SS
County of Wayne)

Subscribed and Sworn to before me, a Notary Public, in and for Wayne County, Michigan,

on this 6th day of April, 2026.

Glynn Robitaille
Notary Public

In and for the County of Wayne, MI.

My commission Expires: January 11, 2031

GLYNN ROBITAILLE
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF WAYNE
My Commission Expires January 11, 2031
Acting in the County of Wayne

INSTRUCTIONS

Complete all requested information on this form and submit it to the City of Birmingham at the information shown below before the close of business at **5:00 p.m., Thursday, April 2nd, 2026.**

Attention: Melissa A. Coatta, City Engineer
Email: mcoatta@bhamgov.org

Receipt of the form may be confirmed by calling (248) 530-1839.

Copies of this Sworn Statement form will be sent by email to prospective bidders upon request.

PROPOSAL

WIMBLETON DRIVE PHASE 2 PROJECT

CONTRACT #6-26(W)

TO THE CITY OF BIRMINGHAM, MICHIGAN:

The undersigned, being familiarized with the local conditions affecting the cost of the work and the Contract Documents including all those sections listed in the Index, and the following addenda:

Date	Addendum Number
03/27/26	1
04/05/26	2
N/A	

hereby proposes to perform everything noted herein and to provide and furnish all labor, materials, except as otherwise specified, necessary to construct and complete in a workmanlike manner all of the work required to be performed for the **Wimbleton Drive Phase 2 Project, Contract #6-26(W)** in conformance with the requirements shown or implied in the above contract documents all of which are hereby made a part of this contract at the following unit price as here stated and further defined in the specifications.

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 1: SEWER PAY ITEMS				
1.	15" Combined Sewer, PVC PS 115, Trench A	471	LF	$123.49	$58,163.79
2.	12" Combined Sewer, PVC SDR 26, Trench A	830	LF	$93.92	$77,953.60
3.	36" Storm Sewer C76, CL-IV, Trench A	681	LF	$207.83	$141,518.63
4.	30" Storm Sewer C76, CL-IV, Trench A	100	LF	$143.10	$14,310.00
5.	21" Storm Sewer C76, CL-IV, Trench A	345	LF	$185.16	$63,190.20
6.	18" Storm Sewer C76, CL-IV, Trench A	88	LF	$151.29	$13,313.52
7.	12" Storm Sewer C76, CL-IV, Trench A	794	LF	$78.47	$62,305.18
8.	Sewer Service, 6" PVC SDR 23.5	1,157	LF	$69.77	$80,683.89

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
9.	6" Perforated Pipe Underdrain (No sock)	450	LF	$26.65	$11,992.50
10.	New 4'-0" Diameter Combined Manhole	6	EA	$4,241.29	$25,447.74
11.	New 6'-0" Diameter Storm Manhole	6	EA	$9,039.93	$54,239.58
12.	New 5'-0" Diameter Storm Manhole	2	EA	$4,645.28	$9,290.56
13.	New 4'-0" Diameter Storm Manhole	2	EA	$2,579.36	$5,158.72
14.	New 4'-0" Diameter Storm Catch Basin w/ 4' Sump & Sed. Trap	9	EA	$2,933.87	$26,404.83
15.	New 2'-0" Diameter Storm Inlet	8	EA	$1,652.92	$13,223.36
16.	Sewer Investigation, Laterals	16	EA	$650.00	$10,400.00
17.	Sewer Service Tap, 6"	37	EA	$709.80	$26,262.60
18.	Sewer Tap, Combined, 15"	2	EA	$691.20	$1,382.40
19.	Sewer Tap, Storm, 10"	1	EA	$377.40	$377.40
20.	Sewer Stub w/ Capped End, Storm, 30"	1	EA	$850.20	$850.20
21.	Sewer Stub w/ Capped End, Storm, 18"	1	EA	$478.10	$478.10
22.	Sewer Stub w/ Capped End, Storm, 12"	1	EA	$425.10	$425.10
23.	Reconstruct Manhole (if and where needed)	10	VF	$398.60	$3,986.00
24.	Remove & Replace Structure Cover (as directed by City)	2	EA	$1,290.10	$2,580.20
25.	Remove Ex. Sewer Manhole	5	EA	$1,103.00	$5,515.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
26.	Remove Ex. Drainage Structure	4	EA	$464.30	$1,857.20
27.	Abandon Ex. 15" Combined Sewer	45	LF	$21.57	$970.65
28.	Abandon Ex. 12" Combined Sewer	706	LF	$8.07	$5,697.42
29.	Abandon Ex. 8" Combined Sewer	483	LF	$5.23	$2,526.09
30.	Remove Ex. 18" Combined Sewer	10	LF	$222.50	$2,225.00
31.	Remove Ex. 10" Storm Sewer	127	LF	$85.81	$10,897.87
32.	Bulkhead Structure, 18"	1	EA	$372.10	$372.10
33.	Bulkhead Structure, 12" or Less	2	EA	$356.20	$712.40
34.	Bulkhead Pipe, Larger than 8"	10	EA	$451.60	$4,516.00
35.	CCTV Sewer Acceptance Inspection	1	LS	$7,000.00	$7,000.00
	SUBTOTAL DIVISION 1: SEWER PAY ITEMS				$704,631.51

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 2: WATER MAIN PAY ITEMS				
36.	Remove Hydrant	2	EA	$1,170.60	$2,341.20
37.	Remove Gate Valve Well	1	EA	$1,339.41	$1,339.41
38.	Retrofit Ex. Gate Well w/ 12" Gate Valve	1	EA	$5,461.60	$5,461.60
39.	12" Gate Valve & Well	5	EA	$10,803.98	$54,019.90

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
40.	8" Gate Valve & Well	3	EA	$7,634.53	$22,904.74
41.	Fire Hydrant Assembly, Complete	4	EA	$7,351.00	$29,404.00
42.	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	1,476	LF	$177.87	$262,536.12
43.	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	272	LF	$118.59	$32,256.48
44.	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	32	LF	$194.75	$6,232.00
45.	12" Water Main Connection to Ex. 12" Water Main	2	EA	$6,786.61	$13,573.22
46.	8" Water Main Connection to Ex. 4" Water Main	2	EA	$7,175.63	$14,351.26
47.	New Water Service, 1", Trench A, Copper	317	LF	$35.54	$11,266.18
48.	New Water Service, 1.5", Trench A, Copper	36	LF	$59.03	$2,125.08
49.	New Water Service, 1", Private Property (Bore), PEX	45	LF	$165.93	$7,466.85
50.	Water Service Connection, 1.5"	2	EA	$903.30	$1,806.60
51.	Water Service Connection, 1"	24	EA	$474.00	$11,376.00
52.	Water Service Connection, 1", Connection at Meter, 871 Poppleton	1	EA	$1,763.40	$1,763.40
53.	Install Curb Stop & Box, 1"	7	EA	$697.66	$4,883.62
54.	Hydra-Stop, Insta-Valve 250, 6"	1	EA	$9,544.18	$9,544.18
55.	Hydra-Stop, Line-Stop, 6"	2	EA	$5,654.59	$11,309.18
56.	Hydra-Stop, Line-Stop, 4"	2	EA	$5,294.59	$10,589.18

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
57.	Abandon Existing Water Mains, Entire Project	1	LS	$110,110.34	$110,110.34
	SUBTOTAL DIVISION 2: WATER MAIN PAY ITEMS			$626,660.59	

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 3: PAVING PAY ITEMS				
58.	Earth Excavation	2,090	CY	$27.32	$57,098.80
59.	Subgrade Undercutting, 21AA Limestone	200	CY	$87.17	$17,434.00
60.	Subgrade Undercutting, 1"x3" Limestone	200	CY	$89.56	$17,912.00
61.	Subgrade Geogrid Fabric, Tensar Triax TX130S	1,250	SY	$2.95	$3,687.50
62.	Removing and Salvage Brick Pavers	225	SF	$3.90	$877.50
63.	Removing Concrete Drive Approach	425	SY	$10.47	$4,449.75
64.	Removing Asphalt Drive Approach	260	SY	$9.31	$2,420.60
65.	Removing Concrete Sidewalk & Ramp (sawcutting included)	195	SY	$16.76	$3,268.20
66.	Pulverize, Remove, Stockpile, Replace, and Re-Shape Existing Bituminous Pavement	6,220	SY	$12.46	$77,501.20
67.	Aggregate Base, MDOT 21AA Limestone, 4"	6,630	SY	$7.49	$49,658.70
68.	Capeseal Surface	6,386	SY	$15.50	$98,983.00
69.	Bituminous Mixture No. 4EML (Handpatching)	3	TON	$299.76	$899.28
70.	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	20	LF	$50.00	$1,000.00

No.	ITEMS FOR BID	QT715 Y	UNITS	UNIT PRICE	AMOUNT
71.	Concrete Drive Approach, 6" Thick on 6" 21 AA Limestone	715	SY	$56.00	$40,040.00
72.	Concrete Sidewalk, 6" (Includes Ramps)	765	SF	$8.00	$6,120.00
73.	Concrete Sidewalk, 4"	865	SF	$6.00	$5,190.00
74.	Handicap Ramp Truncated Domes	110	SF	$60.00	$6,600.00
75.	Adjust Structure Cover	2	EA	$850.20	$1,700.40
76.	Maintenance Aggregate for Entire Project	1	LS	$11,543.66	$11,543.66
	SUBTOTAL DIVISION 3: PAVING PAY ITEMS				$406,384.59

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 4: GENERAL PAY ITEMS				
77.	Mobilization (Max. 5% of Bid)	1	LS	$99,818.70	$99,818.70
78.	Traffic Maintenance & Control	1	LS	$121,577.40	$121,577.40
79.	Inspector Crew Days	88	DAYS	$650.00	$57,200.00
80.	Water and Sewer Allowance	1	LS	$75,000.00	$75,000.00
81.	Audio-Video Route Survey	1	LS	$985.00	$985.00
82.	Salvage Existing Signs	1	LS	$15,780.00	$15,780.00
83.	New Signs	80	SF	$21.00	$1,680.00
84.	Sign Post, U-Channel	240	LF	$9.00	$2,160.00

No.	ITEMS FOR BID	QTY55	UNITS	UNIT PRICE	AMOUNT
85.	Tree Protection, 3" Dia. Or Greater	55	EA	$120.92	$6,650.60
86.	Mulch, 3"	225	SY	$6.67	$1,500.75
87.	Topsoil, 3"	3,640	SY	$3.80	$13,832.00
88.	Sod, Class A	3,640	SY	$6.80	$24,752.00
89.	Inlet Filter, Silt Sack	25	EA	$117.14	$2,928.50
	SUBTOTAL DIVISION 4: GENERAL PAY ITEMS				
					$423,864.95

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
	DIVISION 5: STORM OUTFALL PAY ITEMS				
90.	42" Storm Sewer, C76, CL-IV, Trench A	25	LF	$236.67	$5,916.75
91.	New 6'-0" Diameter Storm Manhole, Construct Online	1	EA	$8,600.40	$8,600.40
92.	New 42" Dia. End Sections w/ Bar Screen	1	EA	$8,416.60	$8,416.60
93.	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	246	LF	$50.00	$12,300.00
94.	Sewer Lining, Pre-Liner, 42" RIFI-CIPP	246	LF	$19.29	$4,745.34
95.	Sewer Lining, 42" RIFI-CIPP	246	LF	$490.00	$120,540.00
96.	Cut/Grind Protruding Sewer Leads, Any Material	2	EA	$55.00	$110.00
97.	Cut/Grind Root Intrusion	5	EA	$55.00	$275.00
98.	Cut/Grind Mineral Deposit	5	EA	$55.00	$275.00

No.	ITEMS FOR BID	QT1Y	UNITS	UNIT PRICE	AMOUNT
99.	Remove Ex. Tree	8	EA	$440.10	$3,520.80
100.	Remove Ex. 42" Storm Headwall	1	EA	$538.30	$538.30
101.	Remove Ex. 42" Storm Sewer	31	LF	$36.94	$1,145.14
102.	Earth Excavation, Storm Outfall	220	CY	$43.34	$9,534.80
103.	Remove & Replace Woodward Ave. Sidewalk	300	SF	$13.16	$3,948.00
104.	Remove & Replace Woodward Ave. Guardrail	60	LF	$110.00	$6,600.00
105.	Mobilization, Traffic Maintenance & Control, Storm Outfall	1	LS	$23,933.75	$23,933.75
106.	Inspector Crew Days, Storm Outfall	20	DAYS	$650.00	$13,000.00
107.	Silt Fencing, 30" Height	325	LF	$2.30	$747.50
108.	Lawn Restoration Along Bank at Storm Outlet	1	LS	$69,309.59	$69,309.59
109.	Gravity Retaining Wall, Boulder	500	FSF	$65.61	$32,805.00
110.	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per Detail)	165	SY	$90.47	$14,927.55
	SUBTOTAL DIVISION 5: STORM SEWER OUTFALL PAY ITEMS				
				$341,189.52	

TOTAL BID $2,502,731.16

Accompanying this proposal is a certified check, bid bond or bank draft in the amount of five (5) percent of the total bid, payable to the City of Birmingham, Michigan, which it is agreed will be forfeited to the City of Birmingham if the undersigned fails to enter into a contract in conformity with the form of contract

incorporated herein, and furnish bonds and insurance as specified within twenty-one (21) days after the contract is awarded to the undersigned or withdraws this bid within sixty (60) days of the date hereof.

In submitting this bid, it is understood that the right is reserved by the City of Birmingham, Michigan to reject any or all bids.

The undersigned hereby agrees to execute a contract with the City of Birmingham, Michigan according to the forms attached hereto and furnish the required bonds, all within twenty-one (21) days after the award of the contract; and will fully complete all work as stated under TIME OF COMPLETION and LIQUIDATED DAMAGES in Supplemental Instructions to Bidders.

The Bidder will identify the business entity as individuals, or if doing business under assumed name, indicate assumed name, partnership (naming partners) and indicate official capacity of persons executing proposal and bid.

Contractor's Name Anglin Civil, LLC

Street Address 13000 Newburgh Road

City Livonia County Wayne

State/Zip Code Michigan 48150

Telephone (734)464-2600 Fax N/A

Date April 9th, 2026

Signed by

Print Name: Nic Faust

Title: Director of Construction

If a corporation, give state in which incorporated: N/A

Witnessed:

Print Name: Andrew Greff

Name of Superintendent Steve Smith
Supervision & time sequence according to the General Requirements

Give below at least three (3) references as to ability to do work proposed.

Name Dennis Farmer, PE
Address 27333 Meadowbrook Rd, Novi, MI 48377
Firm Spalding DeDecker
Telephone (248)844-5400

Name Noel Mullet
Address 1155 Brewery Park Blvd, Detroit, MI 48207
Firm EC T
Telephone (248)207-3004

Name Nic Makhlouf
Address 38777 Six Mile Rd, Livonia, MI 48152
Firm C & S Companies
Telephone (734)743-2215

Give below the last five (5) projects worked on, including those currently in progress, in chronological order. The names need not all be different from those listed above:

Project #1: Name of Project: Inkster Park Restoration

Date Started April 2026 Finished 2027

Name Tennille Newsome
Address 46036 Michigan Ave., Suite 126, Canton, MI 48188
Firm Alliance of Rouge Communities
Telephone (734)768-2180

Project #2: Name of Project: Novi Drainage Improvements

Date Started January 2026 Finished 2026

Name Mark Koskinen, PE
Address 39575 Lewis Drive, Suite 400, Novi, MI 48377
Firm AECOM
Telephone (248)794-3905

Project #3: Name of Project: DWSD Minock Park

Date Started February 2026 Finished 2026

Name Scott Daniel III
Address 735 Randolph Street, Detroit, MI 48226
Firm Detroit Water and Sewerage Department
Telephone (313)977-5413

Project #4: Name of Project: Six Mile Road Stormwater Improvements

Date Started 2025 Finished 2026

Name Tony Tyler Address 27280 Haggerty Rd, Suite C-11, Farmington Hills, MI 48331

Firm Stantec Telephone (734)214-2547

Project #5: Name of Project: Eureka Road Corridor Frank & Poet Drain

Date Started 2025 Finished 2027

Name Kelly Ackland, PE Address 25251 Northline Rd, Taylor, MI 48180

Firm Wade Trim Telephone (734)309-1263

Give below all the subcontractors to be used on the project: If additional space is necessary, please use the back of this page. Should the contractor wish to use any subcontractors that are not on this list after award, the contractor shall submit a written request to the Engineer and obtain authorization for same, prior to proceeding. All subcontractors not listed must receive written approval from the City of Birmingham, prior to working on this project.

Name Jeffry Demek, PE Address 74411 Romulus, MI 48174-0411

Firm Highway Maintenance and Construction Co. Telephone (734)718-3789

Type of Work to be Performed: Capeseal

Name Andre DeMill Address 69951 Lowe Plank Rd, Richmond, MI 48062

Firm Nationwide Construction Telephone (586)203-7042

Type of Work to be Performed: Guardrail

Name Mark Roeske Address 31604 Pamar Ct, New Haven, MI 48048

Firm Pamar Enterprise Inc. Telephone (586)749-8593

Type of Work to be Performed: CIPP

Name Tony Maggiano Address 24806 Industrial Hwy. Warren, MI 48089

Firm State Barricades Telephone (586)756-8282

Type of Work to be Performed: Traffic Control, Signs

Name N/A Address N/A

Firm N/A Telephone N/A

Type of Work to be Performed: N/A

Name N/A Address N/A

Firm N/A Telephone N/A

Type of Work to be Performed: N/A

END OF SECTION

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

CONTRACT

THIS AGREEMENT made the _____ day of_____, 2026, by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and Anglin Civil, LLC of the City of Livonia, County of Wayne, State of Michigan, hereinafter called the "Contractor", relative to Contract No. 6-26(W), otherwise known as: WIMBLETON DRIVE PHASE 2 PROJECT in the amount of $2,502,731.16 to wit:

1. The documents consisting of RFP, including all exhibits and the General Contract Conditions, and the Bid shall be incorporated herein by reference, shall become a part of this Agreement, and shall be binding upon both parties hereto. If there is a conflict between these documents, this Agreement shall control, then the RFP, and then the Bid.

2. The Contractor shall furnish all labor, materials, and appliances necessary, and to all the work as set forth in the Proposal, and in accordance with the plans and specifications, which have been made a part of this agreement in a manner, time and place, as therein set forth.

    a. The Contractor shall provide a Performance Bond, which form is attached hereto and incorporated herein by reference to protect the City and conditioned upon the faithful performance of the contract in accordance with the plans, specifications, and terms hereof.

    b. The Contractor shall provide a Payment Bond which form is attached hereto and incorporated herein by reference for the protection of the claimants as defined in MCL §129.201(6) to supply labor or materials to the principal Contractor or his Subcontractor and the prosecution of the work provided for in this contract.

3. Time is of the essence of this agreement. All the work to be performed by the Contractor shall be completed on or before the Time of Completion, as set forth in the Supplemental Instructions to Bidders. The Contractor shall pay to the City as liquidated damages, the amount per day as set forth under Liquidated Damages in the Supplemental Instructions to Bidders, for each calendar day after the date specified under Time of Completion that the work to be performed by the Contractor is not completed. Liquidated damages are established because of the difficulty in ascertaining actual damages which the City might sustain and are not intended as a penalty.

4. The City promises and agrees to pay said Contractor for all labor, materials and appliances supplied, and for all work performed under this agreement at the unit prices provided in the attached Proposals and Specifications.

5. For the faithful performances of the terms of this agreement, said parties respectively bind themselves, their successors, heirs, executors, administrators, and assigns.

IN WITNESS WHEREOF, the parties execute this agreement as of the day and year first written above.

CITY OF BIRMINGHAM

Attest _____
City Clerk

By: _____
Mayor

Witnessed _____

By: _____
ANGLIN CIVIL
Contractor

APPROVAL (1.135 City Code)

_____
City Manager as to Substance

_____
City Attorney as to Form w/Rev TWG

_____
Director of Finance as to Financial Obligation

_____
City Engineer

SECTION 115
IRAN SANCTIONS ACT CERTIFICATION FORM

Pursuant to Michigan Law and the Iran Economic Sanction Act, 2012 PA 517 ("Act"), prior to the City accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must certify that it is not an "Iran Linked Business", as defined by the Act.

By completing this form, the Vendor certifies that it is not an "Iran Linked Business", as defined by the Act and is in full compliance with all provisions of the Act and is legally eligible to submit a bid for consideration by the City.

Nic Faust
PREPARED BY
(Print Name)

4/9/2026
DATE

Director of Construction
TITLE

4/9/2026
DATE

AUTHORIZED SIGNATURE

n.faust@anglincivil.com
E-MAIL ADDRESS

Anglin Civil, LLC
COMPANY

13000 Newburgh Road, Livonia, MI 48150
ADDRESS

(734)464-2600
PHONE

N/A
NAME OF PARENT COMPANY

N/A
ADDRESS

N/A
PHONE

42-1756268
TAXPAYER I.D.#

N/A

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned _____

_____as Principal, and

_____as Sureties, are hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of _____ Dollars ($_____), in lawful money of the United States, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns this _____ day of _____, 2026.

WHEREAS, the above bounded Principal has entered a certain written contract with the above-named City of Birmingham, Michigan dated _____ day of _____, 2026 for the construction of _____

_____

_____,

which contract is hereby referred to and made a part hereof as fully and to the same extent as if the same were entirely written herein,

AND THE SAID SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder of the specifications accompanying the same shall in anywise affects its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work or to the specifications.

NOW, THEREFORE, the condition of the above obligation is such that if the Principal shall fully perform the annexed contract according to the terms thereof, or as such terms may be changed or modified by mutual agreement, and shall guarantee all work furnished against all defects and incidental damage to other property for a period of one (1) year following final acceptance of the work, then this obligation shall be void, otherwise the same shall remain in full force and effect.

This Bond is provided in compliance with and subject to the provisions of Act 213 of the Public Acts of Michigan for 1963, as amended by Act 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et. seq.

WITNESSED:

_____ _____

_____ _____

_____ _____
Principal

_____

_____

_____

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

PAYMENT BOND

KNOW ALL PEOPLE BY THESE PRESENTS, that we _____ _____ of the _____ _____ hereinafter called the "Principal" and _____ _____ hereinafter called the "Surety", are held and firmly bound unto those persons known as "Claimants", as defined in MCL §129.206(6) supplying labor or materials to the Principal or his subcontractors and the prosecution of the work provided for in a certain Contract by and between the City of Birmingham and the Principal in the sum of _____ Dollars ($_____), in lawful money of the United States, for the payment whereof, we bid ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally this _____ day of _____, 2026.

WHEREAS the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, 2026, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials _____ _____ _____

and,

WHEREAS this Bond is given in compliance with and subject to the provisions of Act No. 213 of the Public Acts of Michigan for 1963, as amended by Act. No. 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et seq.

NOW, THEREFORE, the condition of the above obligation is such that if all persons or claimants as defined in Public Act 213 of 1963 supplying labor or materials to the principal contractor or his subcontractors in the prosecution of the work provided for in the contract are paid, the obligation of this Bond shall be void; otherwise, it shall be in full force and effect.

WITNESSED:

Principal

Surety

To: CITY OF BIRMINGHAM
151 MARTIN
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Date Submitted: _____

Date Received: _____

REQUEST FOR PARTIAL PAYMENT

Partial Payment Request # ____

The undersigned (the "Contractor") hereby requests payment for work performed on WIMBLETON DRIVE PHASE 2 PROJECT #6-26(W) for the period beginning _____ and ending _____. Attached is an itemized list of completed quantities delivered to date.

During the above period, did Contractor incur additional costs for labor or materials because the bid package was missing important information? _____ (if yes, you must provide details of the additional costs and the missing information).

During the above period, did Contractor incur additional costs for labor or materials because the bid package contained information that was not true? _____ (if yes, you must provide details of the additional costs and the untrue statements).

During the above period, did Contractor incur additional costs for labor or materials because the site conditions were different from what you expected? _____ (if yes, you must provide details of the additional costs and the site conditions, both what you expected and what you encountered).

During the above period, did Contractor incur additional costs for labor or materials because of any reasons not mentioned above? _____ (if yes, you must provide details of the additional costs and the reasons the same were incurred).

The above does not include additional work through work directives issued by the City of Birmingham as described on the attached or as covered by an agreed basis of payment attached. _____.

Contractor hereby certifies, represents and warrants that all suppliers, subcontractors and employees have been paid in full for all materials and labor provided on the job during the above period. Contractor certifies, represents and warrants that there have been no change orders issued or requested during the above period, except for the following:_____

_____.

Contractor certifies, represents and warrants that Contractor will never request payments, other than the request made in this form, for any work performed or materials provided during the above period, except for the following unresolved items: _____

_____.

Attached are the following documents
Further detailing the above.

1. _____
2. _____
3. _____

Contractor:

_____
(Company or Contractor Name)

_____
(Signature of Officer of the Company)

_____
Type or Print Name and Title

CONTRACTOR'S AFFIDAVIT

To: CITY OF BIRMINGHAM
151 MARTIN ST.
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Date Submitted_____

Date Received_____

REQUEST FOR FINAL PAYMENT

Payment Request # _____

The undersigned _____
Name of Contractor

hereby represents that on _____ he/she (it) was awarded a contract by
Date

The City of Birmingham hereafter called the Owner to complete construction, in accordance with the terms and conditions of Contract No. 6-26(W), Contract Name WIMBLETON DRIVE PHASE 2 PROJECT; and the undersigned further represent that the subject work has now been accomplished and the said contract has now been completed.

The undersigned hereby warrants and certifies that all of his/her (its) indebtedness arising by reason of the said contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the said contract, have been fully paid or satisfactorily settled. The undersigned further agrees that if any such claim should hereafter arise, he/she (it) shall assume responsibility for the same immediately upon request to do so by the Owner.

The undersigned, for a valuable consideration, the receipt of which is hereby acknowledged, does further hereby waive, release and relinquish any and all claims or right of lien which the undersigned now has or may hereafter acquire upon the subject premises for labor and material used in accomplishing said project owned by the Owner.

This affidavit is freely and voluntarily given with full knowledge of the facts on this ____ day of _____, 2026.

Company or Contractor Name:_____

Signature of Officer of Company:_____

Type or Print Name and Title: _____ _____
Name Title

Subscribed and sworn to before me, a Notary Public in and for _____County,

Michigan on this _____ day of _____, 2026.

_____, Notary Public

My commission expires: _____

SWORN STATEMENT

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

_____ , being duly sworn, deposes and says that _____ is the Contractor for an improvement to the following described real property situated in the County of Oakland, City of Birmingham, State of Michigan, described as follows:

in accordance with the general requirements of the Contract by and between the CITY OF BIRMINGHAM and _____ the following is a statement of each subcontractor, supplier and laborer for the payment of wages or fringe benefits and withholdings is due but unpaid with whom the (contractor)(subcontractor) has (contracted) (subcontracted) for the performance under the contract with the CITY OF BIRMINGHAM, and that the amounts due to the persons as of the date hereof are correctly and fully set forth opposite their names as follows:

Name of Subcontractor Supplier or Laborer	Type of Improvement Furnished	Total Contract Price	Amount Already Paid	Amount Currently Owing	Amount of Laborer Wages	Amount of Laborer, Fringe Benefits and Withholdings Due but Unpaid
TOTALS						

The contractor has not procured material from, or subcontracted with, any person other than those set forth above, and owes no money for the improvement other than the sums set forth above.

Deponent further says that he or she makes the foregoing statement as the (contractor)(subcontractor) or as _____ of the (contractor)(subcontractor) for the purpose of representing to the CITY OF BIRMINGHAM that the Payment Bond for labor and materials is free from claims for the possibility of claims except as specifically set forth above.

Deponent further says that he or she is a duly authorized representative of the (contractor)(subcontractor) and has been authorized to give this release of all claims against the City arising under or by virtue of contract _____ dated _____.

_____
Deponent

Subscribed and sworn to before me
this ____ day of _____, 2026

_____
Notary Public

_____ County, Michigan

My Commission Expires:

WORK DIRECTIVE

From: CITY OF BIRMINGHAM
151 MARTIN
P.O. BOX 3001
BIRMINGHAM, MI 48012-3001

Time:_____

Date: _____

Work Directive No. _____

To: Contractor:_____

Name and # of Contract: WIMBLETON DRIVE PHASE 2 PROJECT, CONTRACT #6-26(W)

The following changed condition(s) is recognized by the City of Birmingham for the above referenced Contract. In order to ensure continuation of the progress of the contract this work directive is issued for the following work described below:

_____

_____

_____

_____

_____

The basis for payment will be: _____ Written Quotation from the contractor.

_____Unit Bid Prices _____ Time and Material

_____Other (describe) _____

A written quotation shall include a detailed description of the tasks involved and the expected timetable to be completed along with a firm quotation for cost.

A time and material basis for work shall be supplemented with agreed quantities and prices between the contractor's field representative authorized to act on behalf of the contractor and the city inspector. It also shall be backed up by unit prices for time, material and equipment supplied to the City in a timely manner. Should this information not be readily available, it shall be provided the following day or a basis for payment shall be agreed to in writing within 24 hours of agreeing to a time and material work directive.

Any other basis shall be approved by all parties in writing before starting work. Should a utility cause the delay, names and approval shall be obtained if possible by their agent.

Approved:

_____ _____ _____

Contractor Supt. Date City Inspector Date City Engineer Date

SECTION 301
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

1.01 TIME OF COMPLETION

Upon review of the submitted bids received on **Thursday, April 9th, 2026,** the City will issue a Notice of Intent to Award Letter to the confirmed, responsive, and qualified low bidder. After receipt of this letter, the Contractor will be allowed to start initiation of the contract, including procurement of bonding and insurance documents. Upon receipt of satisfactory bonding & insurance documentation, the City Engineering Department will then recommend the project for final approval at a forthcoming City Commission meeting.

It is anticipated that the project will receive approval from the Birmingham City Commission on **Monday, May 18th, 2026.** The Contractor shall be allowed to commence the project on or after **Monday June 15th, 2026**, so long as all bonds and insurance submittals have been approved, the contract has been fully executed by both parties, and a pre-construction meeting has been held. Starting on **Monday June 8th, 2026**, prior to the allowable start date listed above (June 15th , 2026), the Contractor will be allowed to start mobilization operations, install temporary signage & barricades, coordinate Miss Dig markings, and other miscellaneous work, so long as no pavement or sidewalk removals occur and all pedestrian and vehicular traffic surrounding the site is not impeded. The purpose of the dates listed above is to coordinate work to accommodate the last week of school for Derby Middle School located southeast of the Wimbleton & Adams Road intersection, in proximity to the project area.

Project phasing and scheduling is required to accommodate the **2026 Woodward Avenue Dream Cruise, which is scheduled to take place on Friday, August 14th, Saturday August 15th, and Sunday, August 16th, 2026.** Work associated with the proposed storm sewer outfall shall be scheduled and phased as necessary to avoid having construction underway during the Dream Cruise event. Since this work involves removal of existing sidewalk and guardrail on the east side of Woodward Avenue, it shall either be finally completed before this event (including sidewalk/guardrail replacement and lawn restoration), or shall be scheduled for mobilization and commencement of this work to occur after this event. Furthermore, the contractor shall schedule & phase their operations associated with construction on Wimbleton Drive such that any advanced warning signage within the Woodward ROW can be temporarily relocated outside of the Woodward ROW. Advanced warning signage can remain within the City-owned ROW for Wimbleton Drive during this event to notify Drivers that Wimbleton should not be used as a through route.

Allowable trucking routes are identified on the project drawings, and it is critically important that they are adhered to. No construction traffic will be allowed to access the recently completed phase 1 work on Wimbelton Drive, which is between Woodward Avenue and Oxford Drive, including the Wimbelton and Oxford intersection. The City will withhold payment of $10,000.00 from the contract as damages for any occurrence where the contractor allows their trucking operations to occur outside of the allowable routes identified on the drawings.

The Contractor shall have the project substantially completed by Saturday, August 29th, 2026, excluding the work associated with the Storm Sewer Outfall (all work included in Division 5 pay items). Substantial completion shall be defined by having all utility construction completed, all roadway, sidewalk, and driveway pavements being installed and cured, and all greenbelt areas restored to final grade using with applicable lawn restoration pay items. **The**

substantial completion date for Storm Sewer Outfall Division 5 Pay Items is Friday, October 15th, 2026, and shall be defined as having the storm sewer and settling pool construction completed, all greenbelt areas final graded and restored, and having the replacement sidewalk and guardrail installed on Woodward Avenue.

The Contractor shall have the project finally completed by Friday, September 25th, 2026, excluding the work associated with the Storm Sewer Outfall (all work included in Division 5 pay items). The final completion date for Storm Sewer Outfall Division 5 Pay Items is Friday, November 13th, 2026. Final completion shall be defined as having all punch list work completed, pavement markings and permanent signage installed, satisfactory establishment of landscaping restoration, and all temporary signage, traffic controls, and all other equipment and materials removed from the site.

LIQUIDATED DAMAGES

A. The contractor shall pay to the City of Birmingham as liquidated damages, the sum of one-thousand dollars ($1,000) per day for each calendar day after the completion dates specified under "Time of Completion" that the work to be performed by the contractor is not completed. Liquidated damages in this amount shall apply for each day that the project is not substantially or finally complete beyond the dates specified under "Time of Completion", regardless of the actual time work began. Liquidated damages are established to compensate the City and the public for the costs of the inconvenience caused by the contractor by extending the work beyond the time specified. Liquidated damages are in place of actual damages, which the City of Birmingham might sustain, and are not intended as a penalty.

B. In addition to the overall project Time of Completion requirements listed above, the following job requirements shall be placed on this Contract:

   The Contractor shall provide the Engineer with a written comprehensive time schedule that details the various steps in the Contract to ensure that the order of the utility and paving operations is clear and meets all applicable phasing requirements specified in the drawings for each work area.

C. For the purpose of determining Liquidated Damages, the Contract Time for work shall be increased proportionally to increases in contract value (if any) for this portion of the work provided that the following conditions are met:

   1. Increase in contract value is greater than 10% of the base bid;
   2. The parties have not adjusted the Contract Time by other mutually agreeable means such as an executed change order;
   3. Adjustments in time on account of unusual weather shall be made in accordance with Section 108.08.D. of the 2020 MDOT Standard Specifications for Construction. The Contractor shall submit a written request for a time extension due to unusual weather conditions, along with supporting documentation, within fourteen (14) days after the last day of the calendar month in which the delay occurred. Failure to notify the City within this time limit shall constitute a waiver of claim for a time extension on account of unusual weather.

1.02 QUESTIONS REGARDING THE CONTRACT DOCUMENTS

A. All questions about meaning or intent of Contract Documents shall be submitted to the Engineer in writing. Address written inquiries to:

   Melissa A. Coatta, P.E.
   City Engineer

City of Birmingham Engineering Department
P.O. Box 3001
Birmingham, MI 48012
Phone: 248-530-1839
Fax: 248-530-1290
Email: mcoatta@bhamgov.org

B. Replies will be issued by Addenda delivered to all parties recorded by as having received Contract Documents for Bidding. Questions received less than five (5) days prior to date for opening of Bids will not be answered. Only answers contained in formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Any Addendum issued during pre-bid period shall be included in the Bid, shall become part of Contract Documents, and shall be acknowledged on Bid Form.

1.03 PROJECT SCHEDULE

A. The Contractor shall submit their preliminary construction schedule within fourteen (14) days of the award of this Contract, along with the signed contract, and required bonds and insurance certificates.

B. Details on the schedule shall be sufficient to meet the requirements set forth in paragraph 1.02 above, or else the Engineer shall have the right to reject and request further information to meet the needs of this requirement.

1.04 HOURS OF WORK

A. Typically, work of this nature is allowed six (6) days a week, from 7:00 AM to 7:00 PM, Monday through Saturday, excluding major holidays, such as Memorial Day, July 4th and Labor Day.

1.05 CONTRACTOR SUPERVISION

A. The Contractor shall have a competent superintendent or foreman available at all times, authorized to act for the contractor as agent on the work, who thoroughly understands the plans and specifications, and who shall receive instructions from the Engineer. The superintendent or foreman shall be responsible for all subcontractors. The superintendent or foreman shall be designated by name prior to commencement of the work, and shall be available ON SITE for proper management of the project for the duration of the contract, regardless of whether or not the contractor or subcontractors are engaged in activity on the project.

1.06 WORK AREA

A. The contractor for this project shall be alert to the fact that the work areas are very visible to the public, and that his work operations have a direct impact on a large number of people on a daily basis. The work shall be organized to minimize the number of work days as much as possible. Also, the contractor shall keep his work area as clean and dust-free as practical at all times.

1.07 STATEMENT OF QUANTITIES

A. The quantities indicated in the proposal are the engineer's estimate of quantities required for the project, and bids will be computed, reviewed, analyzed and compared using these quantities. While these quantities have been estimated with as much accuracy as practical beforehand, they should not be construed as defining, or limiting the amount of work to be performed under this Contract, but rather as information furnished to bidders as an approximate estimation of the work items, and as a basis for comparing bids.

1.08 COORDINATION CLAUSE

A. The following coordination issues are brought to the Contractor's attention for consideration when preparing their bid and planning the construction:

1. Utility owners, such as Detroit Edison, AT&T, and Consumer's Energy, may be relocating their facilities during construction operations. The Contractor is to cooperate with and help facilitate such operations.
2. The Contractor shall protect all existing infrastructure, materials, and operations of the City of Birmingham.
3. Emergency services must be given immediate passage through the construction site.
4. Waste disposal vehicle routes through the construction site must be accommodated at all times.
5. The Contractor shall be responsible to coordinate with the City of Birmingham Police and Fire Departments regarding road closures connected to execution of work in this Contract.
6. There are other construction projects that will be in operation during the term of this Contract and may impact local traffic. The Contractor shall so conduct their operations to cooperate fully with the other contractors, and minimize conflicts to ensure maximum safety and courtesy in the expedient completion of this work.

END OF SECTION

SECTION 310
GENERAL INSTRUCTIONS TO BIDDERS

1.01 CONTRACT PRICE

A. Proposals are solicited on the basis of unit prices and/or lump sum prices which are to be clearly set forth in the Proposal Form. The final contract price on the accepted proposal will be determined by multiplying the number, or fraction thereof, units of work actually performed, or labor, material, or appliances actually supplied by the price designated for such items in the proposal. The total bid figure on the proposal form is merely for purposes of estimating and comparing costs, and under no circumstances on unit price contracts does it constitute or imply the total contract price.

1.02 FORM OF PROPOSAL

A. All proposals must be made in the form attached hereto. Additional copies of this proposal form for the bidder's files may be obtained on request at the City Engineering Department.

B. All prices stated in the proposals must be plainly written in figures.

C. All information called for on the proposal must be furnished to enable a fair comparison of the bids.

D. The place of residence of each bidder, or the official address in the case of a firm or company, with county and state, must be given with the signature.

E. Each proposal must be enclosed in a sealed envelope addressed to the City Clerk of the City of Birmingham, and endorsed upon the outside with the name of the project, as it appears in the advertisement for bids.

1.03 CONFORMITY TO PLANS AND SPECIFICATIONS

A. Proposals must be made in full conformity to all the conditions, as set forth in the plans and specifications for the work now on file in the office of the City Engineer.

1.04 AGENCY

A. Anyone signing a proposal as agent of another or others must submit with the proposal, legal evidence of their authority to do so.

1.05 LEGAL STATUS OF BIDDER

A. The legal status of the bidder, that is, as a corporation, a partnership or an individual, must be stated in the proposal. A corporation bidder must name the state in which its articles of incorporation are held, and must give title of the official having authority under the bylaws to sign contracts. A partnership bidder must give the full names and addresses of all partners.

1.06 CERTIFIED CHECK, BIDDER'S BOND OR BANK DRAFT

A. Each proposal must be accompanied by a certified check, bidder's bond or bank draft in an amount not less than five (5) percent of the total price, drawn to the order of the City of Birmingham, as a guarantee of good faith on the part of the bidder and subject to the conditions stipulated in the proposal form.

B. No proposal shall be withdrawn for a period of sixty (60) days after the date set for the opening of bids.

C. A single check, bond or draft may serve to cover two (2) or more alternative proposals when such alternative proposals are submitted by the same bidder.

D. The bid deposit of all except the three (3) lowest bidders will be returned within three (3) weeks after the opening of bids. The bid deposit of the three (3) lowest bidders will be returned within two (2) weeks after the contract has been executed by both parties.

1.07 OBLIGATION TO EXECUTE CONTRACT

A. The bidder whose proposal is accepted will be required to execute the contract, and to furnish sureties hereafter specified, within twenty-one (21) days after receiving notice of such aeeeptance; and in case of refusal or failure to do so, the bidder shall be considered to have abandoned all rights and interest in the award, and the bid deposit may be declared to be forfeited to the City, as liquidated damages and not a penalty, and the contract may be awarded to another.

1.08 BONDS

A. The successful bidder will be required to furnish two (2) bonds, each on the forms provided as follows:

1. A Performance Bond in an amount not less than 100% of the contract price in favor of the City of Birmingham, conditioned upon the faithful performance of the contract, and completion on or before the date specified.

2. A Payment Bond for labor or material running to the claimants, which is defined in MCL §129.206 as those persons supplying labor or materials to the principal contractor or subcontractors in the prosecution of the work provided for in this contract in an amount not less than 100% of the contract price for the protection of those persons supplying labor, materials or both.

B. The cost of all bond premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required bonds.

1.09 INDEMNITY

A. The Contractor shall indemnify the City of Birmingham in accordance with the INDEMNITY section set forth in the General Requirements.

1.10 INSURANCE

A. The Contractor shall not commence work under this contract until obtainment of the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with insurance carriers acceptable to the City of Birmingham. The cost of all insurance premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required insurance coverage.

1. **Workers' Compensation Insurance:** The Contractor shall procure and maintain during the life of this contract, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

2. **Commercial General Liability Insurance:** The Contractor shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than $3,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent

Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.

3. **Motor Vehicle Liability:** The Contractor shall procure and maintain during the life of this contract Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than $3,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

4. **Additional Insured:** Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement starting the following shall be Additional Insureds. The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any coverage that may be available to the additional insured, whether any other available coverage be primary, contributing or excess.

5. **Pollution Liability Insurance:** CONTRACTOR shall procure and maintain during the life of this Agreement Pollution Liability Insurance, with limits of liability of not less than $1,000,000, per occurrence preferred, but claims made accepted.

6. **Cancellation Notice:** Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to the Finance Department, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012.

7. **Owners Contractors Protective Liability:** The Contractor shall procure and maintain during the life of this contract, an Owners Contractors Protective Liability Policy with limits of liability not less than $3,000,000 per occurrence, combined single limit, Personal Injury, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days' Notice of Cancellation shall apply to this policy.

B. Proof of Insurance Coverage: The Contractor shall provide the City of Birmingham at the time the contracts are returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below:

1. Two (2) copies of Certificate of Insurance for Workers' Compensation;
2. Two (2) copies of Certificate of Insurance for Commercial General Liability;
3. Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
4. Original policy, or original binder pending issuance of policy, for Owners Contractors Protective Liability Insurance;
5. If so requested, Certified Copies of all policies mentioned above will be furnished.

C. Coverage Expiration: If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least ten (10) days prior to the expiration date.

D. Maintaining Insurance: The CONTRACTOR also agrees to provide all insurance coverage as specified. Upon failure of the CONTRACTOR to obtain or maintain such insurance coverage for the term of the agreement, the City of Birmingham may, at its option, purchase such coverage from

the contract amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.

1.11 EXAMINATION OF SITE

A. It is expected that each bidder will make a personal examination of the entire site of the proposed work, and of its surroundings. It will be assumed that each bidder, before offering his proposal, has obtained firsthand information concerning any probable interference and the available facilities for transporting, handling and storing of construction equipment and materials, and concerning other conditions which may affect his work.

1.12 LEGAL CONDITIONS

A. Bidders are notified that they should acquaint themselves with the various provisions in the laws of the State of Michigan, and in the ordinances and regulations of the City of Birmingham and Oakland County, with respect to the carrying on of public improvements.

1.13 BIDDER'S ABILITY

A. It is the intention of the City to award the contract for this job to a contractor whose construction skill and financial resources are fully equal to the task of prosecuting the work in a satisfactory manner, and of bringing it to completion within the time limit specified. With this end in view, the Form of Proposal calls for at least three (3) references concerning his ability to do this particular class of work, and a reference list of the last five (5) projects, including those not completed or currently being performed. The mere ability to offer bonds will not be taken as sufficient evidence of responsibility on the part of the bidder. If the contract is awarded to a foreign company, a certificate of authority to do business in this state must accompany executed contract.

1.14 PAYMENTS

A. Partial payments will be made monthly to the Contractor during the satisfactory progress of the working accordance with the Payments section of the General Requirements.

1.15 RIGHT TO ACCEPT, REJECT AND TO WAIVE DEFECTS

A. The City reserves the right to accept any proposal, to reject any or all proposals, and to waive any defect or irregularity in any proposal, if it appears advantageous to the City to do so.

B. In particular, any alterations, erasure or interlineation in the Specifications which are made a part, specifically, of these instruments, or of the Form of Proposal, shall render the accompanying proposal irregular and subject to rejection by the City. In case any explanation, additions or alterations are to be offered, they shall be indicated on separate sheets attached to the proposal form and referred to therein.

C. Proposals which are clearly unbalanced, will also be considered as irregular, and will be subject to instant rejection by the City.

END OF SECTION

SECTION 400
GENERAL REQUIREMENTS

1.01 DEFINITION OF TERMS

A. The intent and meaning of words and expressions, or pronouns used in their stead, occurring in these specifications or in other contract documents, shall be interpreted as described under Section 101.03 Definitions of Terms of the Current Standard Specifications for Construction adopted by the Michigan Department of and Transportation, with the following additions or exceptions:

1. City - The corporation of the City of Birmingham, Michigan
2. Commission - The Commission of the City of Birmingham, Michigan, and any other board, body, official or officials to which or to whom the powers belonging to the said Commission shall, by virtue of any act or acts, hereafter passed or be held to appertain.
3. Engineer - The person holding the position or acting in the capacity of City Engineer of the City of Birmingham, Michigan, acting either directly or through his properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.
4. Directed, required, permitted, etc. - Whenever in the specifications the words "as directed", "as required", "as permitted", or words of like effect are used, it shall be understood that the direction, requirements or permission of the Engineer is intended; similarly, the words "approved", "acceptable", "satisfactory", or words of like import shall mean approved by, or acceptable, or satisfactory to the Engineer.

1.02 INTENT OF THE PLANS, SPECIFICATIONS AND CONTRACT

A. The intent of the plans, specifications and contract is to provide for the completion of the work in substantial compliance with the details as shown thereon, and as described herein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies, and shall perform all operations required to complete the work in accordance with the specifications, and the lines, grades and cross sections provided for on the plans, or by authorization.

1.03 EXTRA WORK

A. No extra work shall be started, or extra material furnished, until such extra work or furnishing of extra material is authorized in writing by the Engineer.

B. The price for such extra work or material must be approved by the Engineer. Said price may be a unit price, a lump sum price, or if the Engineer so elects, the work shall be done on a force account basis, which will be paid for in the following manner:

1. For all labor, teams and foremen in direct charge of the specific work, the Contractor shall receive the actual rate of wage paid for each and every hour that said labor, teams and foremen are actually engaged in such work, plus 20% of the sum thereof.
2. For materials and supplies, the Contractor will receive the actual cost of such materials delivered on the work, including freight charges, as shown by original receipted bills, plus 15% of the sum thereof.
3. For any machinery and equipment owned or rented by the Contractor, which it may be deemed necessary or desirable to use on extra work, the Contractor will be paid at the actual charge-out rate, if reasonable, for his own equipment, or at the actual rental price paid, if

reasonable, for rented equipment for each and every hour that such equipment is used on the work, to which sum 15% will be added.

4. Bond premium, workmen's compensation insurance, personal injury public liability and property damage public liability insurance, unemployment compensation, and Federal Social Security will be paid for at actual cost, to which sum 15% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance.

5. The compensation as herein provided shall be accepted by the Contractor as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, and the use of small tools and equipment for which no rental is allowed.

1.04 ALTERATION IN CHARACTER OF WORK

A. Should the Contractor encounter, or the Engineer encounter, during the progress of the work, sub-surface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, the Engineer's attention shall be called immediately to such conditions before they are disturbed. The Engineer shall thereupon investigate the conditions, and if he finds that they materially differ from those shown on the plans and indicated in the specifications, he shall at once make such changes in the plans and/or specifications, as he may find necessary.

1.05 COORDINATION OF SPECIFICATIONS AND PLANS

A. In case of discrepancy, written figures shall govern over numerals, figured dimensions shall govern over scaled dimensions, plans shall govern over standards specifications, supplemental specifications shall govern over standard specifications and plans, and special provisions shall govern over supplemental specifications.

B. The Contractor shall not take advantage of any apparent error or omission in the plans or specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

1.06 AUTHORITY OF ENGINEER

A. The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the satisfactory and acceptable fulfillment of the terms of the contract by the Contractor.

1.07 INSPECTION

A. Inspectors may be appointed and directed to inspect all materials used, and all work done. The inspection may extend to all parts of the work, and to the preparation or manufacture of the materials for use in the work. The Inspectors will not be authorized to revoke, alter, enlarge or relax any of the provisions of these specifications, nor to change the plans in particular. The Inspector on the work will inform the Engineer as to the progress of the work, the manner in which it is being done, and the quality of the materials being used. He will also call to the attention of the Contractor any failure to follow the plans and specifications that he may observe. In case of any dispute arising between the Contractor and the Inspector as to the materials furnished, or the manner of performing the work, the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and be decided by the Engineer. In no instance shall any action or omission on the part of the Inspector relieve the

Contractor of the responsibility of completing the work in accordance with the plans and specifications.

B. The Engineer and his duly authorized Inspector, shall at all times have the right to enter the premises upon which the work under this contract is being done, and to inspect said work and to ascertain whether or not the construction is carried out in accordance with the terms of the contract or specifications; and the Contractor shall render all necessary assistance and provide all reasonable facilities and give ample time for such inspection.

1.08 SUPERVISION

A. The Contractor shall give his personal supervision to the faithful prosecution of the work. In case of his absence, he shall have a competent superintendent or foreman on the work site who shall follow, without delay, all instructions of the Engineer or his assistants in the prosecution and completion of the work, and every part thereof in conformity with this contract. He shall also have full authority to supply material and labor immediately.

B. The Contractor's supervisor shall be responsible to act on behalf of the Contractor. This includes being present or available at all times, making decisions on behalf of the Contractor and Subcontractor, scheduling, monitoring work progress on a continued basis, communicating with City representatives, etc. His name shall be submitted prior to the start of work, with all appropriate ways of contacting him. He shall remain the responsible Contractor's representative throughout completion of the project, including any subcontract work associated with this contract. If it is necessary to replace this person, it shall have the approval of the Engineer.

1.09 TIME AND SEQUENCE OF WORK

A. The Contractor shall have control over the sequence of order of execution of the several parts of the work to be done under this contract, and over the methods of accomplishing the required results, except as some particular sequence or method may be distinctly demanded by these specifications and plans, or by the express provisions of the contract.

B. The Engineer may, however, make such reasonable requirements as may in his judgment be necessary for the proper and effective protection of work partially or wholly completed, and to these requirements the Contractor shall strictly conform.

C. The Contractor shall submit a written work plan prior to starting construction. This shall include a written schedule, critical path or equal, to focus in on the date required for completion. This schedule must be updated periodically (not to exceed two (2) weeks) if it becomes necessary to modify the plan. This does not relieve the Contractor of the responsibility to complete the contract according to contractual stipulations. Any modification to the time schedule must obtain prior written approval from the Engineer.

D. Once the Contractor has mobilized, the Contractor must execute the contract in a continuous, expeditious manner, and may not suspend prosecution of work without written permission of the Engineer.

1.10 RELATION TO OTHER CONTRACTORS

A. The Contractor shall so conduct his operations as not to interfere with or injure the work of other Contractors employed by the City on adjoining or related work, and he shall promptly make good any injury or damage which may be done to such work by him.

B. Should a contract for adjoining work be awarded to another Contractor, and should the work on one of these contracts interfere with that of the other, the Engineer shall decide which Contractor shall cease work for the time being, and which shall continue, or whether the work of both

contracts shall continue at the same time and in what manner. In case territory of one contract should be the necessary means of access to another contract, the Engineer shall have power to grant reasonable privileges with respect to the transportation or movement of men, equipment or materials, as he may adjudge to be necessary or expedient, and in the best interest of the City. Any decision which the Engineer may make as to method and time of conducting work or the use of the territory shall not be made the basis of any claim for damage, but an extension of time may be claimed if justified by the circumstances, the same as in the case of other delays caused by the acts of the City. Any difference of opinion or conflict of interest which may arise between the Contractor and other Contractors or workmen of the City in regard to adjoining work, shall be determined and adjusted by the Engineer.

1.11 CONSTRUCTION STAKES

A. The location, alignment, elevation and grade of the work will be determined by the Engineer, who will set such stakes as are necessary to properly mark these elements. The Contractor shall assume full responsibility for detail dimensions and elevations measured from the lines, grades and elevations so established.

B. The Engineer may require the Contractor, at the Contractor's expense, to provide such masts, scaffolds, batterboards, straightedges, templates or other devices as may be necessary to facilitate laying out, inspecting and constructing the work.

C. The Contractor shall exercise proper care in the preservation of all stakes set for his use, or for the use of the Engineer, and if such stakes are injured, lost or removed by the Contractor's operations, the cost of resetting may be charged to the Contractor. The Department will be responsible for the accuracy of lines, slopes and grades established by the City, except that the Contractor shall not take advantage of any obvious errors or omissions.

1.12 SOIL CONDITIONS

A. The Contractor shall make his own determination of the soil conditions and he shall complete the work in whatever materials, and under whatever conditions he may encounter or create, without extra cost of the City.

1.13 MATERIALS FURNISHED BY THE CITY

A. When specified, the City of Birmingham may furnish materials at no cost to the Contractor. All other materials necessary to complete the project shall be furnished by the Contractor.

B. Materials to be furnished by the City will be at the Department of Public Works Yard at Eton Road and Holland Avenue. The Department of Public Works will require the Contractor to provide a written authorization from the Engineer before releasing any materials. The Contractor shall load and transport all such materials from the Department of Public Works Yard to the construction site, at his own expense.

C. The City may, at its discretion, furnish to the Contractor, any materials, supplies or transportation required for extra work, and the Contractor shall not be entitled to any allowance or percentage on account of materials, supplies or transportation so furnished.

1.14 STORED MATERIAL

A. Materials and equipment distributed, stored or placed upon or near the site of the work shall be at all times so disposed as not to interfere with work being prosecuted by the City, or by other Contractors in the City employ, or with street drainage, fire hydrants, or with access thereto, and not to hinder any more than may be necessary the ordinary pedestrian or vehicular traffic of the streets. Such material shall be stored in such a manner as to facilitate inspection.

1.15 REJECTED MATERIAL

A. If any materials used in the work, brought upon the ground, or selected for use in the work shall be condemned by the Engineer on account of bad or improper workmanship, or as being unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove from the work or its vicinity, without delay, all such rejected or condemned material of whatever kind. Upon failure to do so within forty-eight (48) hours after having been so directed by the Engineer, the condemned material may be removed by the City and the cost of said removal deducted from any money that is then due, or that may thereafter become due to the Contractor. No payment shall be made until such materials, work or workmanship has been removed and proper materials and workmanship substituted therefor.

1.16 WATER SUPPLY

A. Water for construction purposes may be taken from the City mains, at no charge, subject to the rules of the City Water Department. Special approval of the Engineer must be obtained prior to the opening of any fire hydrant.

B. The Contractor shall provide for his employees an adequate supply of drinking water taken from the City mains.

1.17 SANITARY REGULATIONS

A. Necessary convenience, properly secluded from public observation, shall be constructed where needed for the use of laborers on the work. Such conveniences shall be located, constructed and maintained, subject to the approval of the Engineer and the collections therein shall be removed at such times, and to such places as he shall direct. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the County Health Department.

1.18 PERMITS AND LICENSES

A. The Contractor shall procure all permits and licenses and pay all charges and fees necessary and incident to the due and lawful prosecution of the work. Unless otherwise stated in these contract documents, there will be no charge for any permits required by the City of Birmingham.

1.19 LAWS AND ORDINANCES

A. The Contractor shall keep himself fully informed of all local ordinances and regulations, state and national laws in any manner affecting the work herein specified. He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with, said ordinances, laws and regulations, and shall protect and indemnify the City and its duly authorized officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, etc.

B. The Contractor shall obey and abide by all the laws of the State of Michigan and of the Federal Government relating to the employment of labor on public work and all Charter provisions and ordinances of the City of Birmingham regulating or in respect to public improvements.

C. The Contractor and his Subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to hire, tenure, terms, conditions or privileges of employment, because of sex, race, color, religion, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

1.20 PROPERTY AND SURVEY MONUMENTS

A. Before any monuments or stakes marking the boundaries of property along or near the work are removed or disturbed, the Contractor shall notify the Engineer in sufficient time so that they can be properly located and reset.

B. All precautions shall be taken to avoid disturbance of permanent survey monuments of any City, County or State authority, and when any of these are disturbed or destroyed, the Contractor shall restore them to the satisfaction of such authority and shall pay all costs incurred by such authority in connection therewith.

1.21 BUILDING AND OTHER STRUCTURES ENCOUNTERED

A. Full responsibility shall be assumed by the Contractor for the protection of all buildings and other structures, public or private, including tracks, pavements, driveways, curbs, poles, signs, hydrants, underground pipes and conduits and other structures of every sort that may be encountered in or adjacent to the work.

B. Wherever settlement or lateral movement of structures might occur, adequate underpinning or other means of support shall be installed. Where necessary, such support shall be installed in advance of construction.

1.22 PROTECTION TO TREES AND SHRUBBERY

A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees or shrubbery shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist, such precautions are necessary. Further detailed information is included in the supplemental specifications section of the contract if applicable.

1.23 DUST CONTROL

A. All Contractors working on projects that require removal of the paved surface during construction shall provide dust control as directed by the Engineer, at no additional cost to the City. When weather conditions are such that dusty conditions can be created, the Contractor shall be prepared to take action. When dry conditions are declared by the Engineer, the Contractor shall have a water truck and calcium chloride on site at all times, to be applied as needed. The Contractor shall be pro-active with respect to applying dust control measures as needed.

1.24 PROTECTION AND RESTORATION OF PROPERTY

A. The Contractor shall restore, at his own expense, any and all public or private property damaged or injured in consequences of any act or omission on his part, or on the part of his employees or agents, to a condition similar and equal to that existing before such damage or injury was done. If the Contractor neglects to repair or make restoration, the Engineer may, after forty-eight (48) hours written notice to the Contractor, proceed to make such repairs or restoration, and will deduct the cost thereof from any monies that are or may become due the Contractor.

1.25 RESPONSIBILITY FOR DAMAGE TO WORK

A. The Contractor shall protect his work and materials from damage, due to the nature of the work, the action of the elements, the carelessness of other contractors, or from any cause whatever, until the completion and acceptance of the work. Should any damage occur, he shall repair or replace it at his own expense, and complete the work to the satisfaction of the Engineer.

1.26 INDEMNITY

A. To the fullest extent permitted by law, the CONTRACTOR and any entity or person for whom the CONTRACTOR is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the CITY OF BIRMINGHAM, its elected and appointed officials, employees and volunteers and any others working on behalf of the CITY OF BIRMINGHAM against, any and all claims demands, suites, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the CITY OF BIRMINGHAM, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF BIRMINGHAM, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or other working on behalf of the CITY OF BIRMINGHAM.

1.27 INSURANCE

A. The Contractor shall comply with the INSURANCE requirements set forth in the General Instructions to Bidders.

1.28 PUBLIC TRAVEL

A. The Contractor shall at no additional compensation make suitable and adequate provisions, unless otherwise authorized by the Engineer, for the safe and free passage of persons and vehicles by, over or under the work while it is in progress.

B. The Contractor shall obtain permission from the Engineering Department to close or block any street. The Contractor shall notify the Engineering Department at least four (4) hours before closing or blocking any street.

1.29 PUBLIC SAFETY

A. The Contractor shall furnish, erect and maintain a good and sufficient fence, railing or barrier around all exposed portions of his work, to effectively prevent any accident in consequences of his operations and to protect the work. Such fences, railings and barriers shall be illuminated from sunset to sunrise by suitable and sufficient lights, flares or torches, in such a manner as to make them clearly visible to approaching pedestrians and/or traffic.

B. When equipment and materials are located within the construction site, or within any public right-of-way, the public shall be safe-guarded by suitable and sufficient signs, lights, barricades or other means furnished and maintained by the Contractor.

C. If any portion of the work is not properly barricaded, signed or lighted by one-half (1/2) hour after sunset, the necessary barricades, signs and lights may be placed by the City and all costs to the City for such work will be charged to the Contractor. The furnishing, erection and maintenance of barricades, signs and lights by the City will not relieve the Contractor of his responsibility for the protection of traffic and the work.

D. The Contractor shall provide such traffic regulators and watchmen as are necessary to insure safe and convenient travel by the public and to protect the work.

E. Barricades, signs and lights shall be erected in accordance with the provisions of the Michigan Manual of Uniform Traffic Control Devices.

1.30 MAINTAINING SERVICE TO DRAIN, WATER MAINS, ETC.

A. The Contractor shall maintain in continuous and effective service all drains, sewers, watercourses and water mains touched during the progress of the work. If it should become necessary to temporarily divert or obstruct the flow of any watercourse or drain, written consent must first be obtained from the Engineer, and then the Contractor shall assume full responsibility for the eonsequenees.

1.31 NOTIFICATION OF UTILITIES

A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavating or disturbances.

B. The rights are reserved to both the City and to the owners of public utilities or franchises to enter upon the work for the purpose of making repairs to their installations and making changes in their installations necessitated by the work.

1.32 SUBLETTING OR ASSIGNING

A. The Contractor shall perform without subletting, at least twenty-five (25) percent of the work provided for in this contract, computed on the basis of cost.

B. The subletting of any portion of the contract work shall be subject to approval by the Engineer, but such approval shall not relieve the Contractor of responsibility for the work of such Subcontractors who likewise shall be bound by all pertinent provisions of these specifications. Before any work is sublet, the Contractor shall satisfy the Engineer that the proposed Subcontractor is suitably equipped and experienced in that kind of work, and that he has proper financial resources to enable him to carry it out.

C. No assignment by the Contractor of any principal construction contract or any part thereof, or of the funds to be received thereunder by the Contractor will be recognized unless such assignment has had the approval of the Engineer, and the Surety has been given due notice of such assignment in writing.

D. No assignment will receive approval unless the instrument of assignment contains a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

1.33 DISCHARGE OF EMPLOYEES

A. The Contractor shall employ only competent, skillful persons to do the work. Whenever the Engineer shall notify the Contractor in writing that, in his opinion, any employee on the work is incompetent, impertinent, disobedient, unfaithful, disorderly or otherwise unsatisfactory, that employee shall be discharged from the work and shall not again be employed on it except with the written consent of the Engineer.

1.34 PROSECUTION OF WORK

A. The Contractor shall begin work in accordance with the detailed progress schedule after execution of the Contract by the City. He shall prosecute the work in the order given in the progress schedule, with force and equipment adequate to complete the major items, portions, or sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the progress schedule, or if it appears at any time that such work

is not being prosecuted in such manner as to insure its completion within the time specified, the Engineer shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to the progress schedule; with or without notice to the Surety, place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plant and equipment as in his judgment is reasonable, and for such time as the plant and equipment are in service.

1.35 EXTENSION OF TIME

A. If the Contractor is obstructed or delayed in the prosecution or completion of the work by reason of the neglect, delay or default of any other Contractor having a contract with the City for adjoining or contiguous work; by reason of any damage that may happen thereto by the unusual action of the elements; by reason of the abandonment of the work by the employees in a general strike; the part of the City in doing work or furnishing material, the

B. Contractor shall have no claim of damages for any such cause or delay. He shall, however, be entitled to such extension of the time specified for the completion of the work as the Engineer shall determine to be just and proper, provided however, that such claim for such extension of time is made by the Contractor in writing to the Engineer within one (1) week from the time when any such cause for delay occurs.

1.36 SUNDAY AND HOLIDAY WORK

A. No work shall be done on Sundays, or upon any days celebrated as holidays by the City of Birmingham, except in case of emergency, or to protect work from damage or injury. All Sunday or holiday work must have prior written approval of the Engineer.

1.37 NIGHT WORK

A. No work shall be carried on from 7:00 p.m. to 7:00 a.m., except in case of emergency, or to protect from damage or injury work that has already been done. All night work must have the prior written approval of the Engineer. This provision does not apply to work covered under the provision entitled "shutting off water".

1.38 MEASUREMENT OF QUANTITIES

A. Quantities of work completed under the contract will be measured by the Engineer according to United States standard measures. When material is measured by weight in tons, the unit shall be the ton of two thousand (2000) pounds.

B. All longitudinal measurements for area of base courses, surface courses and pavements will be made along the actual surface of the roadway. For all transverse measurements for area of base courses, surface courses and pavement, the dimensions used in calculating the pay area shall be the neat dimensions provided in the plans or by authorization.

C. Structures will be measured according to neat lines provided on the plans or by authorization.

D. All materials which are specified for measurement by the cubic yard "Loose Measure" will be measured at the location where used on the project under construction, unless otherwise provided.

1.39 CLEANING UP

A. Upon completion of the actual work of construction, the Contractor shall clean up and leave in a neat condition all the premises which he has occupied during the construction period.

B. Before the time of the final estimate, the Contractor shall remove from the premises, debris, rubbish and all unused materials, together with all tools and equipment, or shall deposit them at such points and in such a manner as the Engineer may require.

C. Before leaving the grounds, the Contractor shall replace and put in good repair all fences, telephone poles and lines, roadways and other property that may have been damaged by him in the progress of the work.

1.40 ENVIRONMENTAL PROTECTION

A. Contractor shall at all times be responsible to insure that no chemicals, pollutants or other harmful or hazardous materials are spilled, discharged or otherwise released into the environment or onto City property, rights-of-way or into the storm or sanitary systems. Should such a release occur, Contractor shall immediately take action to extract the contaminants and prevent further exposure and damage. Contractor shall immediately contact the City and all other required governmental agencies to assess and determine the necessary and appropriate remediation activities. Contractor shall be responsible for all costs and damages stemming from the release including, but not limited to, the cost to remove and dispose of the contaminant, repair/replace/restore the affected areas, and all costs incurred by the City or governmental agency in response.

1.41 UNNOTICED DEFECTS

A. Any defective work or material that may be discovered by the Engineer before the final acceptance of the work, or before final payment has been made, shall be removed and replaced by work and material whieh eonform to the speeifications. Failure to neglect on the part of the Engineer to condemn or reject bad or inferior work or materials shall not be construed to imply acceptance of such work or materials.

1.42 FINAL INSPECTION

A. As soon as practicable, after the completion of all the work covered by the Contract, the Engineer shall make the final inspection of the work. If the work is found to comply with all the terms of the Contract plans and specifications, the Engineer shall accept the completed work with reasonable promptness. If the work is not acceptable to the Engineer at the time of such inspection, he shall advise the Contractor as to the particular defects to be remedied before final acceptanee.

B. If within a period of ten (10) days after such notification the Contractor has not taken steps to speedily complete the work as outlined by the Engineer, the Engineer may, without further notice to the Contractor and without in any way impairing the Contractor, make such arrangements as he may deem necessary to have the work completed in a satisfactory manner. The cost of so completing the work may be deducted from any monies due, or which may become due the Contractor.

C. Use by the City or public of all or any part of the work before acceptance shall not be construed as acceptance of the part used.

1.43 PAYMENTS

A. Partial payments will be made monthly on the basis of the value of work completed during the estimated period, less the percentages retained as specified herein, provided the work is progressing in accordance with the progress schedule, provided the contract provisions are being fulfilled, and provided the time of completion has not elapsed.

B. The Contractor shall be responsible to submit requests for partial payments in writing by completing the Request for Partial Payment form supplied in the contract and/or by the City with

the attached appropriate quantities as measured or estimated by the Superintendent. Final payment shall be made by an officer of the company submitting

C. final quantities to the Engineer based upon the value of the work performed and materials completed in accordance with the contract. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, "Contractor's Affidavit", stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

D. If the Contractor fails to submit a request for a payment, as specified, the Engineer may at his (her) discretion prepare a Contractor's Estimate for such payment.

E. When submitting a request for partial or final payment, the Contractor shall complete the appropriate forms as included in Section 140 of the Contract. When requesting a partial payment, the Contractor shall submit the "Request for Partial Payment" form and the "Sworn Statement" form. When requesting final payment, the Contractor shall complete the "Request for Final Payment" form and the "Sworn Statement" form.

F. When the Contractor determines that work will need to be completed outside of the specified pay items, the "Work Directive" form shall be submitted to the Engineer and approved prior to said work commencing.

G. Except as hereinafter provided, the City will retain ten (10) percent from the partial payments of the amount earned up to fifty (50) percent of the Contract price. After fifty (50) percent of the Contract work is in place, the City will not hold additional retainage, unless the Engineer determines that the Contractor is not making satisfactory progress. If the Engineer determines the Contractor is not making satisfactory progress, the City may retain up to ten (10) percent of the value of the work over fifty (50) percent of the Contract price.

H. After final acceptance of the Contract work by the Engineer, he shall process a final estimate for the total amount due the Contractor, less the total amount of all previous payments. Except as hereinafter provided, the total amount due the Contractor shall include interest earned on retained amounts from partial payments.

I. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, affidavit or certificate, stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

J. In case evidence exists that all bills with respect to the work have not been paid in full, the Engineer may retain out of any amounts due the Contractor, sufficient sums to cover all such unpaid bills.

K. Except as hereinafter provided, and at the City's option, a dispute regarding the percent retained from partial payments or regarding payment of interest on retained amounts, shall be settled in accordance with the provisions of Act 524 of the Public Acts of Michigan for 1980.

L. For a Contract having a dollar value of less than $30,000.00, or a Contract having three (3) months or less between the date of the Contractor and the Contract Time of Completion:

1. The City will retain ten (10) percent of the amount earned from partial payments.
2. The City will not pay interest on amounts retained from partial payments.
3. The provision to settle disputes in accordance with Act 524 will not apply.

1.44 SETTLEMENT OF DISPUTES

A. Any controversy of claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suite in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds $1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suite in the Oakland County Circuit Court or the 48th District Court.

1.45 MAINTENANCE AND GUARANTY

A. The Contractor shall guarantee all the work furnished under this Contract against all defects in workmanship and materials, and incidental damage to other property, for a period of one (1) year following the date of the final acceptance of the work by the City. The Performance Bond shall fully cover all guarantees contained in this article.

1.46 CONFLICT OF INTEREST

A. The Contractor shall not directly or indirectly employ or otherwise use a City official of the City of Birmingham in conjunction with this contract. If subsequent to entering into the Contract a City official, a spouse, child or parent shall become directly or indirectly interested in the contract, the City shall have the right to terminate the contract without further liability if the disqualification has not been removed within thirty (30) days after the City has given notification of the disqualifying interest.

1.47 INSPECTOR CREW DAYS

A. It shall be the responsibility of the bidder to extend as a bid item in his proposal, when called for, the number of inspection crew days he requires for the completion of the project, times the unit price for inspection. The basis of computing crew days shall be as follows:

Total Hours Worked	Crew Days Charged
When an Inspector reports to the project and the Contractor decides not to work, or does not appear to work, weather permitting.	- One-half (1/2) crew day
Under four (4) hours	- One-half (1/2) crew day
Four (4) hours or more	- One (1) crew day
Over Eight (8) hours or more	- Three eights (3/8) crew day for each two hour or part thereof

B. The above hours are only for the usual working days of Monday through Friday.

C. All Saturday work shall multiply the number of crew days by a factor of 1.5. All Sunday work shall multiply the number of crew days by a factor of 2.0.

D. All holiday work shall multiply the number of crew days by a factor of 2.0. Holiday work shall include all legal holidays, and any other days when the Municipal Building of the City of Birmingham is officially closed.

E. The amount bid shall be included in comparative evaluation of the bids. OMISSION OF THIS ITEM, WHEN CALLED FOR, SHALL BE CAUSE FOR REJECTION OF THE BID.

F. The City of Birmingham will bill the Contractor four hundred ($400) dollars per day for each day they require inspection according to the Engineer. The bill must be paid monthly to the City of Birmingham Treasurer. A thirty (30) day grace period will be provided in which to pay the inspection bill, after which a 1% per month late fee will be assessed. All inspection bills must be paid prior to issuance of final payment.

G. In the event that the number of crew days required is less than the amount bid, the excess shall be paid to the Contractor at the end of the project. If the number of days required is more than the amount bid, the pay item shall remain as the amount bid, and all days used shall be due to the City prior to final payment.

H. If the quantity of work under the Contract varies from that stated in the Proposal, the number of "crew days" allowed under the bid item shall be increased or decreased in proportion to changes in the total value of work under the Contract. This revision in the number of crew days shall be agreed upon at the time the Contract quantities are revised.

I. The Contractor shall give the City Engineer at least twenty-four (24) hour notice, exclusive of Saturdays, Sundays or holidays, when the project requires an increase or decrease in the number of Inspectors. Failure to observe this requirement will either necessitate the charging of one-half (1/2) crew day if the Inspector appears on the project, or the halting of all additional work until an Inspector is available. Unless the Inspector is notified in advance, crew days will be charged when an Inspector appears on a project and the Contractor decides not to work.

J. A separate crew day shall be charged for each and every Inspector or Engineer employed on a project for inspection purposes.

K. The number of Inspectors or Engineers required for the complete inspection of any project shall be as determined by the City Engineer.

L. One (1) Inspector or Engineer shall be assigned to each construction crew or each operation listed below:

1. General
    a. Material Testing (not the operations done by a testing laboratory).
    b. Checking barricades and lighting.
    c. Checking maintenance of traffic.
    d. Emergency conditions, as determined by the Engineer.
    e. Measuring quantities when said measurements are taken during one of the operations included within this list.
2. Clean-Up and Complaints
    a. Replacement of driveways, sidewalks, pavement, etc.
    b. Checking restoration and answering complaints.
3. Water Mains and Appurtenances

a. Excavation.
b. Laying of Mains.
c. Installing Valves and Hydrants.
d. Tunneling, Jacking or Boring of Water Mains.
e. Backfilling of Trenches.
f. Restoration of Existing Conditions.
g. Cleanup.
h. Pressure Testing.
i. Cleansing and Disinfecting.
j. Checking final installation for conformance to specifications prior to releasing for connections to be made.
k. The same Inspector may inspect the installation of hydrants, thrust blocks, gate wells, etc., in the proximity of the pipe laying operations, provided the Contractor cooperates to the extent that no portion of the work is covered prior to inspection.

4. Concrete Pavement
   a. Excavation and Preparation of the Site.
   b. Mucking and Filling Ditches.
   c. Pavement Removal.
   d. Subgrade Preparation and Fine Grading.
   e. Adjusting and Reconstructing Existing Structures.
   f. Sub-Base Construction.
   g. Checking Form Alignment and Grade.
   h. Placing of Concrete.
   i. Constructing Compression Cylinders.
   j. Finishing of Concrete.
   k. Placing of Cold Weather Protection.
   l. Sawing and Sealing.
   m. Finish Grading.
   n. Coring Finished Pavement (One (1) crew day will be charged for each twelve (12) cores taken).
   o. Adjusting Existing Driveways and Sidewalks.
   p. Seeding and Mulching.
   q. Restoration.
   r. Site Clean-Up.
   s. Checking final pavement prior to final acceptance for conformance to specifications.

5. Sanitary, Combined, and Storm Sewers, and Appurtenances
    a. Excavation and Preparation of the Site.
    b. Checking Sewer Pipe.
    c. Installing Pipe Bed.
    d. Laying Pipe.
    e. Installing House Leads.
    f. Tunneling, Jacking or Boring of Sewer.
        i. Mining Operation:
        ii. Placement of Concrete:
            -One (1) Inspector in Tunnel.
            -One (1) Inspector Top Side.
    g. Constructing Manholes, Catch Basins, Inlets.
    h. Backfilling.
    i. Restoration.
    j. Infiltration or Ex-Filtration Tests.
    k. Site Clean-Up.
    l. Final checking of sewers prior to releasing for connections to be made or placing in service.
    m. The same Inspector may inspect the installation of manholes, catch basins, inlets, etc., in the proximity of the pipe laying operation, provided the Contractor cooperates to the extent that no portion of the work is covered prior to inspection.
6. Reinforced Concrete Structures
    a. Excavation for Structure.
    b. Sheeting.
    c. Checking Forms and Resteel.
    d. Placing of Concrete.
    e. Backfilling Around Structures.
    f. Checking Installation of Equipment.
7. Asphalt Paving and Pavement Resurfacing
    a. Excavation.
    b. Preparation of Subgrade.
    c. Construction of Base.
    d. Preparation of Existing Pavement.
    e. Priming Base Course.
    f. Construction of Bituminous Concrete Pavement or Surface.

g. Checking of Material.

h. Checking of Asphalt Plants.

i. Checking of Final Pavement for Conformance to Specifications.

j. Restoration.

k. Site Clean-Up.

M. Inspection rates for crew days will be charged as follows:

1. Through 4 Hours = $325.00
2. Over 4 Hours to 8 Hours = $650.00
3. Over 8 Hours = $243.75 for each two hours or part thereof
4. Saturdays
   a. Through 4 Hours = $487.50
   b. Over 4 Hours = $243.75 for each two hours or part hereof

N. No payment on inspector crew days shall occur while the project is in progress. Upon final evaluation and inspection approval inspector crew days will be calculated and paid along with the final payment of the project to the contractor.

END OF SECTION

SECTION 450
COLOR AUDIO-VIDEO ROUTE SURVEY

PART 1. GENERAL

1.01 SUMMARY

A. The bid item "Audio-Video Route Survey" is included in the proposal to cover the cost of obtaining a record of the existing conditions prior to the start of construction.

B. The Contractor shall engage the services of a professional electrographer actively engaged in color audio-video recordings of projects similar to the work included under this Contract.

C. The firm performing this work shall have the equipment and experience necessary to produce a digital color audio-video recording of the prescribed quality, meeting all of the requirements specified herein.

D. The Engineer may require the video taping of a "sample" route to verify the ability of the electrographer to perform the work.

E. All digital recordings and written records shall become the property of the Owner. The firm performing this work shall also provide one complete copy of all media files in electronic format on a "flash drive" or similar physical device, along with applicable written records to the Engineer.

F. Complete coverage shall include all surface features located within the public right-of-way, easement areas and adjacent private properties up to building line when such properties lie within the zone of influence of construction and will be supported by appropriate audio descriptions made simultaneously with video coverage. Such coverage shall include but not be limited to all existing driveways, sidewalks, curbs, ditches, roadways, landscaping, trees, culverts, mail boxes, headwalls, and retaining walls, or buildings located within such zone of influence.

G. Coverage shall include the entire project area impacted by construction and any portions of streets to be used by the Contractor as access roads and/or haul roads.

H. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall not be less than twelve (12) feet to insure proper perspective.

I. In some instances, audio-video coverage will be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Owner.

J. All recordings must be made using digital equipment to produce full-colored audio-video media files in a typical electronic format playable on standard computer software. One complete copy of media files and written records shall be provided to the Owner prior to commencing construction on this project.

K. Buildings shall be identified by street number, when visible, in such a manner that structures of the proposed system can be located by reference. In all instances, however, locations shall be identified by audio or visual means at intervals not-to-exceed 100 lineal feet in the general direction of travel.

L. The rate of speed in the general direction of travel of the conveyance used during recording shall not exceed 30 feet/minute. Panning rates and zoom-in, zoom-out rates shall be controlled sufficiently such that stop-action during play-back will produce clarity of detail in the object viewed.

M. All recording shall be done during times of good visibility. No recording shall be done during periods of visible precipitation, or when more than 10% of the ground area is covered with snow or standing water, unless otherwise authorized by the Owner.

N. Any recorded coverage not acceptable to the Owner shall be rerecorded at no additional charge.

O. The Owner shall have the authority to designate areas for which coverage may be added or omitted and this shall be considered as incidental to the Contract.

P. All media files shall be properly identified as to location, time and date in a manner acceptable to the Owner in written format.

Q. A record of the contents of each media file shall be supplied by a sheet identifying each segment in the flash-drive by location, number, time, starting point, traveling direction and ending point.

R. The recording shall be done prior to placement of materials or equipment on the construction area and the media contents must be furnished one week prior to the start of construction.

S. To preclude the possibility of tampering or editing in any manner, all video recordings, must, by electronic means, display continuously and simultaneously generated transparent digital information to include the date and time of recording, as well as the corresponding engineering stationing numbers. The date information will contain the month, day and year; for example 10/5/96 and be placed directly below the time information. The time information shall consist of hours, minutes and seconds, separated by colons. For example 10:53:18. This transparent information will appear on the extreme upper left-hand third of the screen.

T. The engineering stationing numbers must be continuous, accurate and correspond to the project stationing and must include the standard engineering symbols. For example 14+84. This transparent information will appear on the extreme area covered, direction of travel, viewing side, etc.

U. Below the engineering station, periodic transparent alpha/numeric information will appear. This information will consist of the name of the project, name of area covered, direction of travel, viewing side, etc.

V. In order to produce the proper detail and prospective, artificial lighting will be required where it is necessary to fill in shadow areas caused by trees, utility poles, road signs, or other such objects.

1.02 BASIS OF PAYMENT

A. Payment shall be by "Lump Sum" based on construction zones as identified on the construction plans.

PART 2. MATERIALS

Not Applicable

PART 3. EXECUTION

Not Applicable

END OF SECTION

SECTION 500
WATER MAIN CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. The work of this section shall consist of the installation of water mains, valves, risers, corporations, boxes, hydrants, water services and connections, of the size and character and at the locations shown on the drawings. This work shall include the provision of all labor, materials, equipment, and supervision required, including excavation, bedding, backfill, testing and sterilization and other incidental work necessary for a complete system. The Contractor shall set crosses, tees, bends, sleeves, and other special fittings in the main where shown on the drawings or directed by the Engineer. All unconnected openings of such special fittings shall be closed by standard plugs. All special fittings shall be incidental to the water main construction.

1.02 REFERENCES

A. Unless otherwise specified, all water main pipe materials shall conform to the latest edition of the applicable AWWA standards for construction.

B. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.

C. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 CERTIFICATION AND INSPECTION

A. All pipe and fittings delivered to the job shall be accompanied by certification papers showing that the pipe and fittings have been tested in accordance with the applicable Specifications for this project. All pipe and fittings will be inspected upon delivery to the jobsite. No cracked, broken or damaged pipe will be allowed in this work.

B. Each piece of ductile iron pipe and each fitting shall have its weight and class designation conspicuously painted or cast on it. All other pipe materials shall have the class designation painted thereon. Where required, other designation marks shall be painted on the pipe or fittings to indicate correct location in the pipeline in conformity to a detailed layout plan.

1.04 SHOP DRAWINGS AND GUARANTEES

A. Contractor shall furnish shop drawings and guarantees of the items to be furnished under this section of the Contract. Design details of joints and joint restraint shall be submitted to the Engineer for consideration and approval before ordering any pipe.

PART 2. MATERIALS

2.01 WATER MAIN PIPE

A. All water main pipe supplied and installed on this project shall be Pressure Class 52 Ductile Iron Pipe (DIP) conforming to ANSI A21.5, latest revision.

B. Joints shall be push-on type conforming to ANSI A21.11, latest revision.

C. Ductile iron pipe shall be cement mortar lined and bituminous seal coated, in accordance with ANSI A21.4, latest revision.

2.02 POLYETHYLENE ENCASEMENT

A. All ductile iron pipe and fittings shall be encased with polyethylene encasement in accordance with the requirements of ANSI/AWWA Standard C105/A21.5-10.

B. Polyethylene encasement materials shall be manufactured of virgin polyethylene possessing the following characteristics:

1. Type, Class, Grade, other Characteristics:
   a. In accordance with A.S.T.M. Specification D-1248-84 or latest revision thereof.
   b. Type.....I
   c. Class A..... A natural color where exposure to weather (including sunlight) is less than forty-eight (48) hours total burial OR Black where exposure to weather (including sunlight) may be more than forty-eight (48) hours. Exposure to weather should be kept to a minimum, and in no case should it exceed ten (10) days.
   d. Grade..... E-1
   e. Flow Rate (formerly Melt Index) .....0.4 maximum
   f. Tensile Strength..... 1200 psi
   g. Elongation.....300%
   h. Dielectric Strength.... Volume resistivity, ohm-Cm3 = 1015 volts per mil thickness.
   i. Polyethylene tube material shall have a thickness of .008" (8-mils). Thickness tolerance shall not exceed 10% of the total tube thickness. A suggested tube size for each pipe diameter is listed in Table 1 below. For pipe sizes greater than 24", tube size may be determined by multiplying the nominal pipe diameter by 2.25 to obtain minimum flat tube width.

TABLE 1: Polyethylene Flat Tube Width (Inches)

Nominal Pipe Diameter (Inches)	Ductile Iron Pipe, Bell & Spigot Joints	Ductile Iron Pipe with Mechanical Joints
4	16	16
6	20	20
8	24	24
10	27	27
12	30	30
14	34	34
16	37	37
18	41	41
20	45	45
24	54	54

C. Adhesive tape used to connect Water main Polyethylene Encasement shall be a general-purpose adhesive tape two (2) inches wide and approximately ten (10) mils thick, such as Scotchrap No. 50, Polyken No. 900, or Tapecoat CT. Tape used for repair of damage to the polyethylene shall possess a life expectancy equal to that of the polyethylene.

2.03 FITTINGS

A. Ductile Iron Water Main Fittings shall be furnished in accordance with ANSI A21.10, latest revision, and AWWA C104 & C153, latest revisions.

B. Joints shall be mechanical joint or push-on, conforming to ANSI A21.11, latest revision. When called for on the plans or supplemental specifications, fittings shall be cement mortar lined as detailed for pipe.

C. When connecting to existing water mains, oversized fittings may be required to match the outer diameter of the older water mains. The Contractor shall determine sizes as necessary.

2.04 HYDRANTS

A. Hydrants shall be EJIW model 5BR with 6" mechanical joint inlet, two pumper nozzles, all opening left, 5'6" bury, plugged drain, block bolts (EJIW Product #1D566M01002260A).

B. Hydrants shall be manufactured to conform to AWWA C502 standard specifications.

2.05 GATE VALVES AND BOXES

A. All gate valves shall be of the resilient seat wedge type with mechanical joints and non-rising stem.

B. Gate valves shall be designed for 150 psi working pressure and meet the requirements of AWWA Specification C509.

C. Gate valves shall be cast iron body, fully bronze mounted, bronze stem, O ring stem seal, non-rising stem and wedge disc with resilient rubber seat ring disc seat. Gate valves shall have a clear waterway equivalent in area, when fully open, equal to that of the connecting pipe.

D. Valves shall be made to open when turned to the left, or counterclockwise.

E. The gate valves shall have square wrench nuts.

F. Gate valves of the size specified shall be produced by either Mueller or East Jordan Iron Works.

G. Gate valves are typically required to be installed in pre-cast concrete wells manufactured in accordance with ASTM C478 and C433.

H. When approval is granted by the city, valve boxes may be used and shall be of the three (3) piece adjustable height type with cast iron curves with a 5 1/4" shaft diameter. The cover shall be marked "WATER". The length of the box shall be adequate for the depth of cover at the valve location.

2.06 WATER LEADS

A. All water service leads shall be of Type K copper of the sizes called for on the plans.

2.07 CORPORATION STOPS

A. Corporation stops shall be Mueller Model No. H-15000

B. Corporation Stops shall have an AWWA Taper threaded inlet with copper flare straight connection outlet.

C. Corporation Stops shall be manufactured and tested to meet ANSI/AWWA Standard C800.

D. Corporation stops shall be constructed of heavy-duty brass components meeting the requirements of ASTM B62.

2.08 CURB STOPS AND BOXES

A. Curb Stops shall be manufactured and tested to meet ANSI/AWWA Standard C800.

B. Curb stops shall be constructed of heavy-duty brass components meeting the requirements of ASTM B62.

C. Inlet and outlet shall both have copper flare straight connections.

D. Curb stops valve shall have Minneapolis pattern thread top

E. Curb stop valves shall be McDonald 76100, 1 Ball Curb, Flare X Flare-NL.

F. Curb stop boxes shall be by General Foundry, "Buffalo-Style" box, Screw-type (Product #37095E)

PART 3. CONSTRUCTION

3.01 GENERAL

A. All pipe installation methods and procedures shall be in accordance with the current version of AWWA C600.

3.02 CARE IN HANDLING PIPE

A. The pipe shall be distributed at the site by the Contractor as required and care shall be exercised to prevent injury to the pipe in handling. Proper tools and implements for safely handling the pipe and other materials shall be provided by the Contractor, and particular care shall be exercised to prevent the abrasion of the pipe coating which shall be repainted, if injured, with coal tar varnish properly mixed with oil and heated before applying. The Contractor shall keep on hand a sufficient supply of the coal tar varnish for such purpose.

B. Care shall be taken in handling cement-lined pipe. Hooks inserted inside the pipe shall have blunt ends which will spread the bearing to more than two (2) square inches of cement surface.

C. Pipe must be protected from falling, either from truck to ground or into the trench and, when distributed along the line or stored near a road, must be kept clear of passing vehicles.

D. All materials will be inspected before placing in the trench, and if defective, marked "REJECTED" and removed from the work by the Contractor at no additional expense to the City. All damaged materials shall be replaced by the Contractor at no cost to the City.

3.03 MATERIALS FURNISHED BY THE CITY

A. See the "General Requirements" section for materials furnished by the City.

3.04 SHUTTING OFF WATER

A. The Contractor shall familiarize himself with the locations of existing gate valves, and have the gates made easily accessible for emergency shut-offs. He shall always keep on the job all the necessary equipment to shut the water off and to make immediately emergency repairs without undue delay.

B. WARNING: Since some water mains and valves are old, it is not uncommon for valves to not shut off "tight". In such cases, it may be necessary to close additional valves and/or for the Contractor to contend with a flow of water through such valve(s).

C. In case of an emergency break in a water line due to his construction operations, it shall be the Contractor's responsibility to supply water for immediate needs to those deprived of such service.

3.05 EXISTING STRUCTURES AND UTILITIES

A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavation or disturbance.

B. Underground structures and utilities are shown on the construction drawings as an aid to the Contractor, but the Owner does not guarantee their location or that other underground structures or utilities may not be encountered. No attempt has been made to show utility services on the plans, and it shall be the Contractor's responsibility to locate them. The City will, whenever possible, and when requested by the Contractor, stake the location of sewer and water services at the street right-of-way line.

C. In crossing over or under underground utilities, the Contractor shall use all possible care in protecting the utilities and to maintain their free unobstructed continuous use. The Contractor will be required without additional compensation to repair, replace or rebuild any such improvement injured or damaged by him, and he shall be responsible to the department, companies, individuals, or corporations controlling such improvements.

D. All underground utilities shall be supported on a foundation of sand or sand-gravel thoroughly compacted by mechanical tamping to prevent future settlement and possible failure of the utility. "Cement reinforced sand backfill" rather than "sand or sand 'gravel" shall be used under sewers and sewer services. Gas mains and gas services shall be supported in accordance with the requirements of the Consumer Power Company.

3.06 TRENCH EXCAVATION

A. Excavation shall be open cut. All work shall be done to true line and grade. The Contractor shall protect all line and grade stakes and he will be held responsible for any defective work occasioned by his negligence in this regard.

B. The trench shall be of sufficient depth to provide a cover above the crown of the pipe of at least five and six inches (5.5 feet).

C. The bottom of trench shall be excavated neatly to the required grade and filled four (4) inches with MDOT Class II sand thoroughly compacted by tamping before the pipe is laid.

D. Methods and equipment for excavating shall be such as will produce a trench without excessive width or irregularity. The width of trench shall be sufficient to allow the pipe to be laid and jointed properly and to allow the backfill to be placed and compacted properly.

E. The Contractor shall take great care to protect all trees and shrubs along the site of the work. No equipment will be permitted which causes excessive damage to existing trees along the site of the work.

F. If the trench at any point along the line will be opened nearer than six (6) feet to the face of the trunk of an existing tree, and in the opinion of the Engineer the excavation would be injurious to the tree, he may require the Contractor to tunnel under the tree at no extra cost to the City.

G. Selected excavated material may be used for backfilling under trees and it shall be thoroughly tamped to completely fill the excavated space.

H. Where the trench must be cut through concrete or asphalt pavement, driveways, or sidewalk particular care shall be taken not to damage adjoining areas. All cuts through existing concrete or asphalt pavements, and driveways shall be made with a concrete saw, except where an existing parallel joint is located not more than two (2) feet beyond the line of the intended saw cut. In that case the pavement or driveway shall be removed and replaced to the existing joint. Sidewalks shall not be saw cut and all removal and replacement shall go to existing joints. Pavement breaking using a drop weight may be limited or prohibited by the Engineer, if the Engineer determines the use of such equipment is causing damage to adjacent structures.

3.07 TUNNELING

A. Tunneling, Boring and Jacking under pavements or streets will not be allowed without the approval of the Engineer in writing, or unless noted on plans or in the Specifications. Where tunneling is permitted there shall be a minimum clear space of not less than six (6) inches between the outside of the pipe in the tunnel and the face of the excavation or the sheeting or bracing that is nearest the pipe. Upon eompletion of the eonstruction work in the tunnel, the sheeting and bracing (if any) shall be left in place and all the remaining space between the outside of the pipe and the excavation shall be filled with cement reinforced sand backfill thoroughly compacted. The Contractor shall receive no additional compensation for sheeting and bracing left in place in the tunnel.

3.08 EXCAVATED MATERIAL

A. The materials excavated and to be used in backfilling shall be so handled and stored as to cause as little inconvenience as possible to the public travel and adjoining property owners. The materials excavated and not suitable or needed for backfilling shall be disposed of by the Contractor at his own dumpsites.

B. Payment for handling the surplus excavated material, as outlined above, shall be included in the unit prices quoted in the proposal for pipe installation.

3.09 LAYING PIPE

A. Water mains shall be laid with a minimum of five (5) feet of cover from the top of the main to the final surface grade above the main, unless otherwise designated on the plans, authorized by the Engineer, or necessary to connect to existing fittings.

B. Before laying pipe, all lumps, blisters, and excess coal tar coating shall be removed from the bell and spigot ends of each pipe; the outside of the spigot and the inside of the bell shall then be wire brushed and wiped clean and dry.

C. Before lowering, and while suspended, the pipe shall be inspected for defects and rung with a light hammer to detect cracks. Any defective, damaged, or unsound pipe shall be rejected. The interior of each piece shall be inspected for cleanness and cleared of any dirt or foreign matter before being lowered into the trench.

D. Each length of pipe shall have bearing upon the sub-grade throughout the length of the barrel. The pipe will not be permitted to rest in the trench on any hard unyielding object such as stone, brick, etc. Blocking pipe up to proper level with blocking of any kind will not be permitted.

E. Unless otherwise directed, pipe shall be laid with bell ends facing the direction of laying. After a length of pipe is placed in the trench the spigot shall be centered in the bell of the adjacent pipe, the pipe shoved into position and brought into true alignment, and there secured with sand, carefully tamped under and on each side of the pipe.

F. When the temperature is above 60 degrees F., the spigot of each pipe laid shall be brought tightly home in the bell of the preceding pipe. When the temperature is below 60 degrees F., the pipe shall be laid with the spigot end approximately 1/16" from the face of the bell to allow for expansion.

G. Wherever deflections at joints are required by changes in grade or alignment or to plumb valve stems, the deflection at any joint shall not exceed three-quarters of the maximum deflection recommended by the manufacturer of the joint used.

H. Where necessary to cut pipe, cutting shall be done with approved tools and cut ends of pipe shall be square and regular. Cutting shall be done in a manner to avoid damage to lining and coating.

I. Spigot ends of field cut pipe shall be tapered back one-eighth (1/8) inch at an angle of thirty (30) degrees with the centerline of the pipe.

J. All branches or other openings shall be bulkheaded until either capped or connected. The end of the pipe shall be bulkheaded and braced at the end of each day's work.

K. Tools or other objects shall not be stored or left in the pipe.

3.10 JOINTING OF PIPE

A. Molded rubber gasket slip on type joints shall be used for jointing of pipe. Prior to positioning the rubber gasket, the bell and spigot shall be wiped clean. After properly positioning the gasket in the bell, the joint shall be lubricated with an approved lubricant.

B. The spigot end shall be centered into the bell end until it engages the gasket. The joining pipe shall then be aligned both vertically and horizontally before applying force to make the joint. Any deflection shall be taken after the joint assembly has been completed.

C. Mechanical joints may be used as an alternate for the slip-on type joining, if approved by the Engineer.

3.11 INSTALLATION OF POLYETHYLENE ENCASEMENT

A. Polyethylene encasement shall be installed on all new pipe and fittings installed on this project. Although not intended to be a completely air- and water-tight enclosure, the polyethylene shall provide a continuous barrier between the pipe and the surrounding backfill.

B. On Pipe:

1. Cut polyethylene tube to a length approximately two (2) feet longer than the length of the pipe section. Slip the polyethylene around the pipe, centering it to provide a one (1) foot overlay on each adjacent pipe section, and bunching it accordion fashion until it clears the pipe ends.
2. Lower the pipe into the trench and make up the pipe joint with the preceding section of pipe. A shallow bell hole must be made at joints to facilitate installation of the polyethylene.
3. After completing the joint, make the overlap. Pull the bunched-up polyethylene from the preceding length of pipe, slip it over the end of the new length of pipe, and secure in place with one circumferential turn of tape, plus enough new pipe section over the end of the first wrap until it overlaps the joint at the end of the preceding length of pipe. Tape it in place. Take up the slack width to make a snug, but not tight, fit along the barrel of the pipe, securing the fold as necessary with adhesive tape at quarter points.
4. Repair any rips, punctures, or other damage to the polyethylene with tape, or with a short length of polyethylene tube cut open, wrapped around the pipe, and secured with tape. Proceed with installation of the next section of pipe.

C. On Pipe – Alternate Method:

1. Cut polyethylene tube to a length approximately one (1) foot shorter than the length of the pipe section. Slip polyethylene around the pipe, centering it to provide six (6) inches of bare pipe at each end. Make polyethylene snug, but not tight; tape down at quarter points and secure ends as described above.
2. Before making up a joint, slip a three (3) foot length of polyethylene tube over the end of the proceeding pipe section, bunching it accordion fashion. After completing the joint, pull the three (3) foot length of polyethylene over the joint, overlapping the polyethylene previously

installed on each adjacent section of pipe by a least one (1) foot; make snug, tape down, and secure each end as described above.

3. Repair any rips, punctures, or other damage to the polyethylene as described above. Proceed with installation of the next section of pipe in the same manner.

D. Bends, Reducers, Offsets, and other fittings that can be wrapped in a polyethylene encasement tube shall be covered with polyethylene in the same manner as the pipe.

E. Valves and other odd-shaped fittings which cannot practically be wrapped in a tube, shall be wrapped with a flat sheet obtained by splitting open a length of polyethylene tube. This sheet shall be passed under the valve and brought up around the body of the stem. Seams shall be made by bringing the edges together, folding over twice, and tamping down. Slack width and overlaps at joints shall be handled as described above. Tape polyethylene securely in place at valve stem and other penetrations.

F. Openings for branches, service taps, blow-offs, air valves and similar appurtenances shall be made by making an X-shaped cut in the polyethylene and temporarily folding the film back. After the appurtenance is installed, replace the film, and repair the cut, as well as other damaged areas in the polyethylene, with tape. Branches, service taps, blow-offs, air valves and similar appurtenances shall not be wrapped with polyethylene unless otherwise specified or shown on the drawings.

G. Junctions Between Wrapped and Unwrapped Pipe:

1. Where polyethylene wrapped pipe joins a pipe which is not wrapped, extend the polyethylene tube to cover the unwrapped pipe three (3) feet, unless shown on the drawings. Secure the end with circumferential turns of tape.

3.12 COATING OF BOLTS

A. All bolts and nuts installed by the Contractor shall be coated with coal tar.

3.13 SHORING, SHEETING AND BRACING

A. Where necessary for the safety of persons, adjoining structures, or property, or the work itself, the Contractor shall adequately sheet or shore the trenches and sides of all excavations and shall provide adequate support for such sheeting or shoring. The sheeting, shoring and supports shall be furnished, placed and maintained by the Contractor during the time of need for same.

B. As the excavations are backfilled, the Contractor shall carefully pull the sheeting and remove its supports in such a manner as not to endanger persons, adjoining structures or property or the work, taking care that the space left unfilled by the removal of the sheeting is compactly backfilled. No extra compensation will be allowed for removal of sheeting, shoring or supports.

3.14 THRUST BLOCKING

A. Bends, tees, dead end of pipe or fittings and hydrants shall have concrete thrust blocks installed in accordance with the details as shown on the contract drawings. No separate payment will be made for thrust blocks. This work is incidental to the installation of the water main.

3.15 GATE VALVES

A. The cost of installing gate valves in new water mains and in hydrant connections shall be included with the appropriate pay item for construct gate wells, install gate valve and box, or hydrant connection.

B. Payment for installing gate valves in existing mains will be made at the contract unit price each.

C. Gate valves and valve boxes shall be furnished by the Contractor.

3.16 GATE WELLS

A. Gate wells shall be constructed at the locations as indicated on the contract drawings.

B. Gate well walls are to be built of pre-cast concrete meeting ASTM C-478 and joints meeting ASTM C433. The outside of masonry gate wells shall be plastered to a thickness of one-half (1/2) inch with mortar. The inside joints shall be left smooth. The ring shall be set in a bed of mortar and adjusted to the grade set by the Engineer.

C. Gate wells will be paid for at the contract unit price each, which will be payment in full for furnishing all materials (including Construction castings), for all necessary excavation, backfilling, disposal of surplus material, removing and replacing pavement, curb, curb and gutter, sidewalk, and driveways, and constructing the structure complete.

D. Where gate wells are constructed over new gate valves, the unit price shall cover furnishing and installing both the gate well and the gate valve.

3.17 HYDRANT INSTALLATION

A. Hydrants shall be set plumb and to the grade established by the Engineer.

B. Payment for hydrant installation will be made at the contract unit price each, which price will be payment in full for excavation; furnishing and installing a tee in the water main; furnishing and installing the hydrant, the gate valve, and the gate valve box; blocking; and backfilling.

C. Six (6) inch hydrant connection pipe from the main to the hydrant will be paid for at the contract unit price per lineal foot for installing six (6) inch ductile iron pipe.

3.18 HYDRANT REMOVAL

A. Wherever possible, hydrants to be removed shall be left in service until new hydrants to be installed are in service. The Contractor shall do all necessary excavation required and shall remove the hydrant and hydrant valve (if any) and cap and plug the hydrant connection at the main. After the connection has been capped or plugged, necessary concrete blocking shall be placed and before backfilling, the connection shall be tested for leakage. Salvaged hydrants and fittings shall be delivered by the Contractor to the Department of Public Services Yard.

B. Payment for hydrant removal will be made at the contract unit price each, which price will be payment in full for excavation, removing hydrant and gate valve, plugging, blocking, backfilling, removing the existing surface materials, and replacing the surface materials with the same type and thickness of material as removed.

3.19 BACKFILLING OPEN TRENCHES

A. Before the usual backfilling is commenced, sand backfill shall be placed along the side and under the lower haunches of the pipe up to the top or crown of the pipe for the full width of the trench. This sand backfill shall be placed manually in layers not exceeding six (6) inches in thickness. Each layer shall be thoroughly compacted by mechanical tamping or vibrating. The cost of placing this sand backfill to the top of the pipe shall be included in the unit price bid for installation of the pipe.

B. Insofar as practicable, without interfering with the progress of the work, the Contractor shall keep streets, driveways and sidewalks open to safe use by the public.

C. All trenches and excavations under existing pavement, proposed pavement, existing roadways, driveways or sidewalk shall be backfilled with sand or gravel and thoroughly compacted by

mechanical tamping or vibrating in layers not exceeding 12 inches in depth. The Engineer may require the Contractor to further consolidate the backfill by the water jetting method after compaction by mechanical means.

D. Backfill shall not be placed against any portion of a structure until it (structure) has passed inspection.

E. Where the trench or excavation is in the parkway between the roadway and the street line or in unimproved streets, excavated material may be used in completing the backfill. Care shall be taken in placing this backfill to make sure that all boulders, pieces of concrete and such other material that might damage the pipe or structure, or prevent consolidation are not allowed to remain in the backfill material and it shall be compacted by tamping, jetting, or using compacting equipment.

F. If a bulldozer or other machine is used to place the backfill material, no material shall be pushed or dropped into the trench but shall be placed on the sloping ends of the completed backfill and allowed to roll in place to the bottom of the trench.

G. All trenches and excavations shall be backfilled as soon as inspection is completed to avoid unnecessary risk of damage to the line and to reduce the risk of accidents involving the public.

H. After backfilling is completed, the Contractor shall promptly remove all surplus and waste materials from the site, leaving the site and all places disturbed or affected by the work in a neat and orderly and dust free condition.

3.20 NEW WATER MAIN CONNECTIONS TO EXISTING MAINS

A. When connecting to existing water mains, oversized fittings may be required to match the outer diameter of the older water mains. The Contractor shall determine if oversized fittings are necessary for each connection, and shall provide all necessary materials, parts, tools, labor, equipment and all incidental work required for the connection. No additional compensation will be made for the use of oversized fittings on any connection to an existing water main.

3.21 CONNECT WATER SERVICES TO NEW MAIN

A. This item involves connecting water services to new water mains. The water services to be connected to the new mains are currently connected to water mains that will be removed or abandoned under this contract.

B. The Contractor shall install corporations in the new main and connect the services at the corporations. Locations and sizes of existing water services are shown on the plans in accordance with the best information available to the City. However, there will be no adjustment made in pay items if the locations or sizes are different than those shown on the plans.

C. If the Contractor encounters a lead water service during the installation of the water main or water service connections, they shall notify the City of the lead water service. Once the material of the service is verified by the City, the Contractor shall remove and replace the lead service with a type K copper or PE water service to the either the first shut-off valve inside the house, or 18 inches inside the house, whichever is shorter, in accordance with Michigan EGLE requirements. Follow City protocol requirements for homeowner coordination.

D. New pipe necessary to make the connections shall be Type K Copper and shall be of the same size as the existing service.

E. For water service connections where the existing water service will cross the trench of the proposed water main installation, payment will be made for installing a water service connection

using the existing water service lead (unless it is a lead water service). No payment will be made for installing new Type K Copper water service on these leads. Any new Type K Copper water service required on these services shall be considered incidental to the construction of the water service connection.

3.22 MAINTENANCE OF TRENCHES

A. During the period between the time when a section of water main is completed and the time when the final pavement surface is replaced, the Contractor shall maintain the top of the trench in a suitable condition for traffic to use. The Contractor shall place a minimum thickness of three inches of cold-mix asphalt in all areas where pavements have been removed. Such cold-mix asphalt shall be maintained, and supplemented, if necessary, until such time as permanent pavement is replaced.

B. There is no separate pay item for maintenance of trenches, as that work is considered incidental to the water main construction.

3.23 SURFACE RESTORATION

A. Surfaces removed or damaged for the construction shall be replaced as follows, unless otherwise specified on the plans:

1. Existing Surface	Replaced By
a. Gravel (driveways, shoulders, etc.)	8" 23A aggregate
b. Bituminous mat	5" full-depth asphalt
c. Asphalt (full-depth or over aggregate)	5" full-depth asphalt
d. Concrete pavement	8" concrete
e. Asphalt surfaced concrete	8" concrete and 2" asphalt surfacing
f. Concrete sidewalk	4" concrete, except 6" at drives
g. Grass surface	3" topsoil plus seed or sod

B. For asphalt surfaces, the top shall be a wearing course mixture at one (1) inch minimum thickness. The balance of the thickness shall be: (a) leveling course mixture when over a concrete base and (b) base course mixture when in a full-depth asphalt.

C. Surfaces not described above, which are damaged for the construction, shall be replaced with the same type and thickness of material removed.

D. All surface restoration shall comply with the City's Standard Details and specifications for the specific type of work being done.

3.24 FLUSHING

A. Upon completion, the new main shall be flushed with potable water until the water runs clear in color and no foreign matter is discharged. The main shall be slowly filled and due care taken to expel all air from the main. A temporary connection may be installed to conduct the water out of the trench. Flushing shall be done in a manner that will not cause damage to adjacent property.

B. Standards for proper flushing shall conform to AWWA C600 and C605.

C. Per AWWA C651, a minimum of 3 feet/second flushing velocity in the line shall be provided while conducting the preliminary flushing.

3.25 PRESSURE TEST

A. The pressure test shall be performed in accordance with AWWA C600. The leakage, as measured by water meter or by other means approved by the Engineer, from the section of main under test pressure shall not exceed a rate of 10.49 U.S. gallons per inch of main diameter per mile of pipe in twenty-four (24) hours. (See "Water Main Disinfection & Leakage Test" table at the end of this specification section).

B. In case the leakage under test exceeds the maximum above specified, the leaks shall be discovered and repaired in an approved manner.

C. Any faulty pipe, fittings, valves, or other accessories included in work under this Contract and disclosed during testing shall be replaced with sound material and the test shall be repeated until specified requirements are met.

3.26 CLEANSING AND DISINFECTION OF NEW WATER MAIN

A. Before the new water mains and appurtenances are placed in service, they shall be cleansed, sterilized, and the water passing through them must show by tests safe bacteriological results.

B. All rules and practices of the Oakland County Health Department, the Michigan Department of Public Health, and the Michigan Department of Environmental Quality must be strictly followed.

C. The Contractor shall provide all necessary connections at the points of beginning of the individual sections of mains for applying chlorine to the mains for disinfection purposes.

D. After water mains laid under this contract have been acceptably tested and flushed, they shall be disinfected by the Contractor, in accordance AWWA Standard C651 for the "continuous feed method". All new mains and pipe shall be chlorinated with up to twenty-five (25) parts per million or more of liquid chlorine, or approved equal, and the chlorinated water allowed to stand in the mains for twenty-four (24) hours, at the end of which period the chlorinated water at all parts of the new mains shall show a free available chlorine residual of not less than ten (10) parts per million. If less than ten (10) parts per million residual is shown at the end of the first twenty-four (24) hour period, additional chlorine shall be added until a residual of not less than ten (10) parts per million at all parts of the new system is shown after a subsequent twenty-four-hour period. The chlorinated water shall then be removed from the mains by the Contractor and the mains left full of water ready for use. (See "Water Main Disinfection & Leakage Test" table at the end of this specification section). Care should be taken to not excessively chlorinate the water main pipes above the recommended levels as over chlorination may negatively impact the integrity of the water main and appurtenances.

E. After satisfactory chlorination of the mains has been completed as described above, and the chlorinated water flushed out and the mains filled with potable water, the Southeastern Oakland County Water Authority will take bacteriological samples of the water in the mains for analysis, under supervision by the engineer. Two consecutive sets of acceptable bacteriological test samples shall be taken minimally 24 hours apart from at least one end of the line and at every branch line which exceeds one pipe length, at maximum length intervals of 1 sample per 1,200 linear feet of water main pipe. More frequent sampling (1 sample for every 200 feet) is required if trench water or debris has entered the pipe. All samples shall be analyzed by an EGLE-approved laboratory. If the analyses of samples show the Construction water to be unpotable because of unsatisfactory disinfection of the mains, the mains shall be re-chlorinated at the Contractor's expense until satisfactory samples are obtained. Any charges by the Water Authority for re-testing the water shall be paid by the Contractor.

F. De-chlorination of the water mains shall be in accordance with AWWA C655 and necessary testing and approval shall occur prior to the water system being placed back into service, or any discharges from the water system to the environment.

3.27 PAYMENT FOR WATER MAINS

A. Measurement of completed and accepted water main laid will be made in lineal feet, measured on the axis of the pipe laid from the beginning to the end and shall include measurements through fittings and valves. Branches will be measured in lineal feet from the center of the tee or cross, on the supplying water main, to the end of the pipe or special casting including the cap or plug in the case of a dead end and to the center of hydrants.

B. The unit price per lineal foot of pipe laid shall include all excavating; tunneling; boring and jacking; sheeting; bracing; shoring and de-watering of trench; removing and replacing pavement, sidewalk, or other type of existing surface; furnishing, laying and jointing of pipe and fittings; installing gate valves; connecting to existing water main; installing blocking; all backfilling; flushing; pressure testing; and disinfecting.

3.28 WATER MAIN DISINFECTION & LEAKAGE TEST

TABLE 2: WATER MAIN DISINFECTION AND LEAKAGE TEST

Nominal Pipe Diameter (Inches)	Contents Per 1,000 Feet of Pipe		Pounds of Calcium Hypochlorite @ 65% to obtain 50 PPM Per 1,000 Feet of Pipe	Allowable Leakage (L)* in Gallons of Water Per 1,000 Feet of Pipe at 150 PSI in Two Hour Test
	Cubic Feet	Gallons		
4	87.3	650	0.42	0.67
6	196	1,470	0.94	0.99
8	349	2,610	1.67	1.32
10	545	4,080	2.62	1.65
12	785	5,880	3.77	1.99
16	1,396	10,400	6.67	2.64

*L = 10.49 gallons per day, per mile, per inch diameter at 150 psi., per AWWA C600.

SECTION 600
SEWERS AND RELATED STRUCTURES

PART 1. GENERAL

1.01 SUMMARY

A. This work shall include the furnishing of all labor, materials and construction equipment necessary for the construction of sewers of the size and character shown on the drawings and specified herein including the furnishing and installing of the pipe and bedding and necessary testing. This work shall include the provision of all labor, materials, equipment, and supervision required, including excavation, bedding, backfill, testing and sterilization and other incidental work necessary for a complete system.

B. The work of this section shall also consist of the furnishing and construction of manholes and catch basins including inlets as detailed on the Drawings and at the locations shown on the Drawings. Concrete, excavation and backfill shall be as specified in this section and other sections of the specifications. Manholes and catch basins shall be complete with frames, inlets, etc., to meet new or existing pavement surfaces, sidewalks, or grades and shall be included in the work under this section of the Contract.

C. Contractor shall check entire length of route for acceptability of site conditions, up to and including soil conditions, to perform this work prior to bidding and again prior to mobilizing on the site to perform the various work items.

1.02 REFERENCES

A. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.

B. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 CERTIFICATION AND INSPECTION

A. All pipe and fittings delivered to the job shall be accompanied by certification papers showing that the pipe and fittings have been tested in accordance with the applicable Specifications for this project. All pipe and fittings will be inspected upon delivery to the jobsite. No cracked, broken or damaged pipe will be allowed in this work.

B. Each piece of pipe and each fitting shall have its weight and class designation conspicuously painted or cast on it. All other pipe materials shall have the class designation painted thereon. Where required, other designation marks shall be painted on the pipe or fittings to indicate correct location in the pipe line in conformity to a detailed layout plan.

1.04 SHOP DRAWINGS AND GUARANTEES

A. Contractor shall furnish shop drawings and guarantees of the items to be furnished under this section of the Contract. Design details of joints and joint restraint shall be submitted to the Engineer for consideration and approval before ordering any pipe.

PART 2. MATERIALS

2.01 SEWER PIPE

A. All sewer pipe supplied and installed on this project shall be of the sizes and types called for on the drawings.

1. Reinforced Concrete Sewer Pipe (RCSP): ASTM C\-76, Class IV, or as designated on the drawings.
2. Polyvinyl Chloride Pipe (PVC) - ASTM D-3034, SDR 23.5, for 6-inch diameters. PVC compounds to meet ASTM D-1784.
3. Polyvinyl Chloride Pipe (PVC) - ASTM D-3034, SDR 26, for 8-inch to 15-inch diameters. ASTM F-679, SDR 26, for 18-inch to 24-inch diameters. PVC compounds to meet ASTM D-1784.
4. PVC Schedule 40 Sewer Pipe: ASTM D1785 "Standard Specification for PolyVinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.

2.02 SEWER POINT REPAIR MATERIALS

A. The materials acceptable for use in making a point repair are listed below:

1. Sewer Pipe - The following types of sewer pipe may be used as replacement pipe for a point repair. They shall conform to the appropriate American Society for Testing Materials (ASTM) Specification as listed below and any other ASTM or other applicable specification:
   a. PVC Schedule 40 Sewer Pipe for 10" and smaller only.
   b. ASTM C76 Class IV Concrete Sewer Pipe for 12" diameter and larger.
   c. Approved Equal

2. Sewer Connections and Appurtenances
   a. Service Connection - Any service connection replaced during a point repair shall conform to the pipe manufacturer's recommendations and specifications and applicable ASTM Specifications, for the service connection and for installation of such. The material of the connection shall be similar to the sewer pipe it will be connected to.

2.03 PIPE BEDDING

A. All sewer six (6) inches in diameter and larger laid on this project shall be installed in conformance with the bedding requirements established on the cross-sections shown on the City of Birmingham Standard Notes & Details for Sanitary, Combined, and Storm Sewers, as applicable.

2.04 STRUCTURES

A. Unless otherwise noted on the drawings or in supplemental specifications, precast manhole sections shall be used for all new sewer structures, including manholes, catch basins, and inlets. All concrete shall be 4,000 pounds per square inch, as determined by core test or cylinders. All precast sections shall bear the stamp of an approved testing laboratory as having been tested and delivered from tested stock of the manufacturer, at the expense of the Contractor. Precast reinforced manhole sections shall meet the requirements of current A.S.T.M. C-478, and shall be in accordance with the City of Birmingham Standard Notes & Details for Sanitary, Combined, and Storm Sewers, as applicable.

B. The top section shall be an eccentric cone with one straight side (with manhole steps installed in straight side at the factory). The top section shall be set at an elevation to provide for three (3) courses of brick between the top face and the manhole frame when set to grade. All precast

manholes shall be standard tongue and groove using mastic joint materials equal to DeWitt No. 10. All interior joints shall be pointed with mortar and all visible leaks must be stopped.

C. Manhole frames and covers shall be E.J.I.W. #1040-A, with logo covers and text indicating sanitary, combined, or storm sewer. Drainage structure frames and covers shall be E.J.I.W. #5000 Z4/M4 with hinged assembly, except where modified on the plan.

D. Cast iron manhole steps shall be castings meeting the requirements of A.S.T.M. Specifications for "Gray Iron Castings," A48, Class No. 35B. The steps shall be approximately 10" x 10" x 3". Steps in precast manhole sections shall be cast in place at the plant.

E. All manholes shall have channeled bottoms. For sewers 12" diameter or less, the channel shall be 3/4 depth of pipe. For sewers larger than 12" diameter, the channel shall be a minimum of 9" deep.

2.05 GRANULAR BACKFILL

A. Contractor shall install compacted sand backfill meeting MDOT Class II specifications, compacted to 95% maximum modified proctor density in the locations required per MDOT Standard Detail R-83-B, or where called for on the plans.

PART 3. EXECUTION

3.01 MEASUREMENT AND PAYMENT

A. Where called for in the proposal, the compensation to the Contractor for the sewer installation of the diameter specified will be paid for at the contract unit price per lineal foot measured in place along the center of the pipe. The contract unit price for this work shall be payment in full for furnishing the materials including wyes and all necessary excavation, sheeting or bracing, draining, laying, jointing, bedding, backfilling, disposal of surplus materials, testing, and restoration, and all other work incidental to the construction of the sewer. Final measurements for sewer will be total lineal feet from center to center of standard manholes or center of manholes to face of tunnel sewers where connection only is made thereto.

B. Junction chambers, gate chambers, and other special structures will not be included in measurements of the sewer. Sewer measurements at these structures will end and begin respectively at inside wall of outlet and inlet end respectively, unless otherwise indicated on the plans.

C. Unless specified otherwise, manholes and drainage structures will be paid for at the contract unit price each, which price shall be payment in full for furnishing the materials, including the required fittings, frames, and full grates, steps, and for all labor, equipment and tools, all necessary excavation, backfilling, disposal of surplus material, and all work incidental to the completed structures.

3.02 PIPE DELIVERY

A. A test certificate from an independent testing laboratory showing strength of pipe when tested in accordance with the applicable A.S.T.M. Standards shall be submitted to the Engineer before pipe is delivered to the job site. One certificate shall be furnished for each size of pipe. The Engineer may require additional tests of pipe stored at the plant or delivered to the job, should he have reason to believe that inferior pipe is being delivered on the job. The cost of each test shall be borne by the Contractor. The pipe supplier shall also furnish a certificate stating that all pipe supplied was manufactured from substantially the same material and in the same manner as pipe tested and all pipe delivered to site shall have the test stamp of the testing laboratory making such tests.

B. The pipe shall be distributed at the site by the Contractor as required, and care shall be exercised to prevent injury to the pipe in handling. Proper tools and implements, for safely handling the pipe and other materials, shall be provided by the contractor.

C. Pipe must be protected from falling, either from truck to ground or into the trench, and when distributed along the line or stored near a road, must be kept clear of passing vehicles.

D. The Contractor shall place the pipe so as to cause the least amount of interference to abutting property owners and traffic using the street. Barricades and lighting shall be provided at intersections and other locations where the pipe will interfere with pedestrian or vehicular traffic.

E. All damage caused by storage of the pipe on the construction site shall be repaired by the Contractor, including but not limited to sidewalks, driveways, lawns, and shrubbery. No pipe shall be allowed to be stored longer than three days prior to beginning construction on the section of sewer.

F. All materials will be inspected before placing in the trench, and if defective, marked "REJECTED" and removed from the site by the Contractor. All damaged materials shall be replaced by the Contractor at no additional cost to the City.

3.03 EXISTING STRUCTURES AND UTILITIES

A. Underground structures and utilities are shown on the construction drawings as an aid to the contractor, but the owner does not guarantee their location or that other underground structures or utility services on the plans, and it shall be the Contractor's responsibility to locate them. The City will, whenever possible, and when requested by the Contractor, stake the location of sewer and water services at the street right-of-way line.

B. In crossing over or under underground utilities, the Contractor shall use all possible care in protecting the utilities and to maintain their free unobstructed continuous use. The contractor will be required without additional compensation to repair, replace or rebuild any such improvement injured or damaged by him, and shall be responsible to the department, companies, individuals or corporation controlling such improvements.

C. All underground utilities shall be supported on a foundation of sand or sand-gravel thoroughly compacted by mechanical tamping in order to prevent future settlement and possible failure of the utility. Under sewers and sewer services "cement reinforced sand backfill" rather than "sand or sand gravel" shall be used. Gas mains and gas services shall be supported in accordance with the requirements of the Consumers Power Company.

3.04 MAINTAINING FLOW

A. All combined sewers will likely have continuous dry weather flows, all of which shall be diverted in a safe manner so as to cause no inconvenience to the public. Special care must be taken to ensure that no part of the work is built under water, and the work must remain dry until all concrete and/or mortar has set up.

3.05 EXCAVATION

A. Excavation shall be open cut from the surface. All work shall be done to true line and grade. The Contractor shall remove all obstructions or encumbrances (except those which are specifically noted to be preserved) which may be in the proposed line of the sewer, the cost of doing such work shall be included in the contract unit price per lineal foot for laying sewer.

B. Trenches shall not be excavated for a distance greater than fifty (50) feet in advance of completed sewer without the permission of the Engineer.

C. Excavated material permitted to be used for backfill may be deposited along the line of work where space permits provided it does not cause damage to trees, shrubs, fences, etc., nor cause excessive inconvenience to public travel and adjoining property owners, nor endanger the bank of the trench by imposing too great a load thereon. All material in excess of the quantity permitted for backfilling and all materials unsuitable for backfilling shall be hauled away by the Contractor at his expense in an expeditious manner.

D. Excavation shall be of sufficient widths and depths to provide adequate room for the construction and installation of the work to the lines, grades, and dimensions called for on the drawings, except the width of a trench from the invert to a height twelve inches above the top of the sewer barrel shall not be greater than as follows:

Pipe Size	Maximum Trench Width
12" or less	30"
15" to 36"	O.D. + 12"
42" or greater	O.D. + 24"

E. If the trench width as specified above is exceeded, the Contractor shall install, at his own expense, concrete cradling or other approved bedding, to support the additional backfill load. In case the bottom of the trench is unsuitable as a foundation, it shall be further excavated and prepared. If the unsuitable condition of the foundation is caused by factors beyond the Contractor's control, the additional excavation and preparation will be paid for as extra work.

F. Where, through the Contractor's construction procedure, or because of poor existing ground conditions, it is impossible to maintain alignment and grade properly, the Contractor shall, at his own expense, excavate below grade and replace with large size aggregate or slag in order to insure the pipe, when laid, will maintain correct alignment and grade.

G. If the trench at any point along the line will be opened nearer than six (6) feet to the face of the trunk of an existing tree, and in the opinion of the Engineer the excavation would be injurious to the tree, he may require the Contractor to tunnel under the tree.

H. Selected excavated material may be used for backfilling under trees and it shall be thoroughly tamped to completely fill the excavated spaee between the pipe and excavation by means of mechanical tampers.

I. Where the trench must be cut through concrete or asphalt pavement, driveways, or sidewalk, particular care shall be taken not to unnecessarily damage adjoining areas. All cuts through existing concrete or asphalt pavement, sidewalks or driveways are to be resurfaced with like materials. Pavement breaking by the use of a drop weight is prohibited.

J. Excavation shall be sheeted and braced as necessary to ensure complete working safety and to protect adjoining structures or conduits. If at any time the Engineer has reason to believe that the sheeting or bracing installed by the Contractor is insufficient, he may require that an additional amount shall be placed, but such requirement or failure to make such requirements shall not relieve the Contractor from his liability.

K. No extra compensation shall be paid the Contractor for sheeting or bracing left in place, unless ordered left in place by the Engineer and then only a fair salvage value for the material left in place shall be paid. The Contractor shall receive no extra compensation for sheeting or bracing left in place in tunnels.

3.06 TUNNELING

A. Tunneling under pavements or streets will not be allowed without the approval of the Engineer in writing, or unless noted on plans or in the Specifications. Where tunneling is permitted, there shall be a minimum clear space of not less than six (6) inches between the outside of the pipe in the tunnel and the face of the excavation or the sheeting or bracing that is nearest the pipe.

B. All space outside the finished sewer wall shall be completely filled with 1:2 cement-sand grout applied under pressure.

C. Facilities for ventilation and lighting shall be supplied as necessary for reasonable working conditions and for inspection.

D. Any excess trench excavation made below the pipe shall be refilled with crushed stone, sand, or concrete as directed by the Engineer. Under all conditions, sewer pipe shall have a firm bearing which will insure permanent grade and alignment and proper support against crushing load.

E. Upon completion of the construction work in tunnel, the sheeting and bracing, if any, shall be left in place and all the remaining space between the outside of the pipe and the excavation shall be filled with cement reinforced sand backfill and thoroughly compacted.

F. When boring under pavement, the pit must be a minimum of ten (10) feet away from the pavement edge, unless previously approved by the Engineer.

3.07 LAYING PIPE

A. Unless otherwise allowed under specific specifications for a particular type of sewer or unless permitted by the Engineer, construction shall begin at the outlet end of sewer and proceed upgrade.

B. All pipe shall be laid true to line and grade and the ends of the pipe shall abut against each other with the bell end facing the direction of laying. Each pipe as laid shall be checked by the Contractor with line and a grade pole or a laser beam to insure that this result is obtained.

C. Alignment of laser beams shall be checked with sufficient frequency to assure compliance with plans.

D. Each pipe shall be inspected for defects prior to being lowered into the trench and inside of pipe and outside of spigot shall be cleaned of any dirt or foreign matter.

E. Proper support and bedding of all pipe through the full length of the barrel shall be made by constructing bedding as required and detailed on the plans. Special care shall be observed to avoid load on bells of bell and spigot pipe. Each pipe shall be pushed firmly against pipe previously placed and carefully aligned.

F. Mechanical means, consisting of a cable placed inside the pipe with a suitable winch, jack, or come-along for pulling the pipe home and holding the pipe in position, shall be used where the manual means will not result in pushing and holding the pipe in position.

G. Work executed during the winter shall receive exceptional attention to avoid excessive backfill load on pipe. If sides of trench are frozen, the amount of selected material tamped above the pipe shall be increased to at least two feet. No frozen backfill material shall be used.

H. At manholes the pipe shall be placed on a concrete cradle from the manhole to the point where the sewer trench does not exceed the specified width and shall be done in accordance with the City of Birmingham "Underground Structures and Water Main Standards".

3.08 JOINTS

A. All sewer joints shall be sealed with flexible, watertight, rubber type gaskets; pre-cast die molded bituminous material as used on slip seal pipe; or an approved equal. Before placing the pipe in position in the trench adjusted to grade, the joint compound on both ends of the pipe shall be painted with suitable solvent or lubricant material. The spigot or tongue ends of the pipe to be laid shall be inserted and shoved home against the base of the socket last laid. Throughout this operation every effort shall be taken to prevent sand or gravel from entering the joint or pipe.

B. Joint material shall be applied to the pipe on the day the pipe is placed in the trench. Joint material shall be stored in closed containers when unattended.

C. Concrete pipe 36" and larger shall have all joints inside cement pointed, with cement mortar compound of one (1) part cement and two (2) parts of sand. Mastic compound or any foreign material within 3/4" below inside finish of pipe shall be thoroughly removed before cement grout is applied.

3.09 MANHOLES, DRAINAGE STRUCTURES

A. Manholes and drainage structures shall be constructed of the type and in accordance with the details shown on the plans and at the locations shown on the plans. All necessary steps, frames, and covers shall be furnished and installed. Covers shall be set at the required final elevation so that no subsequent adjustment shall be necessary.

B. Excavation shall be carried to the depth required to permit the construction of the required base and bottom of excavation shall be trimmed to a uniform horizontal bed. The excavation shall be sufficiently wide to allow for shoring, bracing, or form work, should any or all be necessary, and to allow for accessibility in plastering the exterior of brick masonry. The excavated section shall be completely de-watered before any concrete is placed thereon.

C. Concrete shall be Grade A 3,000 pounds per square inch compressive strength, minimum content 1.375 barrels per cubic yard.

D. Brick shall be made of clay or shale or concrete brick and shall be whole, thoroughly and evenly burned, of close and uniform texture, free from cracks and warps, with even faces and uniform texture, and uniform in shape and size. Brick shall show a minimum average compressive strength of 2,000 pounds per square inch and average absorption of water in twenty-four (24) hours of not more than 22 percent of dry weight.

E. The brick shall be laid radially in courses in a full bed of mortar with interior joint not more than 1/4" in width. Whole bricks only shall be used except to effect closure and to fill in the outside portion of the radial joints. Each seventh course shall be laid in "stretchers," the intervening courses shall be composed of "headers". Below a depth of thirteen (13) feet, walls of brick manholes shall be laid in alternative stretcher and header courses.

F. When completed, manholes and drainage structures shall have sand or gravel placed uniformly around the structure in one foot lifts, and compacted in place. No backfill shall be placed around manholes or structures for twenty-four (24) hours, if an outside plaster coat has been applied.

G. Manholes and Structures shall not be placed under conditions which may be expedited to result in defective work. If the soil at the established grade is not sufficiently stable to properly support structures, the Contractor, at his own expense, shall excavate up to 24" below grade and refill the trench to the proper grade with compacted crushed stone chips. If stable support cannot be established in this manner, the work shall be discontinued until plans for change in construction have been submitted by the Contractor to the Engineer for approval and approval has been granted.

3.10 SERVICE CONNECTIONS

A. Service connections shall be made to sewers with "wyes" manufactured on the sewer pipe. Breaking holes in the pipe will not be allowed without specific authorization of the Engineer.

3.11 SHEETING AND BRACING

A. Where necessary in order to construct the work called for by the contract, to insure the safety of the men, or to protect other things of value, the Contractor shall adequately sheet or brace all open excavation or tunnels. The Contractor shall install additional sheeting or bracing as directed by the Engineer, but such order, or failure to give such order, shall not release the Contractor from his liability for damage to person or property under this contract.

B. All sheeting, shoring and bracing, unless left in place as ordered by the Engineer, shall be removed from open trench work progressively with the backfilling operations in order to prevent slides from the sides of the trench. All sheeting left in place shall be cut off five (5) feet below ground line.

3.12 PUMPING, BAILING AND DRAINING

A. The Contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of waste from trenches or other excavation.

B. Where the work is in ground containing an excessive amount of water, the Contractor shall provide, install, maintain, and operate suitable well points, connecting manifolds, and reliable pumping equipment to operate same to insure proper construction of the work.

C. In no case shall water be allowed to rise in or about the pipe before the joint has become thoroughly set. No walking on or over the pipes after they are laid, except as may be necessary in tamping the earth in refilling, will be permitted until they are covered with earth to a depth of twelve (12) inches.

D. Drainage or discharge lines shall be connected to adjacent public storm sewers or extended to nearby watercourses wherever possible. In any event, all pumping and drainage shall be done without damage to any highway or other property, public or private, and without interference with the rights of the public or private property owners.

E. The Contractor shall receive no extra compensation for providing, maintaining, or operating any de-watering or drainage facilities.

3.13 BACKFILLING

A. It is the intent of these specifications that all of the excavation be backfilled with thoroughly consolidated, suitable material in such a manner that the alignment and grade of the construction work in the excavation be not disturbed and that the subsequent settlement of the surface over the excavation and adjacent thereto be avoided as far as possible.

B. Insofar as practicable, without interfering with the progress of the work, the Contractor shall keep streets, driveways and sidewalks open to safe use by the public.

C. All trenches and excavations under existing pavement, proposed pavement, existing roadways, driveways or sidewalk shall be backfilled with sand or gravel and thoroughly compacted by mechanical tamping or vibrating. Where the existing roadway or driveway is gravel surfaced, the top eight (8) inches of the backfill shall be road gravel. The Contractor will not be required to replace any oil treatment or seal coat, however, he shall maintain the top of the trench in a dust free manner until completion of the project. No additional payment will be allowed for the sand or gravel backfill, the cost of which shall be included in the unit price bid for the installation of the pipe and structures.

D. Backfill shall not be placed against any portion of a structure until it (structure) has passed inspection.

E. Where the trench or excavation is located in the parkway between the roadway and the street line or in unimproved streets, excavated material may be used in completing the backfill. Care shall be taken in placing this backfill to make sure that all boulders, pieces of concrete and such other material that might damage the pipe or structure, or prevent consolidation are not allowed to remain in the backfill material and it shall be compacted by tamping, jetting, or by use of compacting equipment.

F. If a bulldozer or other machine is used to place the backfill material, no material shall be pushed or dropped into the trench, but shall be placed on the sloping ends of the completed backfill and allowed to roll in place to the bottom of the trench.

3.14 EMERGENCY REPAIR

A. When the Contractor is not actively performing work on a particular construction site, but where delayed construction operations, testing and/or surface restoration work yet remains to be completed to meet the requirements of the Specifications, situations may arise of an emergency nature as a result of such uncompleted work which may affect directly or indirectly public and/or private property or which may ultimately, either directly or indirectly, affect the health, safety, and welfare of individuals or the general public. While these situations can readily develop as emergencies, the Engineer shall direct field related operations and require immediate efforts by the Contractor to remedy the deficiency in a method of his choosing because of his expertise in the field, time being of the essence. The correction of the emergency which may arise when no construction activity exists on the construction site shall be handled in the following manner.

1. The Engineer shall inspect the site, take any necessary photographs and/or prepare any necessary sketches of conditions at the site to determine that the situation constitutes an emergency.

2. The Engineer then has three (3) alternate sources of manpower and equipment to be selected to remedy the emergency situation in the following order:

   a. The Contractor under contract with the Owner to perform all work on the site location in question.
   b. The City's Department of Public Services (DPS).
   c. An independent contractor designated by the Engineer.

B. Since the nature and extent of most unfinished work on a particular construction site is well known by both the Engineer's authorized agent and the Contractor at the time of declaring an "emergency situation" as set forth herein before the Contractor, under contract to the Owner for the particular project, the Contractor would be the first party notified and would be expected to respond immediately with necessary labor and equipment to remedy the problem.

C. If a reasonable time to respond to the emergency notification is not evident, in the best judgment of the Engineer, then the Contractor shall be judged to have waived his rights to physically correct the problem, but not to his obligations to pay for such physical correction or damages resulting therefrom. The Engineer shall then contact the City's DPS for their assistance in correcting the "emergency situation". Where existing commitments by the DPS prohibits their immediate response to the request of the Engineer, the Engineer shall finally direct that corrective measures be performed by the independent contractor noted above to perform such work when so directed.

D. Since the cost for all remedial work undertaken by the Contractor on this project shall be borne by the Contractor and it is necessary to engage the assistance of the DPS or an independent contractor, then all costs incurred shall be deducted from monies due and payable to the Contractor on the particular project as set forth on any ensuing regular job estimates.

E. Typical costs which will be deducted from the contractor monies due would be as follows:

1. Payroll wages, benefits, and taxes.
2. Material bills.
3. Equipment rental (Detroit area rates) and mobilization costs.
4. 15% profit and overhead for independent contractor.
5. Inspection costs.

3.15 POINT REPAIRS TO SEWER LINES

A. It is the intent of the specifications to provide a basis by which a contractor can successfully and completely make a point repair to a sanitary sewer line. This basis shall cover all aspects of a point repair including methods, materials, and payment for work.

B. A point repair to a sanitary sewer line shall be defined as a repair made at a specified location on a sanitary sewer line.

C. A point repair shall be classified by the inside diameter of the pipe and the length of pipe replaced.

D. Methods:

1. The method by which a repair shall include all supervision, labor, equipment and materials necessary to perform and successfully complete the following items:

a. Excavating a trench deep enough to uncover a sanitary sewer line, wide enough to work in, and long enough to uncover up to twenty (20) linear feet of sewer pipe while providing protection of adjacent utilities, pavements, etc.
b. Remove any landscaping fences, asphalt, concrete, base material, storm sewer, etc., that interferes with the repair made at each specified point, and for the replacement of said landscaping, fences, asphalt, concrete, base materials, storm sewer, etc., in the same or better condition as found. Any such item not replaced in the same or better condition as found, as determined by the Engineer, shall be redone at the Contractor's expense.
c. De-water any trench where excess water accumulates and installation, as required, of compacted sand backfill under paved area.
d. Replace and reshape the bottom of the trench so that the grade of the pipe replaced will match that required for the existing sewer line. Any material replaced in the bottom of the trench shall be compacted so as to prevent sags in the sewer line due to settlement of the trench material.
e. Repair and replace up to twenty (20) feet of the existing sewer pipe with the properly sized pipe the same as existing, as needed.
f. Repair and replace any house service lateral encountered within the required twenty (20) linear feet of uncovered pipe with properly sized service, as specified and with enough sewer pipe to reconnect to the service line where it was severed.
g. Tie all new laid sewer pipe to existing sewer pipe, main sewer lines and service lines, so that no possible source of infiltration/inflow (a leak in the line) may be created.
h. Any sewer pipe broken by the Contractor, outside of the required twenty (20) linear feet of pipe, shall be replaced or repaired at the Contractor's expense. All such

occurrences shall be pointed out by the Contractor to the Engineer when they happen. The materials to use for making the tie-in shall be properly sized.

i. Backfill the open excavation so that thc ground elevation will most nearly match the elevation before excavation.

E. Bypass Pumping:

1. On all sewer lines in which a point repair is to be made, the normal flow of sewage shall be re-routed by bypass pumping.

END OF SECTION

SECTION 610
FLOWABLE FILL

PART 1. GENERAL

1.01 SUMMARY

A. This work shall include the furnishing of all labor, materials and construction equipment necessary for the providing flowable fill for the abandonment of sewers and/or structures of the size and character shown on the drawings and specified herein.

B. Where called for on the drawings certain areas of the excavation and areas of existing structures and sewers to be abandoned shall be backfilled with flowable fill.

1.02 REFERENCES

A. Performance and material requirements shall meet specific Reference Standards as referred to hereinafter under individual items.

B. Unless otherwise specified, all materials shall also conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

A. The method used to measure fly ash and cement shall be submitted for acceptance. The contractor's proposed method shall be one that compliments the type of mixing plant being used and provides assurance that the percentage of cement is being satisfactorily controlled. Cement content shall be based on the dry weight of the fly ash in the mix. The batched weight of fly ash shall be corrected for its moisture content. Water shall be measured, although its control will be a function of consistency (slump and workability) of the mix.

PART 2. MATERIALS

2.01 FLOWABLE FILL

A. Flowable fill shall consist of a mixture of fly ash, cement and water such as "C-Fill" as manufactured by Clawson Concrete or "M-Crete" as manufactured by Michigan Foundation or equal.

B. Cement shall be Portland Cement conforming to A.S.T.M. C 150 Type I. Air entrained cement, pozzolan, and other types of cement shall not be used. Fly ash shall conform to the requirements of A.S.T.M. C618, Class F. Water shall be potable.

C. The stabilized fly ash mixture shall contain 4 to 5% Portland cement based on the dry weight of the fly ash. Occasional batches of mixture with a cement content of 3 to 4% will be allowed provided immediate action is taken to restore the cement content to the specified range. Mixtures containing less than 3% shall not be used. The mixture shall have a slump of 10 to 12 inches at the point of placement. The mix temperature shall not be lower than 50°. The mixture shall have a compressive strength of 100 psi minimum at twenty-eight (28) days.

PART 3. EXECUTION

3.01 PREPARATION

A. Prior to abandoning sewers with flowable fill, the Contractor shall install all necessary bulkheads in sewers and/or structures and ensure that they will not leak when flowable fill is placed.

3.02 MIXING

A. The flowable fill may be mixed by a pug mill, central concrete mixer, turbine mixer or other acceptable equipment or method. Provisions shall be made to maintain the mix temperatures and slump as stated.

3.03 PLACEMENT

A. The material shall be placed by end or side dumping, tremie, pump, conveyors, or other suitable method. Lines and grades shall be as shown on the design drawings. Stabilized fly ash shall be protected from freezing temperatures for the initial twenty-four (24) hours after placement. Protection may consist of earth cover, straw, or a sacrificial layer of the stabilized fly ash mix.

3.04 MEASUREMENT & PAYMENT

A. Unless it is identified in the Proposal as a separate pay item, installation of flowable fill is incidental to the other work of this project.

END OF SECTION

SECTION 710
PORTLAND CEMENT CONCRETE PAVEMENT CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the furnishing and placement of ready mixed Portland Cement Concrete (PCC) pavement and curbs and gutter.

1.02 REFERENCES

A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

A. Contractor shall submit proposed mix design for all PCC pavements to be supplied on this project.

B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 CONCRETE

A. Provide materials in accordance with subsection 602.02 of the Standard Specifications for Construction and the contract.

B. Portland Cement Concrete (PCC) Mixtures shall meet MDOT requirements for Concrete Grade 3500HP, which requires coarse aggregate material to meet optimized aggregate gradation requirements in accordance with Section 10.04.03 of the MDOT 2020 Standard Specifications for Construction. The submitted PCC mix design shall document that the optimized aggregate gradation and associated process control has been provided in accordance with the MDOT Optimized Aggregate Gradation Spreadsheet.

C. Fine aggregate shall be MDOT 2NS sand, and meet MDOT special provision 20SP-1002A-01 requirements for alkali silica reactivity.

D. MDOT 3500HP mixtures require a range between 25-percent to 40-percent of replacement of the Portland cement content with supplementary cementitious materials (SCM's). All PCC mixtures allowed for use in Birmingham shall meet at least one of the following criteria:

1. Provide a maximum of 25-percent replacement of the Portland cement in the concrete mixture with a SCM (Ground Granulated Blast-Furnace Slag (GGBFS) or approved equal).

2. Utilize Portland cement that has a low alkali percentage (0.6% or less total cement alkali content).

E. Portland cement type I, type II, or type IL may be used in the PCC mixture. If type IL is used, a maximum allowable water/cement ratio in the mixture shall be limited to 0.43 to reduce scaling potential.

F. The concrete mixture supplied on this project shall conform to the requirements of the Concrete Durability Requirements section for resistance to alkali-silica reactivity (ASR) and for air entraining requirements.

G. Concrete provided on this project shall be Ready Mixed Concrete; central mixed or transit mixed concrete is permitted. The source of ready mixed concrete shall be approved by the Engineer.

H. Admixtures - Admixtures shall be used only when specified or authorized by the Engineer.

I. The City reserves the right to make air and slump tests on any or all loads of concrete supplied to the job prior to placing the concrete in the grade. Concrete shall not be placed in the grade until such tests have been completed and approved by the Engineer. Concrete not meeting the specifications will be rejected. Re-tempering of rejected concrete for re-use on the job will not be allowed.

J. Water shall not be added to the concrete at any time without specific permission by the Engineer.

2.02 AGGREGATE BASE COURSE

A. Unless otherwise specified on the drawings, or in the specifications, the aggregate base course to support the PCC pavement shall be MDOT 21AA crushed limestone compacted to 95% of the maximum modified proctor density.

B.

PART 3. CONSTRUCTION

3.01 EXAMINATION

A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 EQUIPMENT

A. All equipment used in the construction of the work shall be inspected and shall meet approval of the Engineer prior to start of construction. All equipment, tools and machinery shall be maintained in a satisfactory working condition.

3.03 MAINTAINING TRAFFIC

A. The Contractor shall furnish, erect and maintain road construction barricades in accordance with current Michigan Manual of Uniform Traffic Control Devices.

B. The Contractor shall at all times allow access to abutting property along the job. It is not intended that this shall permit access to the property during the actual processes of construction, however, the Contractor shall provide for temporary crossings and crossovers over the work partially completed prior to final completion of the construction. No roadway surface shall be opened to traffic prior to authorization by the Engineer.

3.04 CONCRETE PAVEMENT REMOVAL

A. Caution shall be exercised during pavement breaking operations, and the use of a crane and ball type pavement breaker will not be permitted. Equipment used for this work shall be such as will not cause damage to adjacent buildings and underground utilities.

B. Concrete pavement removal will be paid for at the contract unit price per square yard, which shall include the removal of adjacent curb or curb and gutter, and any asphaltic concrete surfacing. No additional payment will be made for pavement removal with reinforcing.

3.05 CUTTING TREE ROOTS

A. Tree roots larger than two (2) inches in diameter shall not be cut beyond a point three (3) inches in back of the proposed curb line, and no tree roots shall be cut beyond a point beyond twelve (12) inches behind the proposed curb line. The above limits may be exceeded only with specific

authorization by the City Department of Public Services (DPS). If the contractor believes tree root cutting is required, in any locations throughout the project, they shall notify the City Inspector and City DPS at least 5 working days in advance of their required schedule for cutting the roots. The 5-day notification will allow DPS to review the proposed impacts from an overall tree health and public safety perspective, and allow sufficient time to remove the tree, grind stump, or have other work performed by the City as required. The contractor may elect to sub-contract any tree removal or grinding services, which may be determined to be required by DPS, to help expedite their overall project schedule, at no additional cost to the City.

3.06 EXCAVATION

A. All earth and other material shall be excavated for the full depth and width of the cross section, as given on the plans.

B. Trees and stumps to be removed will be removed by the City at no cost to the Contractor, unless otherwise determined based on the protocol listed under the CUTTING TREE ROOTS section above. Removing and disposing of shrubs, brush and trees or stumps less than four (4) inches in diameter shall be considered as incidental to the work of excavation.

C. The Contractor shall rough grade as close as possible to finished subgrade, leaving a minimum to be removed in fine grading.

D. Excavation material shall be disposed of by the Contractor in the following order of preference:

1. Along the site of the work to fill requirements of the work.

2. At the Contractor's own dump sites.

E. Excavation will be determined by the average end area method of all material included above the base between backs of curbs, or edges of pavement where no curb is constructed. Excavation and fill required from curb to property line will be classed as grading. Concrete pavement removal and other items included in separate pay items will be deducted from excavation. Asphalt removal will be considered part of excavation.

F. Excavation for manholes, catch basins, inlets and gate wells shall be included in the price bid for these items.

G. All excavated material stored along the line of work between curb and sidewalk on improved lawns shall not be left longer than forty-eight (48) hours. Said lawns or otherwise improved parkway shall be left in a neat and clean state within the specified forty-eight (48) hours.

H. Excavated material removed in fine grading or any other operations shall be removed from any completed pavement slab, before any slab is opened for traffic whatsoever, including Contractor's equipment.

3.07 PREPARATION OF SUBGRADE

A. The subgrade shall be smoothed, trimmed and compacted in the required line, grade and cross section to receive the pavement. The roadbed shall be compacted to at least ninety-five (95) percent of the maximum unit weight. The subgrade thus formed shall be maintained in a smooth and compacted condition until pavement has been placed. Should the subgrade between the forms become rutted or disturbed in any manner, the subgrade shall be reshaped and compacted as specified herein.

B. Compaction shall be accomplished by self-propelled steel wheeled or a pneumatic-tired roller weighing not less than five (5) tons or a self-propelled vibratory compactor of adequate size to compact the subgrade to the required density.

C. No concrete shall be placed on the subgrade until the subgrade has been approved by the Engineer.

D. The cost for preparation of subgrade will be paid for under the items "Earth Excavation" or "Station Grading", as noted in the Proposal, and not as a separate pay item.

E. The roadbed and adjacent grade shall be maintained in such condition that the work will be well drained at all times. If it is necessary, in the prosecution of the work, to interrupt existing surface drainage, sewers or underdrainage, then temporary drainage facilities shall be provided until the permanent drainage work is completed. The construction of all temporary drainage facilities shall be considered as incidental to the construction of the project.

F. The Contractor shall perform a proof roll on the subgrade, to be witnessed by the Engineer to determine if there are areas that are unstable or need additional compaction. Proof rolling of subgrade shall be performed with a pneumatic-tired rolling equipment, developing a load of thirty (30) to fifty (50) tons. In a systematic manner acceptable to the Engineer, the equipment shall perform a minimum of three (3) passes over the designated areas(s). When proof rolling of the subgrade shows an area to be unstable as determined by the Engineer, the unstable material shall be removed and replaced to the limits designated by the Engineer.

3.08 INSTALLING ROADWAY BASE

A. Aggregate base shall be placed on streets, roadways, shoulders and driveways at the thickness shown on the drawings in not more than six (6) layers. Such surface shall be compacted to 95% density and shall meet lines and grades established on the drawings or meeting existing pavements.

B. The aggregate base shall not be placed if the subgrade is saturated.

3.09 ADJUSTING CASTINGS

A. Existing manholes, water valve gate wells, catch basins and other like surface structures shall be raised, lowered, shifted in alignment or reconstructed if necessary to fit the proposed line or grade. This work will be paid for at the unit price as bid in the proposal. If there are no work items listed in the proposal for this work, it shall be considered incidental to the other work of the project.

3.10 FORMS

A. Forms shall be of metal, of any approved section which will insure their rigidity under the impact, thrust and weight of the heaviest machine carried on them.

B. Forms shall have a minimum length of ten (10) feet, and shall have a depth not less than the edge thickness of the work prescribed. Forms with a height of eight (8) inches or more shall have a base width of at least eight (8) inches. Other forms shall have a minimum base width of six (6) inches. The forms shall be straight, free from distortion and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge.

C. Flexible forms and hand finishing will be required on all pavement where the edge of pavement radius is less than two hundred (200) feet.

D. When tree roots may not be cut enough to allow room to use forms as specified above, wood forms (planks) may be used to reduce impacts to the tree roots. The contractor and their paving subcontractor (if applicable) are solely responsible for determining their means and methods for forming and constructing the roadway to minimize impacts to trees, tree trunks, and tree roots in proximity to the roadway in advance of staring their paving operations, and may be required to use wood forms and hand-work to complete all or portions of the proposed roadway paving when directed by the City, at no additional cost to the contract unit prices.

E. The method of connections between form sections shall be such that a locked joint is formed free from vertical movement in excess of one-eighth (1/8) of an inch and horizontal movement in excess of one-quarter (1/4) on an inch under the impact, thrust and weight of the heaviest machine carried on the forms. Each form shall be fully pinned with pins of an adequate length, and the soil under the forms shall be thoroughly compacted by use of a mechanical form tamper or vibrator.

F. All forms shall be thoroughly cleaned and oiled before concrete is placed against them.

G. Forms shall be set at least three hundred (300) feet in advance of the paver, in order to allow ample time for inspection and checking prior to the placing of concrete.

3.11 POURING CONCRETE

A. The roadway base and subgrade shall be in a moist condition, but not saturated, at the time concrete is placed.

B. Concrete shall be handled from the mixer to the place of deposit as rapidly as possible, and by methods which will prevent separation of the ingredients. The concrete shall be deposited directly into the forms as nearly as possible in its final position, so as to avoid re-handling. The piling up of concrete in the forms will not be permitted. No concrete which has partially hardened shall be deposited in the work.

C. Before beginning a run of concrete, all hardened concrete or foreign material shall be completely removed from the inner surface of the mixer and conveying equipment. Before depositing any concrete, all debris or other foreign matter shall be removed from the space to be occupied by the concrete; all reinforcing steel shall be secured in its proper locations and shall be inspected and approved by the Engineer.

D. Concrete shall be worked into all the recesses and corners of the forms and closely compacted around the reinforcing steel by means of thorough spading or an approved method of mechanical vibration.

E. When the air temperature falls to 40°F and is dropping, no concrete shall be placed. Pouring may be started when the temperature is 35°F in the shade, away from artificial heat, and is rising. All concrete during curing shall be protected in freezing weather by straw, hay or tarpaulins, for not less than seventy-two (72) hours after pouring.

F. No concrete shall be poured on a frozen, dry, saturated, or uncompacted subgrade.

3.12 PAVEMENT CONSTRUCTION

A. Concrete shall be placed only on subgrade prepared as previously specified. After the concrete has been deposited, it shall be struck off and consolidated by an approved finishing machine to such an elevation that when all finishing operations are completed, the surface will conform to the required finished grade. While striking off, a uniform ridge of concrete at least two (2) inches above the finished pavement grade shall be maintained ahead of the screed for its entire length. In consolidating, the finishing machine shall operate over each section of the pavement at least twice. Only sufficient mortar shall be worked to the surface to provide for a dense smooth finish. Excessive operation of the machine over a given area will not be permitted. Segregated particles of coarse aggregate, which may collect in front of the screed, shall be thoroughly mixed by hand with the mass of concrete already on the subgrade.

B. The concrete shall then be floated by means of a hand operated wood float not less than five (5) feet long.

C. As soon as the above operations are completed, all laitance, surplus water and inert materials shall be worked entirely off the pavement, and the surface made smooth by scraping or dragging with a rigid straightedge ten (10) feet in length.

D. The straightedge shall be placed at the center of the slab, with the blade parallel to the centerline, and pulled slowly and uniformly to the edge. This operation shall be repeated until the surface of the concrete is free from irregularities and makes contact at all points with the bottom of the straightedge. The straightedge shall then be moved forward one-half (1/2) its length and the operations repeated.

E. Depressions found in the surface shall be filled with fresh concrete and consolidated by floating with long handled float not less than five (5) feet in length. This float may also be used to smooth sections of the surface that may have become rough or torn by scraping the straightedge. Where a wood float does not give satisfactory surface, the Contractor will be required to provide metal or metal-shod long handled floats.

F. The surface will then be tested for smoothness with the straightedge. During this operation, the contact of the straightedge with the concrete shall be uniform over the entire length tested. At the time of testing, the surface shall be free from soft mortar or excessive water.

G. As soon as all excessive moisture has disappeared, and while it is still possible to produce a uniform surface of gritty texture, the pavement shall be finished by dragging a seamless strip of damp burlap or cotton fabric, not less than five (5) feet, nor more than six (6) feet in width, over the full width of the pavement. The fabric shall be renewed as often as necessary, to obtain the required texture.

H. Transverse connection joints shall be raised one-eighth (1/8) inch above the slab and finished with a notched wood float, not less than five (5) feet long, to eliminate high or low spots following burlapping. The edge next to all expansion and construction joints shall be rounded with a finishing tool having a radius of one-quarter (1/4) inch

I. The finishing of the surface and any joints shall be done from a bridge which does not touch the concrete at any point. The finished concrete shall be free from porous or open spots; no portion of the surface shall vary more than one-quarter (1/4) inch below a straightedge ten (10) feet in length laid on the pavement parallel to the centerline of the street.

J. Immediately following final finishing operations, the gutter line shall be water tested to assure uniform grade and complete drainage.

K. Should any unevenness appear in the surface of the pavement more than allowed by the Specifications, the Contractor shall at once take measures to eliminate such unevenness. After the concrete has obtained its initial set, no depressions shall be fixed by filling with concrete. In case the unevenness covers a large area of the slab, then the entire slab shall be removed and replaced with new concrete.

L. Any laitance deposited on pavement shall be immediately cleaned off.

M. The paving mixer will not be permitted on completed pavement and vehicles will be permitted only after the concrete has obtained a compressive strength of 3,500 psi. Any equipment wheels (including finishing machine) shall operate at least one (1) foot from the edge of the pavement.

3.13 JOINTS

A. Pre-molded bituminous expansion joints, construction joints, pre-molded bituminous contraction joints and sawed longitudinal contraction joints shall be placed in all pavements. All of the above-mentioned joints shall be included in the price bid per square yard of pavement. Care must be exercised in joint construction, to insure vertical planes and complete separation at the joint.

B. Expansion Joints - Expansion joints shall be one (1) inch thick and of the pre-molded non-extruding bituminous fiber filler type. Joints shall be perpendicular to the subgrade and extend entirely through the concrete to between one-quarter (1/4) inch and one-half (1/2) inch below the top of the pavement to accommodate joint sealant, which shall be placed to 1/8-inch below the top of pavement elevation. Expansion joint material shall bear uniformly on subgrade. After the concrete has set, and before the pavement has been opened to traffic, the joint shall be thoroughly cleaned and filled to the surface of the pavement with a hot poured rubber-asphalt type joint sealer.

C. Contraction Joints – All the longitudinal and transverse contraction joints shall be cut with a self-propelled concrete saw to a width and depth as shown on the plans, prior to any traffic being permitted on the new pavement. Transverse contraction joints shall be edged at the curb, properly aligned and shall butt against adjacent sections, with no space between ends. Sawed joints shall be cleaned by washing and blowing out with air immediately after sawing, and permitted to dry out at least twenty-four (24) hours prior to sealing. All contraction joints shall sawcut to the width and depth as indicated on the plans (3/16" width, and 1/3 the thickness of the proposed concrete section (with a 2.25" minimum depth). After cleaning, transverse contraction joints shall have a pre-molded bituminous material ("backer-rod"), one-quarter (1/4) inch diameter, placed approximately 1" below the top of pavement, to allow for joint sealant to be placed above the backer road to 1/8" below the top of pavement. Longitudinal contraction joints shall filled full-deoth with sealant material, to 1/8" below the top of pavement. Joints shall be sealed with a hot poured rubber asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.

D. If the Contractor elects to construct a full width pavement with a center longitudinal contraction joint, said joint shall be cut in more than twelve (12) hours, and no more than thirty (30) hours after the pouring and finishing of that part of the pavement.

E. Construction Joints - Longitudinal construction joints shall be placed as shown on plans. Construction joints shall also be placed at the ends of all pours, and at places where paving operations are stopped for a period of more than one-half (1/2) hour, except where such pours end at expansion joints. The second pour of concrete shall be edged with a longer lipped edging tool than the first concrete pour. Joints shall be sealed with a hot poured rubber-asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.

3.14 REMOVAL OF FORMS

A. Forms shall not be removed from freshly placed concrete until it has set for at least twelve (12) hours. They shall be carefully removed and in such a manner that no damage will be done to the edge of the pavement.

B. After the forms have been removed, the ends of all joints shall be cleaned and all honeycombed areas pointed.

C. The sides of the pavement shall be covered with curing material, or with at least twelve (12) inches of wetted earth, wetted straw or other suitable curing agent, except where honeycombed areas are to be pointed. Such areas shall be covered with wetted burlap until the pointing has been completed, at which time they shall be cured as specified above.

3.15 WHITE MEMBRANOUS CURING

A. After finishing operations have been complete, and immediately after the free water has left the surface, the surface of the pour shall be completely coated and sealed with a uniform layer of white membranous curing compound.

B. The compound shall be applied in continuous uniform film by means of mechanical pressure sprayer equipment at a rate of not less than two (2) gallons per twenty-five (25) square yards of

surface. The equipment shall provide adequate stirring of the compound during application. The equipment for applying the compound must be approved by the Engineer before work is started.

C. If rain falls on the newly coated pavement before the film has dried sufficiently to resist damage, or if the film is damaged in any other way, the Contractor will be required to apply a new coat of material to the affected areas equal in curing value to that specified for the original coat.

3.16 CLEAN-UP AND GRADING

A. The Contractor shall perform final grading the area between the edge of the new pavement and the sidewalk, or the property line if there is no sidewalk. This area shall be graded to drain to the curb.

B. Wherever lawn areas are unnecessarily damaged by the Contractor, he will be required to repair any such areas at his own expense.

3.17 GRADING AT INTERSECTIONS

A. The Contractor shall grade from the completed paving at a grade not exceeding one (1) inch in twenty (20) inches at all places where the paving adjoins the roadways. At existing roadways, the re-graded area shall be finished with the same type of material as removed. At places where paving adjoins gravel or gravel treated roadways, the regarded area shall be finished with a road gravel at a minimum thickness of six (6) inches compacted. However, the Contractor will not be required to replace any oil treatment or seal coat.

B. There will be no additional payment for this work, and the cost of such should be included in the price bid for the concrete pavement.

3.18 CURB, CURB AND GUTTER

A. Joints in integral curb shall line up with, and be the same type as, those in the concrete pavement.

B. Joints in separate straight curb and in curb and gutter shall line up with, and be the same type as, those in adjacent concrete pavement, but spacing shall in no case exceed ten (10) feet. The Contractor shall use face forms on all straight curbs.

C. The face and top of the curb shall be finished smooth and true to line, grade and cross section. No more troweling than necessary shall be done. Prior to the initial set of the concrete, the curb face shall be lightly brushed to give a slightly roughened surface. The curb shall be dropped to within (1) inch of the gutter at integral curb shall proceed simultaneously and follow immediately the placing of pavement concrete.

D. Form excavations on the street side of curb and gutter sections shall be backfilled with road gravel and thoroughly compacted.

3.19 DRIVES

A. The Contractor shall remove and replace, or construct gravel, asphalt or concrete drives adjacent to new construction where designated by the Engineer.

B. Drives shall be constructed on a uniform slope from the gutter to the sidewalk, property line or place designated by the Engineer.

C. Gravel Drives - The existing material shall be excavated and road gravel placed at a minimum thickness of six (6) inches compacted.

D. Asphalt Drives - The existing material shall be excavated, and a minimum thickness of one and one half (1 1/2) inches of hot mix asphalt pavement placed on a road gravel base, with a minimum

compacted thickness of five (5) inches. A neat joint shall be cut when meeting existing asphaltic concrete.

E. Concrete Drives - Concrete drives shall be six (6) inches thick, unless otherwise designated. A portion of an existing concrete drive to be removed shall be removed to an existing joint, or to a joint made with a concrete saw. Concrete drives shall be constructed in accordance with the procedures and specifications for Cement Concrete Pavement.

F. Payment will be made at the contract unit price per square yard, and for the designated thickness, which will be payment-in-full for excavating material other than concrete, and for constructing the drive complete.

G. Payment for concrete removal will be made at the contract unit price per square yard. Payment for saw cutting will be made at the contract unit price per lineal foot.

3.20 CONCRETE HEADERS

A. Concrete end headers shall be placed at the end of all pavements, including street returns not connecting with concrete or asphaltic concrete pavements.

B. Payment will be made at the contract unit price per square yard for the adjoining concrete pavement.

3.21 SAW CUTTING

A. Payment for saw cutting will be made at the contract unit price per lineal foot for saw cutting designated on the plans, or designated by the Engineer.

B. No additional payment will be made for saw cutting pavement joints or for saw cutting done for the Contractor's convenience.

3.22 DAMAGE BY CONSTRUCTION

A. Sidewalks, driveways, etc., unnecessarily damaged by construction operations shall be repaired or replaced as directed by the Engineer, at no additional cost to the City.

3.23 MEASUREMENT AND PAYMENT

A. Concrete pavement will be paid for at the contract unit price per square yard, which will be payment in full for furnishing all materials (not including pavement reinforcement), dowels, tie bars, joint dowel hook bolts, and all joint materials; laying, curing and protecting the concrete; constructing the pavement complete; grading at intersections; and maintaining traffic.

B. Payment for integral curb will be included in the contract unit price per square yard for concrete pavement with integral curb.

END OF SECTION

SECTION 711
PORTLAND CEMENT CONCRETE DURABILITY REQUIREMENTS

PART 1. GENERAL

1.03 SUMMARY

B. All Portland cement concrete mixtures supplied by the Contractor for this project shall have been tested under this specification and shown to be resistant to excessive expansion caused by alkali-silica reactivity (ASR) and provides adequate air entrainment for freeze thaw durability. The contractor shall construct the project with practices outlined in this specification.

C. All labor, materials, equipment, supervision and incidentals required for complying with the requirements of this section shall be incidental to the other work of this project.

1.04 REFERENCES

B. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.05 SUBMITTALS

B. Contractor shall submit proposed mix design for all Portland cement concrete mixtures to be supplied on this project.

C. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.03 PORTLAND CEMENT CONCRETE MIXTURE COMPONENTS

A.	Portland cement	ASTM C-150
B.	Fine Aggregate	ASTM C-33
C.	Coarse Aggregate	ASTM C-33
D.	Fly Ash, Class F	ASTM C-618
E.	Slag Cement, Grade 100, 120	ASTM C-689
F.	Silica Fume	ASTM C-1240
G.	Blended Cements	ASTMC-595
H.	Air Entraining Admixtures	ASTM C-260
I.	Chemical Admixtures	ASTM C-494
J.	White Membrane Cure	ASTM C-309 Type 2

PART 3. EXECUTION

3.03 ALKALI-SILICA REACTIVITY

A. Provide documentation to the Engineer that the concrete mixture does not present the potential for deleterious expansion caused by alkali-silica reactivity (ASR). Provide current ASR test results (valid for 2 years from completion of testing), for the fine aggregate that is proposed to be used in the concrete, from an independent testing laboratory proficient in ASR testing. The independent

testing laboratory must certify in writing, including a signed statement that all testing was conducted in accordance with the designated standard test procedures, described herein. Test results must conform to the specified criterion for one of the following standard test methods. ASR testing is not required for concrete pavement repairs and temporary concrete pavements. Use the Rounding Method described in ASTM E 29 when determining significant digits for reporting expansion test results.

1. Method 1. ASTM C 1293. Concrete Prism Test. If the expansion of concrete prisms is not greater than 0.040 percent (rounded to the nearest 0.001 percent) after 1 year, the fine aggregate is considered non-deleterious to ASR and may be used in the JMF.

2. Method 2. ASTM C 1567. Mortar Bar Test. If no previous test data are available for the fine aggregate that shows it is resistant to ASR using Method 1, above, replace 25 to 40 percent of the Portland cement in the concrete mixture with a supplementary cementitious material. A blended cement meeting the requirements of ASTM C 595 containing the above Portland cement and supplementary cementitious material proportions may also be used.

   Demonstrate the ability of the supplementary cementitious material to control the deleterious expansion caused by ASR by molding and testing mortar bars according to the standard test method described in ASTM C 1567 using the mix proportions and constituent sources for both the aggregates and the cementitious materials that will be used for the project. Make at least three test specimens for each cementitious materials-aggregate combination. If the average of three mortar bars for a given cementitious materials-aggregate combination produces an expansion less than 0.10 percent (rounded to the nearest 0.01 percent) at 14 days of immersion, the JMF associated with that combination will be considered non-deleterious to ASR. If the average expansion is 0.10 percent (rounded to the nearest 0.01 percent) or greater, the JMF associated with that combination will be considered not sufficient to control the deleterious expansion caused by ASR and the JMF will be rejected.

3. Method 3. ASTM C 1260. Mortar Bar Test. If the expansion of the mortarbars is less than 0.10 percent (rounded to the nearest 0.01 percent) at 14 days of immersion, the fine aggregate is considered non-deleterious to ASR and may beused in the concrete without the need for ASR mitigation. The Engineer will not approve the use of the JMF if the expansion exceeds the respective threshold limits for the respective ASTM test method used.

3.04 QUALITY CONTROL

A. The Owner and Contractor shall monitor the concrete that is delivered to the project site so as to insure that the approved mix design is being followed. The supplier shall include on the delivery ticket for each batch of concrete delivered to the job, the identification and proportions of each material batched. In lieu of individual batch tickets a detailed summary report showing the batch weights for each load may be submitted, at the end of each production shift, provided that individual ticket information is supplied upon request for inspection and testing personnel.

B. When concrete is placed during cold weather, below 40 degrees F, the use of accelerators, heated aggregates, silica fume and/or additional forms of cold weather protection will be required. Cold weather will not eliminate the requirement for furnishing and placing a concrete mix that is considered resistant to ASR attack.

C. Prior to cool weather placement, temperatures between 40 and 60 degrees F, the set time of the proposed mix shall be verified under anticipated field conditions. This information shall be used when scheduling pours and saw crews.

3.05 AIR ENTRAINMENT

A. Air entrainment shall be accomplished by addition of an approved air entraining agent. Air content as determined by ASTM C 231 or ASTM C 173, shall be determined on each day of production as early and as frequently as necessary until the air content is consistently acceptable. Acceptance testing for air content shall be on the grade ahead of the placement operation.

B. Paver placement:

1. The target air content of the in-place finished plastic concrete is 6.0%. During production acceptance will be at the point of acceptance sampled ahead of the paver, the target value referred to as the Acceptance Air Content (AAC). The AAC will be determined by the air loss actually experienced during transportation, consolidation and placement of the concrete. The difference between the as-produced concrete in front of the paver and the in-place air content will be considered the air loss. The AAC for the project will be 6.0% plus an amount equal to the air loss.

2. To establish the initial target AAC on the first day of paving, the first load shall be tested at the plant. For up to the first ten (10) loads, the AAC measured prior to placement shall be at least 8.0% and no more than 12.0%. After initial testing at the plant at least two sample sets shall be tested to determine the actual air loss during placement. A set shall consist of two (2) samples of concrete from the same batch, one taken at the point of discharge and the other from the in-place concrete behind the paver. The air loss from the two (2) sets shall be averaged and added to 6.0% to establish the AAC (rounded to the next higher 0.5%). The project acceptance air tests shall be taken prior to placement and shall be within the range of the AAC plus 2.0% or minus 1.0%.

3. After the AAC has been established it shall be verified and/or adjusted through daily checks of the air loss through the paver. The loss through the paver shall be checked twice daily. A Revised AAC shall be established if the average air loss from two (2) consecutive tests deviates by more than 0.5% from the current accepted air loss.

C. Hand placed concrete:

1. The air content for non-slip form paving shall be 7.0% plus 1.5% or minus 1.0% at point of placement.

3.06 CONSTRUCTION PROCESSES

A. Aggregate control

1. Gradation control – The Contractor shall provide a detailed stockpile management plan, describing their process control procedure for shipping, handling, and stockpiling of each aggregate including workforce training.

2. Moisture control – All aggregate materials must be conditioned to a moisture content of not less than saturated surface dry (SSD) prior to batching. A watering process using some type of sprinkler system is required on all coarse aggregate material stockpiles.

B. Mixing

1. Central mix plants

a. The total volume of the batch shall not exceed the designated size of the mixer or the rated capacity as shown on the manufacturer's rating plate.

b. Drum Mix Plants:

i. After all solid materials are assembled in the mixer drum; the mixing time shall be a minimum of sixty (60) seconds and a maximum of five (5) minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall start after the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. Any additional slump water required shall be added to the mixing chamber by the end of the first 25% of the specified mixing time. Mixers shall not be used if the drum is not clean or if the mixing blades are damaged or badly worn.

c. Ribbon mixers:

i. After all solid materials are assembled in the mixer; the mixing time shall be a minimum of thirty (30) seconds and a maximum of 2.5 minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall be indicated by an accurate timing device which is automatically started when the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. After any additional slump water is added to the mixing chamber the mixing shall continue for a minimum of ten (10) seconds. Mixers shall not be used if the mixer is not clean or if the mixing blades are damaged or badly worn.

2. Truck mixers

a. The capacities and mixing capabilities shall be as defined in ASTM C 94, and each unit shall have an attached plate containing the information described therein. The plate may be issued by the Truck Mixer Manufacturer. The mixer capacity shall not be exceeded, and the mixing speeds shall be within the designated limits. Truck mixers shall be equipped with a reliable reset revolution counter. If truck mixers are used for mixing while in transit, the revolution counter shall register the number of revolutions at mixing speed.

b. An authorized representative of the concrete producer shall certify that the interior of the mixer drum is clean and reasonably free of hardened concrete, that the fins or paddles are not broken or worn excessively, that the other parts are in proper working order, and that the unit has been checked by the representative within the previous thirty (30) calendar day period to substantiate this certification. The current, signed certification shall be with the unit at all times.

c. The required mixing shall be between seventy (70) and ninety (90) revolutions. The mixing shall be at the rate designated by the manufacturer and shall produce uniform, thoroughly mixed concrete.

d. The Engineer may inspect mixer units at any time to assure compliance with certification requirements, and removal of inspection ports may be required. Should the Engineer question the quality of mixing, the Engineer may check the slump

variation within the batch. Should the slump variation between two (2) samples taken, one (1) after approximately 20% discharge and one (1) after approximately 90% discharge of the batch, show a variation greater than 3/4 inch (20 mm) or 25% of the average of the two, whichever is greater, the Engineer may require the mixing to be increased, the batch size reduced, the charging procedure be modified or the unit removed from the work.

e. The practice of adding water on the site shall be discouraged. After the first round of trucks has been adjusted on the grade the amount of water added at the plant shall be adjusted and shall become the point of adjustment throughout the pour. All water additions on site shall be approved by the Engineer.

C. Curing

1. Apply liquid curing compound in a fine atomized spray to form a continuous, uniform film on the horizontal surface, vertical edges, curbs and back of curbs immediately after the surface moisture has disappeared, but no later than thirty (30) minutes after concrete placement. With approval of the Engineer, the timing of cure application may be adjusted due to varying weather conditions and concrete mix properties.
2. The cure system shall be on site and tested prior to concrete placement.
3. Apply a curing compound at a rate of application not less than two (2) gallons per twenty-five (25) square yard; keep the material thoroughly mixed per the manufactures recommendation and do not dilute the compound.
4. The finished product shall appear as a uniformly painted solid white surface. Areas exhibiting a blotchy or spotty appearance shall be recoated immediately.

END OF SECTION

SECTION 712
CONCRETE SIDEWALK CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the construction of concrete sidewalks and ramps, and associated work, including detectable warning plates for sidewalk ramps as required for compliance with the American with Disabilities Act.

B. Related Sections: The following sections contain requirements that relate to this Section:

1. Concrete Durability Requirements

1.02 REFERENCES

A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

B. All sidewalk and ramp shall meet ADA requirements for slope, surface finish, width, and all other requirements.

1.03 SUBMITTALS

A. Contractor shall submit proposed mix design for all concrete to be supplied for sidewalk construction.

B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 CONCRETE

A. Portland Cement Concrete (PCC) Mixtures shall meet MDOT requirements for Concrete Grade 3500 in accordance with MDOT 2020 Standard Specifications for Construction.

B. Coarse aggregate shall be natural limestone and conform to MDOT gradation requirements for 6AA material.

C. Fine aggregate shall be MDOT 2NS sand, and meet MDOT special provision 20SP-1002A-01 requirements for alkali silica reactivity.

D. MDOT 3500 mixtures require a range between 25-percent to 40-percent of replacement of the Portland cement content with supplementary cementitious materials (SCM's). All PCC mixtures allowed for use in Birmingham shall meet at least one of the following criteria:

1. Provide a maximum of 25-percent replacement of the Portland cement in the concrete mixture with a SCM (Ground Granulated Blast-Furnace Slag (GGBFS) or approved equal).

2. Utilize Portland cement that has a low alkali percentage (0.6% or less total cement alkali content).

E. The concrete mixture supplied on this project shall conform to the requirements of the Concrete Durability Requirements section for resistance to alkali-silica reactivity (ASR).

F. Admixtures shall be used only when specified or authorized by the Engineer.

G. The City reserves the right to make air and slump tests on any or all loads of concrete supplied to the job prior to placing the concrete in the grade. Concrete shall not be placed on the grade until such tests have been completed and approved by the Engineer. Concrete not meeting the specifications will be rejected. Re-tempering of rejected concrete for re-use on the job will not be allowed.

H. Water shall not be added to the concrete at any time without specific permission by the Engineer.

2.02 TRUNCATED DOMES / DETECTABLE WARNING

A. Truncated Domes / Detectable Warning shall be manufactured of cast iron, and shall at a minimum have the following properties:

Slip Resistance (ASTM C-1028):	1.10 Dry / 1.06 Wet
Wear Resistance (ASTM C-501):	7333
Impact Resistance (ASTM D-1709)	>238 Newtons
Adhesion to Concrete (Bond Strength ASTM D-482)	>5000 lbs
Tensile Strength (ASTM A-48)	35,000 PSI

B. Truncated Domes / Detectable Warning shall be supplied with a natural finish and shall not be "dipped" in asphaltic or other material.

C. Truncated Domes / Detectable Warning shall be supplied at each sidewalk ramp in accordance with ADAAG and/or MDOT requirements, whichever is more stringent.

D. Truncated Domes / Detectable Warning shall be at least two (2) feet deep along the direction of travel. The detectable warning plate width shall generally be five (5) feet, unless otherwise specified on the drawings or in the field by the Engineer. Radial plates may be used where called for on the drawings, or in the field by the Engineer.

E. Truncated Domes / Detectable Warning shall be manufactured by East Jordan Iron Works, or approved equal.

2.03 FORMS

A. Forms shall be of metal or wood, and of an approved section. Materials, other than metal or wood shall not be used for forms, unless specifically authorized by the Engineer.

B. Forms shall be straight, free from distortions, and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge, and shall show no lateral variations greater than one-quarter (1/4) of an inch from the true plane surface on the vertical face of the form when tested with a ten (10) foot straight edge.

2.04 JOINTS AND JOINT SEALANT

A. All expansion joints shall be 1/2-inch thick pre-molded, non-extruding bituminous fiber filler type.

B. All expansion joints within and adjacent to concrete sidewalks and driveways shall be sealed using a two-part polysulfide sealant, self-leveling, light gray color, per federal specifications TT-S-0027E, Type 1, Dow Corning #780, or approved equal.

PART 3. CONSTRUCTION

3.01 EXAMINATION

A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 PREPARATION

A. If removal and replacement of the existing sidewalk is specified in the work item, the Contractor shall remove the existing sidewalk to the extent shown on the plans, or as directed by the Engineer in the field.

B. During removals and construction, Contractor shall protect all adjacent sidewalks, pavement, curb and gutter, and drive approaches from damage. Any adjacent infrastructure that is damaged by the Contractor during construction shall be replaced by the Contractor at no additional cost to the City.

C. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete, or to bottom of subbase, if a subbase is specified. All sod and vegetative matter shall be stripped from the subgrade.

D. The subgrade after grading shall be thoroughly tamped or otherwise compacted, to insure its stability. Any soft, spongy or otherwise unstable areas in the subgrade shall be removed and replaced with granular fill.

E. In cuts, the subgrade shall be made sufficiently wide to permit the proper placing of forms, and in fills, the subgrade shall be made at least one (1) foot wider on each side than the required width of sidewalk.

F. All fills shall be of granular material, and shall be placed in thoroughly compacted layers not to exceed six (6) inches in depth. Compaction shall be accomplished by the use of mechanical equipment or hand tamps with metal bases.

G. Existing sidewalks or paved areas under proposed sidewalks shall be removed, except where grade will allow at least two (2) inches of granular fill to be placed over them.

3.03 SIDEWALK THICKNESS

A. Unless otherwise noted on the drawings, sidewalks shall be at least four (4) inches thick, except at ramps and across driveways, where they shall be at least six (6) inches thick.

3.04 DISPOSAL OF WALK AND EXCAVATED MATERIALS

A. The old walk, after removal, and excavated materials shall be disposed of by the Contractor at his own expense. He shall provide his own dump. When directed by the Engineer, the Contractor shall leave removed sod in an area adjacent to the construction. The Contractor will not be held responsible for the sod after that time or responsible for the condition of the area under which the sod was placed.

3.05 PREPARATION OF SUBGRADE

A. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete, or to bottom of subbase, if a subbase is specified. All sod and vegetative matter shall be stripped from the subgrade.

B. The subgrade after grading shall be thoroughly tamped or otherwise compacted, to insure its stability. Any soft, spongy or otherwise unstable areas in the subgrade shall be removed and replaced with granular fill.

C. In cuts, the subgrade shall be made sufficiently wide to permit the proper placing of forms, and in fills, the subgrade shall be made at least one (1) foot wider on each side than the required width of sidewalk.

D. All fills shall be of granular material, and shall be placed in thoroughly compacted layers not to exceed six (6) inches in depth. Compaction shall be accomplished by the use of mechanical equipment or hand tamps with metal bases.

E. Existing sidewalks or paved areas under proposed sidewalks shall be removed, except where grade will allow at least two (2) inches of granular fill to be placed over them.

3.06 PROTECTION OF TREES

A. Where a tree is less than twenty-four (24) inches from the existing walk, or at the Engineer's discretion, the Contractor may be required to curve the walk around the tree, maintaining the full width of the walk through the curve. The Contractor shall cut and remove all tree roots that are in the sidewalk grade. Merely shaving the roots in order to place the sidewalk at proper grade and thickness will not be acceptable. The cost of the work of cutting and removing the roots and curving the walk around the trees shall be included in the unit price bid. The City may elect to cut and remove certain tree roots with their own forces, but the Contractor shall submit his bid based on performing all of the necessary root cutting and removal.

3.07 BARRICADES AND LIGHTS

A. Barricades and lights shall be placed in accordance with the "Public Safety" section of the "General Requirements" section of these specifications. In addition, the following requirements shall be met.

B. Barricades used under this contract shall be "horses" or other barricades approved by the Engineer. Barricades made of rope, wood siding and other similar types will not normally be approved by the Engineer.

C. Barricades shall be placed where sidewalks under construction join sidewalks or driveways which are open for use.

D. Lights shall be placed at the beginning and end of construction in each block. Where such lights are more than five hundred (500) feet apart, intermediate lights shall be placed so that the distance between any light does not exceed five hundred (500) feet.

3.08 FORMS

A. Forms shall be of metal or wood, and of an approved section. Materials, other than metal or wood shall not be used for forms, unless specifically authorized by the Engineer.

B. Forms shall be straight, free from distortions, and shall show no vertical variation greater than one-eighth (1/8) of an inch in ten (10) foot lengths from the true plane surface on the top of the forms when tested with a ten (10) foot straight edge, and shall show no lateral variations greater than one-quarter (1/4) of an inch from the true plane surface on the vertical face of the form when tested with a ten (10) foot straight edge.

3.09 FORMING

A. Forms must be used for all edges of all sidewalk construction. Where proposed walk abuts existing concrete, and the edge of the existing concrete is true to line and grade, the existing concrete, with or without expansion paper, will be considered a form for the new sidewalk.

B. Forms shall be installed true to line and grade established by the Engineer. They shall be adequately staked and braced to remain on line and grade during the placement of concrete.

C. Walk shall pitch to the center of the street at the rate of one-quarter (1/4) inch per foot of width, unless otherwise provided. Forms shall be of the full depth specified for the walk.

D. Before placing concrete, forms shall be thoroughly cleaned and oiled.

3.10 PLACING AND FINISHING CONCRETE

A. Before beginning a run of concrete, all hardened concrete or foreign material shall be completely removed from the inner surface of the mixer and conveying equipment. Before depositing any concrete, all debris or other foreign matter shall be removed from the space to be occupied by the concrete.

B. The subgrade shall be thoroughly wetted and the concrete shall be deposited thereon to the proper depth. So called "two course" pouring will not be permitted. Concrete shall be handled from the mixer to the place of deposit as rapidly as possible and by methods which will prevent separation of the ingredients. The concrete shall be deposited directly into the forms as nearly as possible in its final position, so as to avoid re-handling. The piling up of concrete in the forms will not be permitted. No concrete which has partially hardened shall be deposited in the work.

C. Concrete shall be worked into all the recesses and corners of the forms by means of thorough spading of an approved method or mechanical vibration.

D. When the air temperature falls to 40°F and is dropping, no concrete shall be placed. Pouring may be started when the temperature is 35°F in the shade, away from artificial heat, and is rising. All concrete during curing shall be protected from freezing by straw, hay or tarpaulins, for not less than seventy-two (72) hours after pouring.

E. No concrete shall be poured on a frozen, dry or uncompacted subgrade.

F. The concrete shall be alternately tamped and struck off with a strike board until all voids are removed and the surface has the required grade and cross section. The strike board shall be long enough so it can always be in contact with both forms. The surface shall be floated with a wood or aluminum float, followed by a steel float, just enough to produce a smooth surface free from irregularities. All edges and joints shall be rounded to a radius of one-quarter (1/4) inch with an approved finishing tool. The surface shall then be brushed to slightly roughen the surface and remove the finishing tool marks.

G. The end of a run of concrete shall not remain unformed for more than one-half (1/2) hour, by which time a header form shall be placed. If a header is not placed, the concrete shall be removed back to the last transverse joint prior to continuing the pour. Headers, when used, shall not vary more than six (6) inches in location from the normal transverse joint location.

3.11 JOINTS

A. Joints shall be constructed true to line, with their faces perpendicular to the surface of the sidewalk, and shall not vary more than one-quarter (1/4) inch from their designated position. Transverse joints shall be constructed at right angles to the centerline of the sidewalk, and longitudinal joints shall be constructed parallel to the centerline, unless otherwise required.

B. When the sidewalk is constructed in partial width slabs, transverse joints in the succeeding slab shall be placed in line with like joints in the adjacent slab. In the case of widening existing sidewalks, transverse joints shall be placed in line with like joints in the existing sidewalk.

C. The concrete at the faces of all joints shall be thoroughly spaded and compacted to fill all voids, and the surface shall be finished smooth and true to grade.

D. Expansion Joints - Expansion joints shall be of the pre-molded non-extruding bituminous fiber filler type.

E. In new sidewalk, one-half (1/2) inch thick expansion joints shall be placed at intervals of not more than fifty (50) feet.

F. One-half (1/2) inch thick expansion joints shall also be placed at junctions with curb junctions, parallel curb and gutter, sidewalks, drives, buildings and other rigid structures.

G. All sidewalk expansion joints paper shall be placed to provide a minimum of 1/2-inch below the walk surface elevation to allow for at least 3/8-inch of joint filler/sealant to be placed to an elevation just below the surface elevation. All sidewalk expansion joints shall be sealed using gray-colored, two-part polysulfide sealant as indicated in part 2 above.

H. Contraction Joints - Insofar as feasible, joints shall be spaced at intervals equal to the width of the walk and with maximum transverse and longitudinal intervals of ten (10) feet. Joints shall be produced by use of slab division forms extending the full width and one-half (1/2) the depth of the walk. The joints shall be of not less than one-eighth (1/8) inch, nor more than one-quarter (1/4) inch in width, and shall be finished smooth and true to line.

I. Slab division forms shall remain in the concrete a sufficient length of time to insure permanent separation of the concrete.

3.12 WHITE MEMBRANOUS CURING

A. After finishing operations have been completed, and immediately after the free water has left the surface, the surface of the sidewalk shall be completely coated and sealed with a uniform layer of white membranous curing compound.

B. The compound shall be applied in a continuous uniform film by means of mechanical pressure sprayer equipment at a rate of not less than one (1) gallon per two hundred (200) square feet of surface. The equipment shall provide adequate stirring of the compound during application. The equipment for applying the compound must be approved by the Engineer before work is started.

C. If the compound is too thick for satisfactory application during cold weather, the material may be warmed in a water bath at temperatures not over 100°F. Thinning with solvents will not be permitted.

D. If rain falls on the newly coated sidewalk before the film has dried sufficiently to resist damage, or if the film is damaged in any other way, the Contractor will be required to apply a new coat of material to the affected areas equal in curing value to that specified for the original coat.

3.13 SIDEWALK RAMPS

A. Sidewalk ramps shall be constructed in accordance with these Concrete Sidewalk Construction Specifications, and in accordance with MDOT Standard Detail R-28, latest edition.

B. Surface texture of ramps shall be that obtained by a coarse brooming, transverse to the slope of the ramps. The normal gutter line profile shall be maintained through the area of ramps.

C. There is no separate pay item for sidewalk ramps. The sidewalk portion of ramps will be paid for as concrete sidewalk construction. Work required at the curb for ramps will be paid for under a curb pay item, depending on the type of curb work performed.

D. Each ramp shall include a Truncated Domes / Detectable Warning installed at the back of the curb. The Truncated Domes / Detectable Warning shall generally be five (5) feet wide by two (2) feet deep. If that is not possible given the site constraints, then they shall be at least as wide as the existing adjacent sidewalk. Radial Truncated Domes / Detectable Warning plates may be required in some locations.

3.14 REMOVAL OF FORMS

A. Forms shall not be removed from freshly placed concrete until it has set for at least twelve (12) hours. They shall be carefully removed, and in such a manner that no damage will be done to the edge of the sidewalk.

3.15 PROTECTION OF EXISTING LAWNS

A. The Contractor shall use extreme care while replacing existing sidewalks or constructing new sidewalks in existing lawns not to damage the lawns. The Contractor shall remove a maximum of six (6) inches of sod beyond the edges of the sidewalk. He shall remove the sod after cutting it with a square nosed shovel on a parallel line to the sidewalk.

B. The Contractor shall protect existing lawns at all times during his work. Equipment or vehicles will not be permitted on established lawns. The Contractor will be held responsible for all damage to lawns more than six (6) inches away from sidewalk construction. Sod and other excavated materials shall not be placed on existing lawns. Any lawn area damaged as a result of the Contractor's operations may be repaired by the City at the Contractor's expense.

3.16 UNDERGROUND SPRINKLER SYSTEMS

A. Some of the houses in the sidewalk replacement area may have underground sprinkler systems for their lawns. The owners of these sprinkler systems have been notified that they are responsible for locating for the Contractor, all underground sprinkler equipment adjacent to any sidewalk that is to be replaced. The Contractor will be required to use caution when working around these known underground sprinkler systems, and shall repair any damage to sprinklers if, in the opinion of the Engineer, insufficient care was taken to prevent damage to the sprinkler system.

3.17 SERVICE WALKS

A. Where the grade of a new or replaced sidewalk does not meet the grade of a private service walk, the Contractor may be required to replace a portion of the service walk. The Contractor will be required to replace only that portion of the service walk that the Engineer determines is necessary to eliminate a hazard or drainage problem.

B. Payment for replacement of service walks will be made at the contract unit price for four (4) inch concrete sidewalk replacement.

3.18 CONSTRUCTION AT PAVED DRIVEWAYS

A. Sidewalk Replacement at Concrete Driveways

1. The existing sidewalk shall be removed without damaging the driveway. Expansion joints shall be replaced along each edge of the sidewalk, and the sidewalk shall be replaced using the expansion paper at the drive as forms.

B. Sidewalk Replacement at Asphalt Driveways

1. The existing sidewalk, and a maximum of four (4) inches of asphalt on each side of the sidewalk, shall be removed without damaging the rest of the drive. A neat joint shall be cut in the asphalt prior to removing the sidewalk. The sidewalk shall be formed across the

driveway. Wood forms may be used in such locations. Upon completion of the sidewalk construction, the Contractor shall place road gravel in the form excavations. There will be no additional payment made for cutting the neat joints, removing asphalt and placing road gravel in the form excavations. The City shall then be responsible to have the remaining asphalt replaced by others.

2. Where an asphalt driveway is in good condition and at a suitable grade, the Engineer may direct that the sidewalk be removed and replaced without removing a portion of the driveway. In such case, the Contractor shall use caution to avoid damage to the asphalt. Also, the Contractor will not be required to set forms. The Contractor should avoid getting cement on the surface of any asphalt drive.

C. New Sidewalk at Concrete Driveways

1. The Contractor shall saw cut and remove that portion of the driveway necessary to be removed to construct the sidewalk, and necessary to be removed because of grade. The sidewalk shall be formed across the driveway, and following the removal of the forms, the remaining portion of the driveway removed shall be replaced.

D. New Sidewalk (asphalt drives)

1. The Contractor shall cut neat joints in the asphalt at locations determined by the Engineer. The Contractor shall remove the asphalt between the neat joints, shall form the sidewalk across the drive, and following the removal of the forms, shall fill the form excavations with road gravel. There will be no additional payment made for cutting the neat joints, removing the asphalt and placing road gravel in the form excavations.

3.19 CONSTRUCTION AT UNPAVED DRIVEWAYS

A. The Contractor shall backfill the form excavation across unpaved drives with the same type material as exists in the adjacent driveway.

3.20 FINAL GRADING

A. For new sidewalk construction, the Contractor shall grade to a uniform slope from the top of the walk to top of the curb, and from the walk to the property line. In the event there is no curb, grading shall be done for a distance of 10 (ten) feet towards the centerline of the street to the existing grade. If this provision should involve destroying or re-grading established lawns and parkways, the Contractor shall confer with the Engineer before starting such grading.

B. Grading and clean-up work shall be done as soon as possible following the completion of any section of sidewalk, and in no case shall more than two (2) consecutive days (excluding Sundays and holidays) elapse from the time any section of sidewalk is placed until the adjacent grading and clean-up is completed.

C. In establishing lawns, the Contractor shall place a minimum of two (2) inches of topsoil in all form excavations and on all re-graded areas. The topsoil shall be tamped and graded, and then seeded with grass seed. Clean excavated material may be used to fill under the required topsoil. Topsoil and seed used shall be of a high quality and approved by the Engineer. Topsoil shall be free of sticks, stones, clumps of clay, debris and similar materials.

D. In unimproved areas, clean excavated material may be used for grading.

3.21 PAYMENT

A. Payment will be made by unit price per square foot of walk constructed, and price bid shall include: placement and preparation of granular fill (4" or 6" of compacted class II sand base per plan

details); forming, furnishing, placing and finishing of concrete (thickness as specified); placing of jointing materials; curing compound; removal of forms; and grading as specified.

B. There will be no additional payment for removing and replacing unstable subgrade.

C. No deductions in payment will be made for areas of sidewalk construction occupied by manhole castings, utility boxes, pole bases and similar objects, provided no one such object occupies more than ten (10) square feet of the new (or replaced) sidewalk. Where any one such object occupies more than ten (10) square feet of the new (or replaced) sidewalk, no payment will be made for sidewalk within that area.

END OF SECTION

SECTION 750
HOT MIX ASPHALT PAVEMENT CONSTRUCTION

PART 1. GENERAL

1.01 SUMMARY

A. This section includes the provision of all labor, materials, equipment, supervision and incidentals required for the furnishing and placement of plant mixed Hot Mix Asphalt (HMA) pavements.

1.02 REFERENCES

A. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 SUBMITTALS

A. Contractor shall submit proposed mix design for all hot mix asphalt to be supplied on this project.

B. Contractor shall submit certifications for all aggregate and classified granular fill materials to be supplied on this project.

PART 2. MATERIALS

2.01 HOT MIX ASPHALT PAVEMENTS

A. Hot-mix asphalt mixture designations shall be as specified on the drawings for wearing (surface) course, leveling course, and base course as applicable. All mix designations shall meet applicable minimum requirements per MDOT standard specifications for construction.

B. Binder from Recycled Asphalt Pavement (RAP) materials shall be limited to not more than 17 percent of the total mix binder content by weight. Final binder for all mixes shall meet specification requirements for Performance-Grade PG64-28.

C. Bond coat shall be SS-1h.

PART 3. CONSTRUCTION

3.01 EXAMINATION

A. Contractor shall verify the existing conditions prior to submitting a bid on the project.

3.02 ASPHALTIC - BITUMINOUS

A. For purposes of these specifications, the words, "asphaltic" and "bituminous", and comparable variations of such words, will be considered to be interchangeable.

3.03 MAINTAINING TRAFFIC

A. The Contractor shall furnish, erect and maintain road construction barricades in accordance with current Michigan Manual of Uniform Traffic Control Devices.

B. The Contractor shall at all times allow access to abutting property along the job. It is not intended that this shall permit access to the property during the actual processes of construction, however, the Contractor shall provide for temporary crossings and crossovers over the work partially completed prior to final completion of the construction. No roadway surface shall be opened to traffic prior to authorization by the Engineer.

3.04 ADJUSTING CASTINGS

A. This work will consist of adjusting manhole, gate well and drainage structure castings to the elevation of the finished surface in accordance with the "Adjusting Drainage Structure Covers" section of the MDOT specifications.

B. In concrete pavements, the top of the concrete replaced around castings shall be held down two (2) inches below the elevation of the finished surface.

C. Prior to placing the top course of asphaltic concrete, the area around castings shall be filled with asphaltic concrete to the elevation of the leveling course.

D. Variable adjusting castings shall not be used unless specifically authorized by the Engineer.

E. The City may elect to replace some castings. In such cases, the Contractor shall deliver the old castings and pick up new castings at the City Department of Public Services (DPS) yard on Eton Road. That work will be considered to be incidental to Adjusting Castings.

3.05 PREPARATION OF EXISTING PAVEMENT FOR ASPHALT OVERLAY

A. Repairing Concrete Curb & Slab Replacement

1. Concrete for concrete curb and slab repairs shall meet the requirements for concrete for Portland Cement Concrete Pavement Construction.

2. Repairs to existing concrete pavements shall be made in accordance with MDOT Standard Drawing R-44, latest edition.

3. Curb repairs shall join existing curbs at existing joints, cracks (where authorized by the Engineer), or at saw cut joints where saw cutting is necessary. Unless otherwise provided for in the specifications, saw cutting shall be incidental to the other work on this project.

B. Removing Bituminous Surface For Joints

1. This work will consist of stripping joints in existing bituminous surfaces in accordance with the "Removing Bituminous Surface" section of the MDOT specifications.

C. Chipping Pavement Around Structures

1. At drainage structures not to be adjusted, the existing concrete or asphaltic pavement surface shall be cut back up to one and one-half (1 1/2) feet, as designated by the Engineer, around the casting to a depth of at least one (1) inch, completely around the structure.

D. Hand Patching

1. Hand patching shall be performed where called for in the plans and specifications, or where directed by the Engineer.

2. Areas where pavement surfaces are badly deteriorated or cracked into small sections will be repaired using this method.

3. Hand patching will include stripping, chipping or otherwise removing existing surface materials from deteriorated areas in bituminous or Portland cement concrete pavements, and replacing by hand or machine methods with bituminous material approved by the Engineer.

4. Joint repairs shall be done in conformance with Detail 7 and 8 on MDOT Standard Plan R-44, latest edition, except as modified by the project plans and specifications. This work will consist of chipping joints in the existing concrete pavement surfaces in accordance with the "Chipping Concrete Pavement for Joints" section of the MDOT specifications.

5. Following the removal of the existing material, holes to be hand patched shall be thoroughly cleaned by blowing out all loose material with an air compressor or with a power blower.
6. Hand patching will not include wedging of low areas.
7. Except as provided herein, this work shall conform to the requirements of the "Hand Patching" section of the MDOT specifications.

E. Joint Clean Out

1. Excess filler in cracks or joints, which may cause bleeding or instability in the opinion of the Engineer, shall be removed to the elevation of the pavement surface. This work is considered to be incidental to the asphalt pavement installation on the project.

3.06 BOND COAT

A. The amount of bond coat applied to existing pavement surfaces shall be 0.15 gallon per square yard, or less if directed by the Engineer.

B. The amount of bond coat applied to new HMA surfaces shall be 0.10 gallon per square yard, or less if directed by the Engineer.

C. Bond coats shall not be diluted, unless authorized by the Engineer.

D. Proper precautions shall be taken to prevent smearing bond coat on adjacent pavement surfaces, curbs, walks, castings, lawns or shrubbery. The Contractor shall remove all such bond coat smeared on the above mentioned items.

E. There is no separate pay item for bond coat, as such work is considered to be incidental to asphaltic surfacing.

F. The Contractor shall furnish tickets or other satisfactory evidence showing the quantity of bond coat used in order to verify the application rate.

3.07 PLACING BITUMINOUS MIXTURE

A. At the end of each period of work on the wearing surface, joints shall be formed by laying and rolling against boards of the thickness of the wearing surface placed at right angles to the centerline across full width of pavement, or by such means as approved by the Engineer.

3.08 MEETING DRIVEWAYS OR OTHER SURFACES

A. Where new asphaltic concrete surfacing is higher than abutting paved driveways or other paved surfaces, the Contractor shall place asphaltic wearing course mixture over such driveways or other paved surfaces to provide a transition to meet the new surface elevation. Where the abutting paved surface drains towards the new surfacing, the surfacing mixture shall be extended for a distance sufficient to provide for drainage onto the new surface, as directed by the Engineer. The surfacing mixture may be feathered to zero thickness at the end of the surfacing.

B. The Contractor shall place bond coat over abutting areas to be surfaced.

C. There is no separate pay item for this work, and payment will be included under the pay item for the asphaltic mixtures used.

3.09 BASIS OF PAYMENT

A. Payment for the types of asphalt pavement and pavement repairs shall be as listed in the Proposal. Bid prices for work items listed in the Proposal shall include all other work necessary for a complete job.

END OF SECTION

SECTION 762
CAPESEAL SURFACE

PART 1. GENERAL

1.01 SUMMARY

This work shall consist of a double chipseal followed by one application of a type II asphalt slurry applied after second chipseal application. The application of the materials shall comply with the following specifications.

A. BITUMINOUS SURFACE TREATMENT

1. This work consists of two applications of bituminous material applied to the prepared surface and being covered with a course of aggregate. The work shall be done in accordance with this specification or in accordance with applicable drawings to plans of this contract.

B. SLURRY SEAL APPLICATION

1. The work covered by this specification consists of furnishing all labor, equipment, and materials to apply the second course of the capeseal, an emulsified asphalt slurry seal, in complete accordance with the specification.

1.02 REFERENCES

Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 QUALITY ASSURANCE

A. APPLICABLE SPECIFICATIONS

ASTM – American Society for Testing and Materials
ISSA – International Slurry Surfacing Association

1. AGGREGATE AND MINERAL FILLER

a. ASTM D75: Sampling Stone, Slag Gravel, Sand and Stone Block for use as Highways Materials.
b. ASTM C136: Sieve Analysis of Fine or Coarse Aggregate.
c. ASTM C117: Amount of Material Finer than No. 200 Sieve in Aggregate.
d. ASTM D2419: Plastic Fines in Graded Aggregate and Soils by use of the Sand Equivalent Test.
e. ASTM C128: Specific Gravity and Absorption of Fine Aggregate.
f. ASTM C29: Unit Weight of Aggregate.
g. ASTM C131: Abrasion of Coarse Aggregate by use of the Los Angeles Machine.
h. ASTM C183: Sampling Hydraulic Cement
i. ASTM D546: Sieve Analysis of Mineral Filler
j. ASTM D242: Mineral Filler for Bituminous Paving Mixtures

2. EMULSIFIED ASPHALT

a. ASTM D140: Sampling Bituminous Materials.
b. ASTM D244: Testing Emulsified Asphalt.
c. ASTM D977: Specifications for Anionic Emulsified Asphalt.

d. ASTM D2397: Specifications for Cationic Emulsified Asphalt.
e. ASTM D2172: Bitumen Content of Paving Mixture by Centrifuge.
f. ISSA T100: Measurement of Wear of Slurry Seal Mixtures by Wet Tract Abrasion.

1.04 DELIVERY, STORAGE AND HANDLING

A. SLURRY SEAL APPLICATION

1. STOCKPILING OF AGGREGATES. Precautions shall be taken to ensure that stockpiles do not become contaminated with over-sized rock, clay, silt, or excessive amounts of moisture. The stockpile shall be kept in areas that drain readily. Segregation of the aggregate will not be permitted. Owner will provide yard site for stockpiling aggregates and keeping emulsion storage tanks within one mile of the projects, or closer when possible.

2. STORAGE. The contractor shall provide suitable storage facilities for the asphalt emulsion. The container shall be equipped to prevent water from entering the emulsion. Suitable heat shall be provided if necessary to prevent freezing.

1.05 PROJECT/SITE CONDITIONS

A. TRAFFIC CONTROL

1. Suitable methods such as barricades, flag-men, pilot cars, etc., shall be used to protect the uncured slurry surface from all type of traffic. Contractor shall perform all necessary barricading and/or flagging of traffic. Any damage to the uncured slurry will be the responsibility of the Contractor. The Engineer shall give final approval as to the method used. The Contractor shall co-ordinate the scheduling of street to be surfaced with the City Engineering Department.

1.06 PAYMENTS

A. Seal coat will be paid for at the contract price per square yard, (as described above) which price shall be payment in full for furnishing, heating, hauling and applying the bituminous material, furnishing, hauling and placing the cover material, dragging, rolling, replacing disturbed material, maintaining traffic and constructing the surface complete.

PART 2. PRODUCTS

1.01 MATERIALS

A. BITUMINOUS SURFACE TREATMENT

1. BITUMINOUS MATERIAL - Shall be CM-90
   a. MATERIALS - The materials will meet the following requirements as specified. All chip seal multi grade asphalt will conform to the following table:

CHIP SEAL MULTI GRADE ASPHALT

	CM-90	METHOD OF TEST
Viscosity @ 25°C, 1. Sec.-1, P.	2000-20,000	ASTM D-4957
Flash Point, °C	66+	ASTM D-93
Distillate Test		

Volume % of Total Distillate to 360° C		ASTM D-402
To 225° C	0-2	
To 260° C	0-5	
To 316°	15.75	
Residue from Distillate to 360° C % Volume by Difference		
Water %	1.0-	ASTM D-95
Test on Residue from Distillation		
Penetration @ 25° C, 100g, 5 sec, dmm.	100-250	ASTM D-5
Float Test @ 60° C, sec.	1200+	ASTM D-139
Solubility %	99.0+	ASTM D-2042

The successful Contractor will be responsible to provide above material delivered to the project location on a schedule determined by the Contractor. The contractor shall be responsible for proper heating of asphalt, needed storage facilities and for all truck demurrage charges that are incurred.

b. APPLICATION - The Contractor shall apply the multi grade asphalt at a temperature between 260° F and 300° F, followed by a uniform application of coarse aggregate.

c. MULTI GRADE ASPHALT - Application Rates:

CM-90 shall be within the range of 0.26-0.28 gal/syd. The JMF target rate for the asphalt shall be 0.27 gal/syd.

If the target rate of 0.27 gal/syd is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the Contractor shall notify the Project Engineer, immediately. The Contractor shall then document the new JMF rate(s) by stationing.

2. COARSE AGGREGATE - Coarse aggregates for all chip seals will be tested materials or provided by a prequalified aggregate supplier. All aggregate must meet the gradation requirements in the following table:

a. A CS-2 coarse aggregate of limestone, natural, or slag shall be used.

GRADATION FOR CHIP SEAL AGGREGATES
Sieve Analysis (MTM 109), Total Percent Passing (a)

Sieve Size	**CS-2**
3/4"	100
½"	100
3/8"	90-100
No. 4	0-10
N0. 8	0-5
N0. 200 (loss by wash)	2.0 maximum 2.0 maximum

PHYSICAL REQUIREMENTS

TEST	DESCRIPTION	SPECIFICATION
MTM - 102	L.A. Abrasion Resistance	45% Max.
MTM - 117	Percentage of Crushed Particles	95% Min.
*MTM - 110	Deleterious Particles in Aggregate	3.5% max.

*Includes the sum of shale, siltstone, structurally weak and clay-ironstone particles

B. SLURRY SEAL APPLICATION

The slurry seal surface shall consist of a mixture of emulsified asphalt, mineral aggregate, and water, properly proportioned, mixed and spread evenly over the double chipseal surface as specified herein and as directed by the engineer. The cured slurry shall have a homogeneous appearance, fill all cracks, adhere firmly to the surface and have skid resistant texture.

1. ASPHALT EMULSION. The emulsified asphalt shall conform to the requirement of International Slurry Seal Association Specification, for type CSS-1H.

2. AGGREGATE. The mineral aggregate shall consist of natural or manufactured sand, slag, crusher fines, and others, or a combination thereof. Smooth-textured sand of less than 1.25 percent water absorption shall not exceed 50 percent of the total combined aggregate. The aggregate shall be clean and free from vegetable matter and other deleterious substances. When tested by ASTM D2419, the aggregate blend shall have a sand equivalent of not less than 45. When tested according to ASTM C88 the aggregate shall show a loss of not more that 15%. When tested according to ASTM C131 the aggregate shall show a loss of not more that 30%.

Mineral fillers such as Portland cement, limestone dust, fly ash, and others shall be considered as part of the blended aggregate and shall be used if required by the mix design. They shall meet the gradation requirements of ASTM D242.

The combined mineral aggregate shall conform to the following gradation when tested by the previously mentioned test.

	TYPE II
SIEVE SIZE	PERCENT PASSING
3/8	100
No. 4	90-100
No. 8	65-90
No. 16	45-70
No. 30	30-50
No. 50	18-30
No. 100	10-21
No. 200	5-15

Theoretical Asphalt Content

% Dry Aggregate	7.5-13.5

TYPE 1I. This aggregate blend is used when it is desired to fill surface voids, correct severe surface conditions, and provide sealing and a minimum wearing surface. An application rate of 18 (plus or minus) 2 pounds per square yard based on dry aggregate weight is used when standard aggregates are utilized.

3. WATER
   a. All water used with the slurry mixture shall be potable and free from harmful soluble salts.

1.02 EQUIPMENT

A. BITUMINOUS SURFACE TREATMENT

All equipment used shall be sufficient size and in such mechanical condition as to produce a satisfactory job.

1. PRESSURE DISTRIBUTORS - The pressure distributor shall have a computerized application rate and speed control. This control shall have a radar ground sensing device that controls the application rate regardless of ground speed or spray bar width. The pressure distributor shall be capable of maintaining the asphalt emulsion at the specified temperature. The spray bar nozzles shall produce a uniform fan spray, and the shutoff shall be instantaneous, with no dripping. Each pressure distributor shall be capable of maintaining the specified application rate within ±0.015 gal/syd for each load.

2. AGGREGATE CHIP SPREADER - The aggregate chip spreader shall be self-propelled and have a computerized spread control capable of spreading the cover material uniformly for widths of 1 to 20 feet and have a screen to remove oversized material.

3. COMPACTION EQUIPMENT - Shall be self-propelled, vibratory, rubber tired, three wheel or tandem rollers. Rollers shall weigh not less than 6 ton or more than 9 ton.

4. MISCELLANEOUS EQUIPMENT - Sufficient equipment for hauling of cover material shall be provided to ensure continuance covering of bituminous material, hand tools, thermometers, etc. Chain link fence drag shall be available for use when required by engineer.

B. SLURRY SEAL APPLICATION

All equipment used in the performance of this work shall be maintained in satisfactorily working order at all times.

1. SLURRY MIXING EQUIPMENT. A minimum of two (2) continuous flow slurry machines, minimum capacity of eight (8) tons shall be provided. They shall be capable of delivering accurately a predetermined proportion of aggregate, water and asphalt emulsion to the mixing chamber and to discharge the thoroughly mixed product on a continuous basis. The aggregate shall be pre-wetted immediately prior to mixing with the emulsion. The mixing unit of the mixing chamber shall be capable of thoroughly blending all ingredients together. No violent mixing shall be permitted. The mixing machine shall be equipped with an approved fines feeder that provides an accurate metering device or method to introduce a predetermined proportion of mineral filler into the mixer at the same time and location that the aggregate is fed. The feeder shall be used whenever added mineral filler is a part of the aggregate blend. The mixing

machine shall be equipped with a water pressure system and fog type spray bar adequate for complete fogging the surface preceding spreading equipment with a maximum application of 0.05 gallons per square yard.

2. CALIBRATION- Each material delivery function (a) fines feed, (b) aggregate feed, and (c) emulsion feed, shall be independently operated and monitored with digital counters capable of giving accumulated readings of the material usage on a daily basis.

All instruments, gauges and meters shall be accurate within +5% of the operating range required. All instruments and controls shall be centrally mounted in a protected console and shall be readily accessible during operation to the Engineer or his designated representative.

The bidder will submit calibration sheets for each machine to substantiate meter reading and aggregate openings (gal/count, #/count). Daily counter readings will be supplied to the inspector with yardage applied to verify application rates. If readings do not confirm correct application rates, recalibration on site will be required before additional work is applied.

3. SLURRY SPREADING EQUIPMENT. Attached to the mixer machine shall be a mechanical type squeegee box equipped with flexible material in contact with the surface to prevent loss of slurry from the box. It shall be maintained so as to prevent loss of slurry on varying grades and crown by rotating at center of box. There shall be a steering device and a flexible strike-off. The spreader box shall have an adjustable width from 8 to 12 feet. The box shall be kept clean, and build-up of asphalt and aggregate on the box shall not be permitted. The use of burlap drags or other drags shall be approved by the Engineer.

4. CLEANING EQUIPMENT. Power brooms, power blowers, air compressors, water flushing equipment, and hand brooms shall be suitable for cleaning the surface and cracks of the old surfaces.

5. AUXILIARY EQUIPMENT. Hand squeegees, shovels and other equipment shall be provided as necessary to perform work.

PART 3. EXECUTION

1.03 PREPARATION

A. BITUMINOUS SURFACE TREATMENT

1. Work required on existing surface such as base repair, patching, sweeping shall be done by the contractor.

B. SLURRY SEAL APPLICATION

1. Immediately prior to applying the slurry, the surface shall be cleaned of all loose material, silt pots, vegetation, and other objectionable material, which shall be done by owner. Any standard cleaning method used to clean pavements will be acceptable, except water flushing will not be permitted in areas where considerable cracks are present in the pavement surface. The Engineer shall give final approval of the surface.

1.04 CONSTRUCTION

A. BITUMINOUS SURFACE TREATMENT

1. EXISTING SURFACE
   a. The bituminous material shall be applied at the rate specified immediately followed by the self-propelled chipper covering the bituminous material with aggregate. In no instance shall the chipper by more than 400 ft. behind the distributor. The aggregate should be compacted into the bituminous material by a self-propelled roller directly behind the chipper. At no time shall the aggregate cover material be left unrolled for more than 10 minutes.

2. WEATHER LIMITATIONS
   a. No bituminous material shall be applied during rainy weather or when the air temperature in the shade is less than 50 F. and rising except by the approval of the contracting officer

B. SLURRY SEAL APPLICATION

1. GENERAL
   a. The surface shall be fogged with water directly preceding the spreader. The slurry mixture shall be of the desired consistency when deposited on the surface and no additional elements shall be added. Total time of mixing shall not exceed four (4) minutes. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that complete coverage is obtained. No lumping, balling or unmixed aggregate shall be permitted. No segregation of the emulsion and aggregate fines shall be permitted. If the coarse aggregate settles to the bottom of the mix, the slurry will be removed from the pavement. No excessive breaking of the emulsion will be allowed in the spreader box. No streaks such as caused by oversized aggregate will be left in the finished pavement.

2. COMPOSITION AND RATE OF APPLICATION OF THE SLURRY MIX
   a. The amount of asphalt emulsion to be blended with the aggregate shall be that as determined by the laboratory report after final adjustment in the field. A minimum amount of water shall be added as necessary to obtain a fluid and homogeneous mixture. The Engineer shall give final approval to the design and rate of application used.

3. JOINTS
   a. No excessive build-up or unsightly appearance shall be permitted on longitudinal or transverse joints.

4. HAND WORK
   a. Approved squeegees shall be used to spread slurry in accessible areas to the slurry mixer. Care shall be exercised in leaving no unsightly appearance from hand work.

5. CURING
   a. Treated areas will be allowed to cure until such time as the Engineer permits their opening to traffic.

6. INTERSECTION

a. Care should be taken to achieve a clean straight line as directed by the Engineer by use of 15 pound roofing felt or equal. All roofing felt will be removed at completion of work.

7. WEATHER LIMITATION
   a. The slurry seal surface shall not be applied if either the pavement or air temperature of 55 F or below and falling but may be applied with both the air and pavement temperature is 45 F or above and rising. The mixture should not be applied if high relative humidity prolongs the curing beyond a reasonable time.

1.05 FIELD QUALITY CONTROL

A. BITUMINOUS SURFACE TREATMENT

1. INSPECTION
   a. METHOD OF MEASUREMENT: Field measurements of the areas seal coated in square yards shall be determined by the engineer in the presence of the contractor and or with his concurrence.

B. SLURRY SEAL APPLICATION

1. LABORATORY TESTING
   a. Sources of all materials shall be selected prior to the time the materials are required for use in the work. All samples shall be taken according to procedures previously mentioned. All materials shall be pretested in a qualified laboratory as to their suitability for use in slurry. The theoretical asphalt content shall be determined. The laboratory shall also determine if a mineral filler is required, and if so, how much should be used. Test samples shall be made and tested on a Wet Track Abrasion Machine. A complete laboratory analysis and test report accompanied by an un-abraded slurry test sample shall be submitted by the Contractor before the job starts.

2. INSPECTION
   a. The slurry seal surface shall be measured and paid for by the square yards of work completed and accepted as designated by the Engineer.

3. SAMPLING
   a. Samples of materials and of the finished slurry surfaces shall be furnished by the Contractor as directed by the Engineer during progress of the work. Test reports may be requested from the Contractor as additional materials arrive.

1.06 CLEANING

A. Initial sweeping and cleaning will be performed by the contractor.

B. Sweeping During Contract: The contractor will be required to sweep the chipsealed area prior to the slurry application.

C. Contractor shall ensure that all existing utility structure covers shall remain clean and visible following the installation of the capeseal surface on the streets.

SECTION 2704
INTERNAL SEWER INSPECTION

PART 1 GENERAL

1.1 SUMMARY

A. It is the intent of these specifications to provide a basis for which a sewer line can be internally inspected by a Closed Circuit Television (CCTV) camera. The inspection shall include providing the Owner with digital videos, images, and reports that include condition and other descriptive data related to the sewer. This basis shall include all aspects of televising including method, equipment, and payment for work.

B. This Section shall include all supervision, labor, equipment, materials, traffic control, temporary plugging and/or bypassing of flow, disposal of debris, required cleaning, video media, still pictures and any applicable electrical service necessary to successfully complete the inspection and assessment of the designated lines, as well as the required reporting and deliverables which includes the Contractor providing the Owner with applicable recommendations for corrective actions.

C. The Contractor shall provide and furnish all required skilled and unskilled labor, materials, fuel, machinery, tools, so that the contract and all work required to be done under the contract can and will be carried on continuously and expeditiously to completion, in all respects to the satisfaction of the Owner.

D. The sewer lines for which televising is required are shown in these Contract Documents.

E. Related Sections:
   1. Section 02751 – Cleaning of Sewer Lines

1.2 MEASUREMENT AND PAYMENT

A. The Contractor shall provide a video inspection record of all newly constructed sewer mains (storm, sanitary and combined) and new sewer service lines installed for the project in accordance with this specification.

B. Sewer service lines shall be clearly televised to show the condition of the tap/connection at the main, and shall be launched up each lateral to televise the service line from the sewer main to the property line to the maximum extent practicable. The video inspection shall occur after sewer trenches have been backfilled and compacted to final elevation.

C. Final payment will not be made until such time as all deliverables are provided for each televised pipe segment.

1.3 REFERENCES

A. Abbreviations and Acronyms
   1. NASSCO - National Association of Sewer Service Contractors
   2. PACP - Pipeline Assessment and Certification Program
   3. MACP - Manhole Assessment and Certification Program
   4. LACP - Lateral Assessment and Certification Program

B. Definitions

1. Reverse Setups - a situation that arises when the television camera cannot pass through the manhole section, making it necessary to reverse the positions of the television equipment and enter the sewer from the opposite direction

1.4 QUALIFICATIONS

A. The Contractor or Subcontractor performing the work shall be a company with experience performing internal sewer inspections and shall have a minimum experience of three other projects of at least 50,000 feet within the last five years that included surveying, processing, and interpretation of data associated with CCTV inspections.

B. The work shall be performed under the supervision of personnel trained and certified in the use of NASSCO's PACP for the inspection of sewer mains, LACP for the inspection of laterals, and MACP for the inspection of manholes.

1.5 SUBMITTALS

A. Prior to initiation of work, the Contractor shall submit for Owner review and approval the following:

1. Data sheets for proposed CCTV equipment, description of proposed electronic storage device (hard drive, etc.) and proposed electronic file formats.
2. Description of proposed software for recording inspection logs along with a sample of a typical log and samples of all required reports as described in this Section.
3. Proposed sequence and schedule, and sample resident/business notification letter.
4. Contact information for Contractor's staff including mobile phone and email, and emergency contact information.

1.6 QUALITY ASSURANCE

A. After completion of one week of Internal Sewer Inspection (or alternative period as approved by the Owner), the Contractor shall provide the Owner with a sample of the required deliverables for the work completed for review and approval of format.

1.7 REPORTING

A. The Contractor shall record any and all defects such as radial and linear cracks no matter how minor, dips, blockages, or obstructions, pipe joint conditions, infiltration and calcite buildup, lateral connections (including reporting active, inactive, or abandoned), root infiltration, deterioration of pipe material surface, penetrating utilities, etc. The Contractor shall record the characteristics and defects observed using the NASSCO PACP/MACP/LACP Inspection Report format and coding for each sewer segment, and provide a shape file with the information in the correct location. All pipes, manholes, laterals and other structures shall be identified using the Owner's naming convention. The operator's NASSCO certification number shall be recorded on the Report.

B. All manhole and pipe assets shall be referenced using the supplied Owner identification numbers ("Owner Asset/Pipe ID #"). Reports generated using a Contractor–generated numbering system will not be accepted. The Pipe ID (not the Manhole ID) shall be used

as the Pipe Segment Reference (PSR). A shape file will be provided to the contractor with the Pipe and Manhole IDs.

C. Location of defects shall be given as a distance from the starting point and location around the pipe (i.e., 2 o'clock)

D. The Contractor shall provide the following reports for each inspected segment that include all descriptions in NASSCO format of all defects found as part of the survey, all NASSCO header information, and identify the asset using the Owner's identification system:

1. Graphic Reports, including:
   a. Linear sketch of the inspected manhole or pipe/lateral segment showing defect locations
   b. List of the individual defects
   c. Defect "grade" assigned using the NASSCO PACP/MACP/LACP Condition Grading System guidelines.
2. Tabular Reports, including:
   a. List of the individual defects
   b. A defect "grade" using the NASSCO PACP/MACP/LACP Condition Grading System guidelines
   c. NASSCO segment scores, including
      1) Overall Pipe Rating (Structural, Maintenance, and Overall)
      2) Pipe Rating Index (Structural, Maintenance, and Overall), and
      3) Quick Scores (Structural, Maintenance and Overall.)
3. Defects by Inspection Report
   a. Generated at completion of the project, or at intermediate milestones as required by the Owner
   b. Includes;
      1) A tabular list of all segments inspected to date,
      2) The surveyed length for each segment,
      3) A count of defects encountered for each segment,
      4) Quick rating scores and,
      5) The overall pipe rating index

E. Submit Samples of Contractor Reports for Owner approval prior to starting project.

F. Provide Final Reports in accordance with Required Deliverables.

1.8 REQUIRED DELIVERABLES

A. The contractor shall deliver an editable database compliant with Pipeline Assessment Certification Program (PACP) Exchange Database standards, set forth by the National Association of Sewer Service Companies Organization (NASSCO), survey details, observations, and shape files for all pipes surveyed. All reports submitted to the Owner by the Contractor must follow the most recent standards set forth by NASSCO, and the database provided by the contractor will be comprehensive with NASSCO's database. Contractor must have their database validated through NASSCO prior to the project start date.

B. The Contractor shall deliver to the Owner one copy each of the Graphic Report and Tabular Report for each segment inspected, and one copy of the Defects by Inspection Report that

summarizes all segments inspected during the project. All reports shall also be provided in Adobe PDF format. Both reports for each sewer segment shall be a single PDF file with the GIS pipe ID or up-steam and down-stream manhole IDs included in the file name.

C. The Contractor shall submit preliminary copies of the Graphic Report, Tabular Report, and NASSCO Exchange Database for areas completed for review as the project progresses.

D. The Contractor shall deliver to the Owner digital copies of all video recordings, still photos, and other media for the segments inspected. The files shall be accessible using commonly-installed software, or a viewer may be provided instead.

E. All electronic records and digital files shall be provided to the Owner on a suitable data storage device (CD, DVD, hard drive, etc.) The devices shall be labelled to correspond with the hard copy inspection reports. Labels shall be permanent with complete project information.

F. The Owner reserves the right to reject any or all televising and recording of sewer segments due to poor quality or clarity of defects. If necessary, the Contractor shall re-inspect those segments as determined by the Owner at no additional cost to the Owner.

G. All video recordings, still images and reports shall become property of the Owner without restriction for copying, re-use or publication

1.9 ACCEPTANCE

A. A daily log of work accomplished shall be duly recorded and acknowledged by the Owner and the Contractor's superintendent.

B. All inspection recordings and reports will be reviewed by the Owner. The Owner shall have the authority to reject all or any portion of recordings not conforming to Specifications. These areas shall be re-inspected at no additional charge.

1.10 SAMPLE REPORTS

A. Samples of the required reporting are located at the end of this Section.

PART 2 PRODUCTS

2.1 INSPECTION EQUIPMENT

A. General:
1. Provide equipment as required for the proposed work to perform inspections of sewer mains, manholes and/or laterals. Laterals shall be inspected from mainline to property line or cleanout located in streets, street rights-of-way, and off road easements.
2. Equipment shall include but not be limited to portable CCTV equipment, vehicles capable of transporting TV equipment and accessing remote easements, cleaning equipment, and any additional equipment and supplies required to allow for communication between personnel and to maintain a safe working environment.

3. The Contractor shall have on site fans and/or blowers necessary to remove any fog or steam that may be present, during or caused by the inspection of the piping system. All cost incurred in the use of fans or blowers shall be considered incidental to this project. No inspection of pipe shall proceed while fog is present.
4. Necessary playback equipment shall be readily accessible in the field for Owner to perform periodic review of the inspection work.

B. Sewer Main CCTV:
1. All equipment used for televising sewer lines shall be of the highest quality and shall have high performance capabilities. It shall be operative in 100 percent humidity conditions and shall be specifically designed for the proposed work.
2. The CCTV camera shall be of the remotely operated pan and tilt type. The rotating camera and lighthead configuration shall provide 240 degrees of pan and tilt angle measuring centerline to centerline and minimum 65-degree lens viewing angle.
3. The camera shall be color and shall provide a minimum of 460 lines of horizontal resolution and 400 lines of vertical resolution.
4. The color camera shall be equipped with the necessary circuitry to allow for either automatic or remote adjustment of the optical focus and iris from the power control unit at the viewing station.
5. Mounting: Cameras may be mounted on conventional camera skids, floating skids or rafts, or maybe handheld and carried manually through larger diameter sewers.
6. Lighting: Suitable to allow clear picture of entire inner pipe wall extending at least 10 feet in front, including black High Density Polyethylene (HDPE) pipe.
7. Image: Capable of self-righting itself.
8. Features: Equipment shall have a display feature capable of showing following information.
   a. Project name.
   b. Contractor's name.
   c. Date and time of inspection.
   d. Inside pipe diameter and type.
   e. Manhole identification (upstream manhole to downstream manhole).
   f. On-going footage counters accurate within 0.2 foot.
9. Operator narration capability: Follow NASSCO standards.
10. Recording of a single section of sewer onto two different media storage devices will not be acceptable. Each sewer segment shall be documented in a continuous video.

C. Lateral CCTV:
1. Shall conform to sewer main CCTV, except as modified herein and also be able to inspect laterals as small as 3-inches diameter for a distance of up to 70 feet from sewer mainline.
2. Launched from within mainline sewer: Unit shall be mounted on tread tractor that moves through sewers and positions inspection camera launcher opposite lateral line connection.
3. Launched from within cleanout: Unit shall be able to travel to mainline sewer.
4. Shall be of the self-leveling type.
5. Display shall include lateral address.

D. Manhole CCTV.
1. Color Video Camera:

a. Shall conform to sewer main CCTV, except as modified herein and also be specifically designed and constructed for this application.
b. Capable of capturing both video and high resolution stills.
c. High-resolution, pan and tilt or rotating head (manually performed or motor operated) with wide viewing angle lens and either automatic or remote focus and iris control.
d. Lighting: Suitable for use with digital color inspection cameras and manhole and structure sizes as identified in contract.
e. Operative in 100 percent humidity conditions.

E. Software:
1. Software for logging condition and feature coding shall conform to current NASSCO standards:
   a. Sewer Mains: Follow PACP
   b. Laterals: Follow LACP
   c. Manholes: Follow MACP
2. The software shall offer all coding compliant with PACP standards and validate each entry before it can be saved.
3. The footage reading from the camera equipment shall be automatically entered into the survey log and shall directly correspond to the noted defect location throughout the pipe graphic and tabular reports generated.
4. Software shall be compatible with Microsoft Windows operating system and shall be capable of importing and exporting data to and from the standard PACP database.
5. Recorded audio-video files shall be in a format viewable by commonly available software, either directly or via export. Any additional software required viewing files in their native format shall be provided at no additional cost with the deliverables.

PART 3 EXECUTION

3.1 GENERAL

A. The Contractor shall be responsible for securing the site and protection of the Owner's personnel and public. Any necessary traffic control shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices.

B. All inspection and recording of sewer features and condition shall be in accordance with NASSCO standards.

C. Unless otherwise noted, a sewer line shall be repaired or rehabilitated as specified in these Contract Documents prior to insertion of the television camera.

D. Maintain sewer isolation by temporary plugging or bypass pumping, as required by the Contract Documents. Contractor shall conduct operations to prevent backups and sewer overflows, and coordinate all activities with Owner. Should bypass pumping be required, the Contractor shall have personnel witnessing the pumping continuously during operations to assure that the capacity of bypass pumping equipment is sufficient.

E. For sewers impacted by wet weather, including storm sewers, combined sewers and sewers with significant inflow and/or infiltration, work shall be coordinated with weather forecasts. No work shall be scheduled within 24 hours before or after an anticipated precipitation event.

F. The Contractor shall notify affected residents/businesses one day prior to starting cleaning and sewer inspection with a "Resident Notification Letter" informing the residents/businesses of the Contractor's activities and to provide contact information for the Contractor and Owner. The Contractor shall submit the letter for Owner review and approval prior to notification.

G. The Owner shall have the authority to designate areas for which coverage may be added or omitted.

3.2 INSPECTION PREPARATION

A. The Contractor shall be responsible for having the necessary camera skids, floats, and rafts available to allow for inspection in a manner aeceptable to the Owner under live flow conditions. The following general criteria shall be followed:

1. No inspections shall be performed where flow depths exceed 50% of pipe diameter without prior approval of the Owner.
2. The maximum flow depth for remote inspection work is 33% of the pipe diameter. The Contractor may be required to perform inspections during off-peak hours (night inspections) if specifically requested by the Owner to achieve this maximum flow standard.
3. No maximum flow depth has been established for manual (walk-through) inspections since depths in excess of one-third pipe will probably make such inspection methods unsafe.
4. Pipes 60 inches in diameter and larger, and having flow depths of less than 20% of the pipe diameter, shall be manually inspected unless the Contractor provides the owner with reasons for deeming manual inspections to be impractical or unsafe.

3.3 INSPECTION METHOD FOR SEWER MAIN LINES

A. All recording of the piping system shall be a continuous record from structure to structure. The camera shall be positioned at the center of the sewer pipe. All inspection shall be completed during times of dry weather flow, and the camera shall record in the same direction as the flow. Inspection against the flow especially during high flow conditions must be approved by the Owner.

B. The rate of speed shall be adjusted to produce a clear, concise record of the piping system and shall not exceed 30 feet per minute for conventional CCTV cameras. Travel shall stop for minimum of 10 seconds to record lateral connections, mainline connections, defects, features, and other observations. Advanced Digital Video Survey (DVS) inspection camera systems with high digital image recording resolution and lighting characteristics will be allowed to record at faster rates subject to Owner review and approval of images.

C. The camera pan/tilt and zoom-in/zoom-out rates shall be controlled sufficient such that during playback all angles or magnifications may be viewed clearly. Lighting shall be sufficient to ensure true color and minimal glare/reflective distortions.

D. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line.

E. If there is interference in the sewer line that will not allow the CCTV equipment to pass, then it shall be backed out of the line and an attempt shall be made to inspect the line from the manhole at the other end. If the entire length of the sewer line cannot be televised because of two or more obstructions, then the Owner shall be notified to determine how to proceed.

3.4 INSPECTION METHOD FOR LARGER DIAMETER SEWER MAIN LINES ("WALKABLE")

A. Manual inspections will be required in lines where conditions will allow the Contractor's inspection crew to safely walk through the sewer, and shall conform to the requirements for sewer main lines except as otherwise modified herein.

B. Manual pipe inspections (walk-through inspections) shall be conducted in such a manner as to transmit the video signal to an above-ground viewing room to permit the Owner to watch the inspection work live on a color monitor in the viewing facility.

C. Direct voice communication between the Owner, the in-pipe inspection personnel, and the recording technician in the above-ground unit shall be maintained at all times during the manual inspection work. Video recording equipment shall also be located above ground in the inspection truck and accurate, continuous footage readings shall be superimposed on the video recording of permanent record.

D. The Contractor shall conform to all regulations and requirements for confined space entry, and shall prepare and submit a health and safety plan to the Owner prior to initiation of any work.

E. The Contractor shall provide for coordination of flow control.

3.5 INSPECTION METHOD FOR LATERALS

A. Follow sewer main line procedure above, modified as follows:
   1. Verify accessible cleanout exists near limits of inspection prior to performing internal inspection. Notify Owner if no cleanout is available.
   2. Isolate section inspected by bypassing flow or turning off property water. Prevent backflow into laterals.

3.6 INSPECTION METHOD FOR MANHOLES

A. Obtain still photos of exterior of manhole and surrounding area, and include manhole identification in photo. This may be done by placement of a whiteboard in the photo or post-editing of image to include the data.

B. Interior manhole inspection
   1. Start at manhole rim in line with largest diameter outgoing pipe.

2. Rotate camera clockwise until 360 degree panorama is complete. Provide still photos of noted defects and features following MACP. Lower camera two to three vertical feet and repeat procedure until bench invert is reached.
3. Record vertical location of all defects and features and position in manhole. All photos and report logs shall include the manhole structure ID and location within manhole.

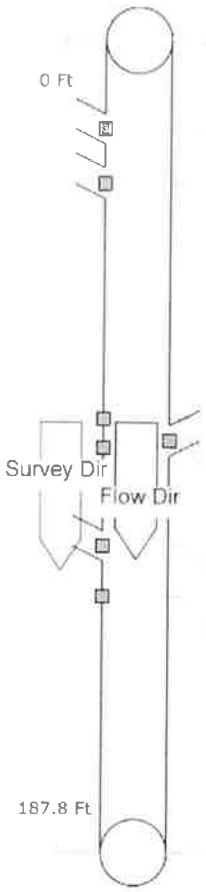
3.7 CLEANUP

A. The Contractor shall be responsible to clean up any debris or spills during each day of work and restore conditions to existing as soon as possible.

B. The Contractor shall be responsible for the disposal of personal protection equipment used during the work.

Pipe Graphic Report Owner Asset ID#

Setup XXX	**Surveyor** XXX	**Certificate #** XXX		**System Owner** OWNER NAME	
Drainage		**Survey Customer** OWNER NAME			
P/O #		**Date** YYYY/MM/DD	**Time** HH:MM	**Street** STREET NAME	
City LOCATION		**Further location details** CAMERA IS HEADING SOUTH			
Up ID #XXX		**Rim to invert**	**Grade to invert**	**Rim to grade**	**Ft**
Down ID #XXX		**Rim to invert**	**Grade to Invert**	**Rim to grade**	**Ft**
Use Sanitary/Combined/Storm		**Direction** Downstream	**Flow control** Not Controlled	**Media No** XXX	
Shape Circular		**Height** 18 **Width**	**ins** **Preclean** J	**Date Cleaned** YYYY/MM/DD	
Material Vitrified Clay Pipe		**Joint length**	**Total length** **Ft**	**Length Surveyed** 187.80	
Lining		**Year laid**	**Year rehabilitated**	**Weather** Dry	
Purpose Capital Improvement Program Assessment			**Cat**		
Additional info			Structural O & M Constructional Miscellaneous Hydralic		
Location Light Highway					
Project PROJECT NAME				**Work Order**	
Northing		**Easting**		**Elevation**	
Coordinate System				**GPS Accuracy**	



0.0 Ft	Start of Survey Manhole [C-039] Water Level 0%
20.6 Ft	Crack Multiple 02 to 04 o'clock ST: 3 Tap Break-in 6.000 02 o'clock [WEST]
33.2 Ft	Tap Break-in 6.000 02 o'clock [WEST]
87.6 Ft	Roots Fine Joint 05 to 07 o'clock OM: 1 [S01]
92.6 Ft	Tap Factory 6.000 09 o'clock [EAST]
94.3 Ft	Fracture Circumferential 05 to 07 o'clock ST: 2
117.0 Ft	Tap Break-in 6.000 03 o'clock [WEST]
128.7 Ft	Roots Fine Joint 05 to 07 o'clock OM: 1 [F01]
187.8 Ft	Manhole [C-040] End of Survey

Tabular Report Owner Asset ID#

Setup XXX	**Surveyor** XXX	**Certificate #** XXX		**System Owner** OWNER NAME
Drainage		**Survey Customer** OWNER NAME		
P/O #		**Date** YYYY/MM/DD **Time** 17:10	**Street** STREET NAME	
City LOCATION		**Further location details** CAMERA IS HEADING SOUTH		
Up ID #XXX		**Rim to invert**	**Grade to invert**	**Rim to grade** Ft
Down ID #XXX		**Rim to invert**	**Grade to invert**	**Rim to grade** Ft
Use Sanitary/Combined/Storm	**Direction** Down		**Flow control** Not Controlled	**Media No** XXX
Shape Circular	**Height** 18	**Width**	ins **Preclean** J	**Date Cleaned** YYYY/MM/DD
Material Vitrified Clay Pipe		**Joint length**	**Total length**	**Length Surveyed** 187.8
Lining		**Year laid**	**Year rehabilitated**	**Weather** Dry
Purpose Capital Improvement Program Assessment		**Cat**		**Pressure**
Additional info			Structural O & M Constructional Miscellaneous Hydralic	
Location Light Highway				
Project PROJECT NAME				**Work Order**
Northing		**Easting**		**Elevation**
Coordinate System				**GPS Accuracy**

Count	Video	CD	Code		Grade	In1	In2	%	Jnt	Fr	To	ImRef	Remarks
0.0			ST	Start of Survey									
0.0			AMH	Manhole									C-039
0.0			MWL	Water Level				0					
20.6			CM	Crack Multiple	3					02	04		
20.6			TB	Tap Break-in		6.000				02			WEST
33.2			TB	Tap Break-in		6.000				02			WEST
87.6		S01	RFJ	Roots Fine Joint	1				J	05	07		
92.6			TF	Tap Factory		6.000				09			EAST
94.3			FC	Fracture Circumferential	2					03	07		
117.0			TB	Tap Break-in		6.000				03			WEST
128.7		F01	RFJ	Roots Fine Joint	1				J	05	07		
187.8			AMH	Manhole									C-040
187.8			EH	End of Survey									

187.8 Ft **Total Length Surveyed**

Scores				
Structural:	**Pipe Rating** 5	**Pipe Ratings Index** 2.5	**Quick Rating** 3121
O&M:	**Pipe Rating** 8	**Pipe Ratings Index** 1.6	**Quick Rating** 1500
Overall:	**Pipe Rating** 13	**Pipe Ratings Index** 1.9	**Quick Rating** 3121

Contractor Logo/Name, Address and Contact Information

Project: XXX **Owner: XXX** **System: XXX**
Project Start Date: YYYY/MM/DD **Date of Report: XXX**
Project End Date: YYYY/MM/DD
Total Number of Setups: XXX **Total lft scheduled: XXX** **Total lft completed: XXX**

CCTV Defects by Inspection Report

Location						Structural			O&M			Misc		NASSCO Scoring					
Setup #	Owner Pipe ID#	From MH	To MH	Diameter, Inches	Surveyed Length, ft	Sags	Cracks	Fractures	Deposits Attached	Roots	Tap Break In Obtruding	Material change	Survey Abandoned	Structural Quick Rating	Maintenance Quick Rating	Overall Quick Rating	Structural Pipe Rating Index	Maintnenace Pipe Rating Index	Overall Pipe Rating Index
1	C040P	C039	C040	18	187.8		1	1		8		1		3121	1500	3121	2.5	1.6	1.9
2	C041P	C040	C041	10	40.0				2		4			0000	2600	2600	0.0	2.0	2.0
3	C042P	C041	C042	10	63.5			1						4100	0000	4100	4.0	0.0	4.0
4	C043P	C042	C043	10	64.7								1						
5	C044P	C043	C044	10	80.2	1		1						4121	0000	4121	3.0	0.0	3.0

Contractor Logo/Name Contact Information

END OF SECTION

SECTION 2708

RESIN IMPREGNATED FLEXIBLE FABRIC LINE AND CURED-IN-PLACE PIPE (GRAVITY FLOW)

PART 1 GENERAL:

1.1 SUMMARY

A. This Section shall include all work, materials, labor, and equipment necessary to provide for rehabilitating gravity flow sewer pipelines by the installation of a resin-impregnated flexible tube that will cure into a hard impermeable cured-in-place pipe (CIPP) that shall extend from end to end in a continuous, tight-fitting, watertight pipe-within-a-pipe.

B. Related Requirements
1. Section 02704 – Internal Sewer Inspection
2. Section 02751 – Cleaning of Sewer Lines

1.2 MEASUREMENT AND PAYMENT

A. **Sewer Lining, ___" RIFI-CIPP.....Foot**
Sewer Lining shall be paid for at the contract bid price per linear foot for actual linear footage of cured-in-place pipe installed in the field, complete in place using the RIFI method, for the size of pipe installed. Measurement shall be from center of structure to center of structure. Payment for the cured-in-place pipe shall also include the cost of sealing the pipe in the manholes, reworking the manhole inverts and benches, and all required testing.

B. **Sewer Lining, Pre-Liner, ___" RIFI-CIPP.....Foot**
Sewer Lining shall be paid for at the contract bid price per linear foot for actual linear footage of cured-in-place pipe installed in the field, complete in place using the RIFI method, for the size of pipe installed. Pre-liner installation will be dependent upon infiltration conditions found during construction; where installation of the pre-liner is requested by the Contractor in advance of the final liner system. Use of pre-liner shall not affect the design of the final liner system. Measurement shall be from center of structure to center of structure. Payment for the cured-in-place pipe shall also include the cost of sealing the pipe in the manholes, reworking the manhole inverts and benches, and all required testing.

C. **Cut/Grind Protruding Sewer Leads, [type of sewer lead material] .....Ea**
Cut/grind Protruding Sewer Leads shall be paid for at the contract bid price for the full removal of each service lead excessively protruding more than one inch into the pipe, regardless of the amount of cutting/grinding necessary for removal. Payment for the removal of the protruding sewer leads shall also include the cost of removing the remnants of the protruding sewer lead and cleaning the affected area. Separate pay items have been established for the various types of sewer lead materials that are anticipated to be encountered.

D. **Cut/Grind Root Intrusion.....Ea**
Cut/grind Root Intrusion shall be paid for at the contract bid price for the full removal of each root intrusion at a distinct location (joint, lateral connection, crack) that could not be sufficiently removed following standard cleaning and heavy cleaning methods, and where use of a mechanical or robotic cutter or grinder is necessary to complete the removal. Payment for the removal of the root intrusion shall also include the cost of removing the remnants of the protruding sewer lead and cleaning the affected area.

E. **Cut/Grind Mineral Deposit.....Ea**
Cut/grind Mineral Deposit shall be paid for at the contract bid price for the full removal of each mineral deposit at a distinct location (joint, lateral connection, crack) that could not be sufficiently removed following standard cleaning and heavy cleaning methods, and where use of a mechanical or robotic cutter or grinder is necessary to complete the removal. Payment for the removal of the mineral deposit shall also include the cost of removing the remnants of the protruding sewer lead and cleaning the affected area.

F. The following work items shall be included in the contract bid price per linear foot for **Sewer Lining, ___" RIFI-CIPP**, unless otherwise described and provided for in the Proposal:

1. Design of required liner thickness for each sewer segment, and necessary submittals
2. Pre-installation cleaning of sewer lines and debris disposal
3. Identification of existing live taps
4. Traffic Control
5. Styrene Odor Control Plan
6. Bypassing of flow
7. Installing clean-outs on laterals in areas of high groundwater, and bypassing flow from the clean-outs when necessary
8. Cured-in-place (CIPP) sewer pipe installation, including required testing
9. Air Testing (sampling and measuring of styrene odors)
10. Removal of line obstructions
11. Proper disposal of cure water
12. Sampling and testing of cured-in-place pipe
13. Post installation T.V. inspection with PACP coding
14. Clean-up
15. Reinstate Lateral Connection
16. All additional items described herein as incidental to the work.

G. Any additives, resin modifications, installation methods, or other changes in work necessary to reduce styrene odors shall be indicated in the Styrene Odor Control Plan and shall be included in the contract bid price per linear foot for **Sewer Lining, ___" RIFI-CIPP** whether part of operations as initially planned or in response to styrene presence threshold being exceeded or complaints from odors.

1.3 REFERENCES

A. Abbreviations and Acronyms

1. CIPP – Cured-in-Place Pipe
2. ITCP – Inspector Training Certification Program
3. PACP – Pipeline Assessment and Certification Program (most current version)
4. RIFI – Resin-Impregnated Fabric Inversion Liner

B. Reference Standards
1. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
2. ASTM D 5813 – Standard Specification for Cured-in-Place Thermosetting Resin Sewer Piping Systems
3. ASTM F 1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
4. ASTM F 1743 - Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe
5. ASTM F 2019 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Thermosetting Resin Pipe (CIPP)
6. ASTM F 2994 – Standard Practice for Utilization of Mobile, Automated Cured-In-Place Pipe (CIPP) Impregnation Systems
7. All work shall comply with the reference standards unless specifically stated otherwise in the Specification.
8. References to standards which are made part hereof shall be latest edition thereof.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Access
1. Determine locations of appropriate access points (manholes) for cured-in-place pipe installation.
2. Obtain access rights from private property owners when access across private property is necessary to reach access manholes due to easement congestion which limits equipment travel within existing easements, unless provided by Owner.

B. Coordination
1. Provide adequate notification of work to private property owners that are connected to the sewer being lined whose building laterals will be out of service during the cured-in-place pipe installation, curing, and restoration processes.
2. Notification shall;
   a. Be in writing via door hanger, door flier, or U.S. Mail given 24 hours but no more than 48 hours in advance of service loss (excluding weekends and holidays)
   b. Clearly state purpose of the work.
   c. Advise all affected customers against water usage until the sewer line is placed back in service.
   d. Clearly state the potential consequences of using wastewater generating facilities during the time the building sewer service will be out of service.
   e. Include a 24-hour contact telephone number for questions regarding the work.
3. Limit service outage for any property served by the sewer to no more than 24 hours.

C. Prepare a Styrene Odor Control Plan to minimize project specific styrene odors at the project site and surrounding areas.
1. Submit with Bid Proposal
2. Styrene odor control plan will be used to evaluate the qualifications of the bidder.

D. Collect and dispose of cure water to an Owner approved location when lining sewers that discharge to open waterways.

E. Restore all property in the project work area to a condition equal to or better than existing following completion of construction.

F. Final acceptance of each line segment is contingent on completion and acceptance of sample testing and receipt and approval of post-installation T.V. inspection.

1.5 PROJECT WORK PLAN

A. Prepare a Project Work Plan (PWP) in advance of the pre-construction meeting which clearly defines the CIPP product delivery in conformance with the requirements of the Contract Documents. The PWP shall at minimum contain:
1. Detailed installation plan describing all work necessary and appropriate for a complete CIPP installation.
2. Installation method, sequencing and schedule.
3. Schedule of Submittals.
4. Bypass pumping plan.
5. Traffic control plan
6. Engineering design calculations to for each length of cured-in-place pipe to be installed including the thickness of each proposed CIPP.
7. Detailed public notification plan.
8. Project contact list and defined responsibilities.
9. Proposed procedures for product sampling and testing.
10. Sample field documentation forms, reports, and logs.
11. Outline of specific repair or replacement procedures for potential defects that may occur in the installed CIPP.

B. Compensation for all work required for the preparation of the PWP shall be included in the cost of the project.

1.6 SUBMITTALS

A. Provide all submittals in a timely manner, considering a reasonable review time, and possible resubmittals for corrections if found to not be compliant with these Specifications. Completion of submittal reviews, and review of resubmittals, shall not be a basis for any delay claims.

B. CIPP Liner Design
1. Provide preliminary design of CIPP liner with bid
2. Provide secondary design of CIPP liner if necessary after pre-lining inspection
3. Furnish certified design calculations stamped by a registered professional engineer prior to liner manufacture.

C. Liner Tube data
1. Manufacturer
2. Description of product components
3. Technical data sheets
4. Certified information from manufacturer of the liner tube's nominal void volume.

D. Liner Tube Coating
   1. Material safety data sheets (MSDS)
   2. Technical data sheets
   3. Recommended repair (patching) procedure, if applicable
   4. Design thickness

E. Raw Resin data
   1. Manufacturers of all formulated resin components: resin, catalysts, fillers, additives, and monomers.
   2. Description and percentage utilization of each component for the resin formulation proposed.
   3. Technical data sheets for all formulated resin components
   4. MSDS for all formulated resin components

F. Site Samples
   1. Provide flexural and tensile testing reports of CIPP samples from the last three (3) projects in which testing was completed.
   2. Provide copies of design thickness calculations for the cured-in-place pipe from the flexural and tensile testing reports.

G. Manufacturers' shipping, storage and handling recommendations for all components of the CIPP system.

H. Proposed tube wet-out and cure method, including:
   1. A complete description of the proposed wet-out procedure for the proposed technology.
   2. When epoxy resins are utilized, manufacturer's certification of compliance with ASTM F2994
   3. CIPP manufacturer's recommended installation and cure method - for each diameter and thickness of the CIPP to be installed.

I. Licensed Testing Company to perform third-party flexural properties testing on representative samples collected from the installed CIPP.

J. Personnel Certifications
   1. Documentation of PACP certified personnel assigned to pre- and post-inspection televising of pipelines
   2. Documentation of ITCP certified personnel assigned to project.

K. Styrene Odor Control Plan
   1. Method to continually monitor styrene resin odors in the project area during the liner installation, inversion, and curing process
   2. Method to contain styrene resin odors from the liner container truck.
   3. Method to contain styrene odors during CIPP liner installation and curing.
   4. Method to contain styrene resin odors from inversion water discharging after CIPP curing completion.
   5. Name of the equipment for sampling and measuring styrene odors.
   6. Sample Resident Notification Letter, addressing the issue of styrene odors and providing educational information on how to avoid the odors and what to do if the odors are present in a home/business/school.
   7. Procedures for notifying schools, hospitals, and businesses impacted.

8. Procedures for work progress should maximum permissible styrene odor levels be exceeded.

1.7 QUALITY ASSURANCE

A. The Contractor shall carry out his operations in strict accordance with all OSHA and manufacturer's safety requirements. Particular attention is drawn to those safety requirements involving working with scaffolding and entering confined spaces.

B. Products used in the Work identified herein shall be produced by manufacturers regularly engaged in the manufacture of cured-in-place liners for municipal water systems and with a history of successful production acceptable to the Owner.

C. Verification of Pipeline Inside Diameter
1. Prior to manufacture of the CIPP, the Contractor is responsible for verifying the inside diameter of the pipeline to be rehabilitated to assure a tight-fitting cured-in-place pipe is installed.
2. Sections of liner with visual defects, continuous or intermittent inward folding, or overlapping of excess liner material will be rejected, refer to "Section 3.13 – Non-Conforming Work" for acceptance criteria.
3. Provide a liner with a transition section in cases where the internal diameter of the pipe changes significantly.

D. Styrene Odor Control Monitoring
1. Read and record styrene levels every one (1) hour with a Drager Tube or approved equal.
2. Measure styrene levels a maximum of 10 feet away from the inversion manhole while liner is being inverted and cured.
3. Notify Owner and implement procedures for work progress should styrene level readings exceed 50 ppm or resident complaints of excessive styrene odors are filed.

E. Minimum Qualifications
1. The installing Contractor shall be licensed by the CIPP lining system Manufacturer and shall have successful experience in the installation of CIPP lining systems in municipal wastewater systems.
   a. Provide a copy of the license/agreement or letter from the CIPP Manufacturer that certifies the use and installation of the CIPP lining system by the Contractor.
   b. The Contractor shall be familiar with the specified requirements and methods needed for proper performance of the liner system in accordance with the Work specified herein.
2. Contractor's Field Supervisor Foreman: Minimum five (5) years of continuous experience as a foreman/superintendent for a CIPP installation crew
3. Minimum CIPP installations of the proposed method by the Contractor in the past five (5) years:

Pipe Diameter Range	**Required Performance (inch-miles)**
Up to 18-inch	1,000
18-inch to 36-inch*	200
36-inch and larger*	50

* if in Contract

4. All CCTV work shall be performed under the supervision of personnel trained and certified in the use of NASSCO's PACP for the inspection of sewer mains.

PART 2 PRODUCTS:

2.1 CIPP MATERIALS

A. Liner tube

1. Shall consist of one or more layers of flexible needled felt or an equivalent absorbent non-woven or woven felt fabric, felt/fiberglass or fiberglass that when installed will tightly fit the internal circumference of the existing conduit.
2. Meet the requirements of ASTM F1216, ASTM F1743, ASTM D5813, ASTM F2019 or ASTM F2994 whichever is compatible with the ClPP system proposed.
3. Capable of absorbing and carrying resins
4. Constructed to withstand installation pressures and curing temperatures
5. Have sufficient strength to bridge missing pipe segments
6. Have the ability to stretch to fit irregular pipe sections, negotiate minor bends, and dimple at any service or branch connection.
7. Uniform in thickness and, when subjected to installation pressures, will meet or exceed the designed finish wall thickness in accordance with ASTM F1216, Section 8.6.
8. Mark liner tube for distance at regular intervals along its length, not to exceed 5 feet, and include the CIPP Manufacturers name or identifying symbol (brand).

B. Thermosetting Resin System

1. Corrosion resistant unsaturated, isophthalic polyester or vinyl ester thermoset resin and catalyst system or epoxy resin and hardener that is compatible to the installation process and when properly cured within the tube composite meets the requirements of ASTM F 1216, ASTM F 1743 or ASTM F 2019, the physical properties herein, and those, which are to be utilized in the design of the CIPP for this project.
2. The resin shall produce CIPP which will comply with or exceed the structural and chemical resistance requirements of this specification.
3. Formulate the resin system for the subject project;
   a. Viscosity shall be conducive to its being saturated into the void space of the tube's matrix,
   b. Thixotropy shall be adjusted to minimize its migration during the tube installation process.
4. The pot life of the catalyzed resin system should be such that it provides a reasonable timeframe for the tube to be installed.
5. If necessary, add a dye (pigment), approved by the ClPP manufacturer, to the catalyst or resin to allow visual verification that the liner tube has been thoroughly wet-out.
6. Resins that are expired are not permissible; ensure the resin system to be used is within the resin manufacturer's recommended shelf life.

C. Corrosion Resistance
1. Furnish a corrosion resistant, unsaturated, isophthalic polyester or vinyl ester thermoset resin and catalyst system, or epoxy and hardener compatible with the process that provides cured physical strengths specified herein.
2. The installed CIPP shall have a long term (50 years) corrosion resistance to typical chemicals found in domestic sewage.

D. Chemical Resistance
1. Provide in accordance with the requirements of ASTM F1216, Appendix X2.
   a. Testing for chemical resistance shall be at the Owner's request.
   b. Costs for chemical resistance testing to be borne by the Owner.
2. The pipe within-a-pipe, when cured, shall be chemically resistant to withstand internal exposure to sewage gases containing hydrogen sulfide, carbon monoxide and dioxide, methane gas, dilute sulfuric acid, and external exposure to soil bacteria and chemical attack which may be due to materials in the surrounding ground or sewage within.
3. The finished CIPP shall be fabricated from materials which, when cured, will be chemically resistant to withstand internal exposure to domestic sewage.

E. The color of the interior liner surface shall be light reflective and pre-approved by the Owner, to allow for adequate post installation inspection by closed circuit television.

F. Styrene Chemicals
1. Use minimal styrene chemicals for the CIPP resin to minimize styrene odors in residential homes and business office.
2. The maximum level of released styrene shall not exceed 50 ppm.
3. Where specified for use on the Plans, or as directed by the Owner, provide vinyl ester resin free of styrene, VOC's and HAP's, or epoxy resin.

2.2 PHYSICAL STRENGTH

A. The CIPP system shall conform to the minimum initial structural standards, as listed below.

	Standard	Minimum Required
Flexural Strength	ASTM D 790	4,500 psi
Flexural Modulus of Elasticity	ASTM D 790	250,000 psi

Note: Samples from the project shall be taken and tested in accordance with Section 8 of ASTM F 1216 using either method. See Section 3.8, "Site Quality Control" of this Specification.

2.3 DESIGN

A. Provide measurement verification of the inside diameter of each pipeline to be rehabilitated signed by the installer of the CIPP with the design calculations.

B. Design CIPP wall thickness in accordance with Appendix X1, of ASTM F 1216 using the **fully deteriorated** pipe condition.

C. Design for a minimum fifty (50) year service life under continuous loading conditions.

D. Design such that the net inside diameter of the rehabilitated sewer is as large and smooth as possible.

E. Furnish design calculations **for each run of pipe to be lined** (i.e. manhole to manhole) based on site-specific parameters (diameter, depth, ovality, etc.) and soil modulus and groundwater table levels to be reviewed by the Engineer.
   1. All calculations shall be signed and sealed by a Registered Professional Engineer.
   2. Multiple runs of the same diameter pipe may be included under a single design calculation if the remaining site-specific parameters do not exceed the parameters assumed in the calculation.
      a. Include site-specific parameters of each run included in the single design calculation.

F. Minimum CIPP liner thickness, unless otherwise specified, shall be determined utilizing design procedures outlined in ASTM F1216, Appendix X1, mechanical properties provided by the CIPP Manufacturer, and the following project specific design assumptions:
   1. Existing sewer is fully deteriorated
   2. Existing sewer is considered to have 2% ovality in circumference at a minimum
   3. CIPP is subjected to a full soil load of 120 lbs/cft at a minimum
   4. CIPP is subjected to traffic loads as calculated by AASHTO HS-20-44 Highway Loading over a flexible pavement for sewer segment subject to vehicular traffic.
   5. Use 700 psi for modulus of soil reaction for pipe zone backfill at a minimum
   6. Use a groundwater elevation at five feet below existing surface elevation or two feet above the top of pipe, at a minimum, whichever yields a higher groundwater loading condition.
   7. All calculations shall be signed and sealed by a Registered Professional Engineer in the State of Michigan.

G. Submit price proposal for the length and size of pipeline specified assuming the finished liner is continuous over the entire length of the liner insertion run between manholes.

H. Should pre-lining inspection reveal the sewers to be in substantially different conditions than those in the design considerations, the Contractor shall submit a "secondary design" to request such changes in CIPP wall thickness, supporting such request with revised design computations signed and sealed by a Registered Professional Engineer.
   1. Submit secondary design only upon authorization from the Owner.
   2. Determine costs to perform a secondary design and install a liner that differs from what was proposed during the bidding process in accordance with the contracting requirements of the Owner, prior to completing the work.

PART 3 EXECUTION:

3.1 PRE-INSTALLATION

A. The following procedures shall be adhered to unless otherwise approved by the Owner's representative.

B. Pre-Installation Cleaning of Sewer Lines
   1. Remove all internal debris out of the sewer line that would prevent proper installation of the CIPP.

2. Refer to Section 02751 for the minimum requirements for cleaning of sewer lines
   a. Deliverables specified are not required.

C. Pre-Installation Inspection of Pipelines
1. Inspect pipeline to determine the location of any conditions which may prevent proper installation of the fabric lining into the pipelines, and it shall be noted so that these conditions can be corrected.
2. Refer to Section 02704 for the minimum requirements for inspection of pipelines
   a. Deliverables specified are not required for the pre-inversion inspection

D. Locate Service Connections
1. Record location of all service connections.
2. Determine capped and unused services with Owner.
3. Establish service connections to reinstate
   a. All service connections are to be reinstated unless otherwise directed by the Owner.
   b. Coordinate with the Owner any service connections that are not to be reconnected.
   c. Record plan for all service connections
4. Refer to sample Service Connection Documentation Form that follows this Section.

E. Bypassing Sewage
1. Provide for the bypass pumping of sewage around the section or sections of pipe being installed.
   a. Bypass shall be made by plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole or alternate system.
   b. The pump and bypass lines shall be of adequate capacity and size to handle all the anticipated flow.
   c. If pumping into alternate system, review system capacity to determine if it has adequate capacity to handle the additional flow.
2. Provide for the bypass pumping of sewage and groundwater from service laterals connected to section of cured-in-place pipe being installed.
   a. Required in areas where groundwater elevations at time of construction are above the adjoining footing drain elevations.
   b. Install PVC clean-out using hydro-excavation equipment, or other means as approved by the Owner.
3. The Contractor shall take adequate precautions to assure that no backup of sewage into basement drains occurs during installation.
   a. Monitoring of the surcharge levels during pumping operations is required 24 hours per day, 7 days per week.
   b. The Contractor shall be fully responsible for any damages resulting from their operations.
4. All costs associated for the bypass pumping of sewage around the section or sections of CIPP being installed shall be included in the unit price bid for **Sewer Lining, ___" RIFI-CIPP** unless separate pay items are included in the Proposal for the work described.

F. Line Obstructions
1. Clear line obstructions such as solids, dropped joints, protruding service connections or collapsed pipe that will compromise the proper installation of the CIPP lining.
2. Remove service leads excessively protruding into the pipe more than 5% of the pipe's internal diameter.
   a. Use a remote saw cutter or similar method, subject to the approval of the Engineer.
3. If inspection reveals an obstruction that cannot be removed by remote internal type equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner prior to the commencement of the work and shall be considered as a separate pay item.

G. Owner's Review of Pre-Lining CCTV Videos
1. Submit pre-installation inspection videos and reports of sewers to be lined a minimum one (1) week prior to planned lining.
2. No sewers are to be lined until the Owner has authorized the Contractor to proceed with the CIPP installation.

H. Contractor's Review of Pre-Lining CCTV Videos
1. Review the pre-installation inspection videos and reports of sewers to be lined.
2. Determine if the condition of the host pipe is acceptable to receive the CIPP installation.
3. Submit a "secondary design" should the pre-installation inspection reveal the sewers to be in substantially different conditions than those in the design considerations
4. Install pre-liner, per manufacturer's recommendation, where the host pipe material is not compatible with the proposed CIPP product; include this work in "secondary design" submittal.

I. Prior to any lining, the Contractor shall certify to have a minimum of two (2) complete working systems for reconnecting services available for use on this project.

3.2 RESIN IMPREGNATION

A. Designate a location where the uncured resin in the original containers and the unimpregnated tube will be vacuum impregnated prior to installation.
1. Impregnation to be performed in a regulated, quality controlled facility in accordance with local ordinances.
2. Allow the Owner to inspect the materials and "wet out" procedure.
3. Utilize a resin and catalyst system compatible with requirement of this method.

B. Document the volume of resin placed in each tube and the volume of resin indicated by the tube's manufacturer for a complete filling of the void space.
1. Call to the attention of the Owner/Engineer any tube failing to accept the full amount of resin per the tube manufacturer's specifications prior to installation to allow for a visual inspection.
2. Tube's failing to accept at least 95% of the prescribed resin amount shall be reviewed by the manufacturer and certified to the Owner/Engineer of its acceptability for use prior to its installation.

C. Prepare a "Wet Out Report" for each liner
   1. CIPP systems conforming to ASTM F2994 shall provide wet out reports to the Owner for each installation in digital format.
   2. Record wet out quantities on the "Wet Out Report".
   3. Submit to the Owner or Owner's representative with each liner delivery.
   4. Refer to a sample "Wet Out Report" that follows this Section.

3.3 INSTALLATION OF CIPP (INVERSION METHOD)

A. Pressurized air liner inflation/steam is prohibited in sewers greater than 12 inches in diameter, unless otherwise indicated.

B. Provide manufacturer calculated minimum pressure required to hold the tube tight against the existing conduit and maximum allowable pressure so as to not damage the tube.

C. Install resin-impregnated tube in accordance with ASTM F 1216.
   1. Maintain pressures between manufacturer minimum and maximum allowable pressures until the installation is complete.

D. Take suitable precautions to eliminate hazards to personnel in the proximity of the construction when pressurized air is being used.

3.4 INSTALLATION OF CIPP (PULLED-IN-PLACE METHOD)

A. Pressurized air liner inflation/steam or UV curing is prohibited in sewers greater than 12 inches in diameter, unless otherwise indicated.

B. Provide manufacturer calculated minimum pressure (height of water column) required to hold the tube tight against the existing conduit and maximum allowable axial and longitudinal tensile stresses so as not to overstress the felt fiber.

C. Perforate the outer impermeable membrane of the resin-impregnated tube prior to pulling the tube in place.
   1. Install perforations using a perforating roller device, after fabric tube impregnation.
   2. Perforate the tube at the point of manufacture.
   3. Perforations shall be made on both sides of the lay-flat fabric tube covering the full circumference with a spacing no less than 1.5 inches apart and slits a minimum of 0.25 inches long.

D. Install resin-impregnated tube in accordance with ASTM F 1743 or ASTM F 2019.
   1. Utilize a power winch to pull the wet-out fabric tube in place.
      a. Provide a measurement device on the winch or cable to monitor the pulling force.
      b. Measure the overall elongation of the fabric tube after pull-in completion.
   2. Pressurize the resin impregnated tube using the hydrostatic head calibration hose inversion method.
   3. Alternative methods of resin impregnated tube installation require Owner approval prior to use.
   4. Utilize a lubricant during installation of the resin impregnated tube.

E. Take suitable precautions to eliminate hazards to personnel in the proximity of the construction when pressurized air is being used.

3.5 CURING (NON-U/V APPLICATIONS)

A. Required Curing Parameters (for both steam and heated water)
1. Provide the temperature required to affect a cure of the resin as recommended by the resin manufacturer.
2. Provide manufacturer estimated maximum and minimum pressures required to hold the flexible tube tight against the existing conduit during the curing process.

B. Cure the CIPP in accordance with ASTM F 1216 and ASTM F 1743.
1. Fit the heat source with suitable monitors to gauge the temperature of the incoming and outgoing water supply.
2. Place an additional gauge within the impregnated tube and also at the pipe invert at the remote manhole to determine the in place liner temperature during cure.
3. Comply with recommendations from resin manufacturer for water temperature in the line during the cure period.

C. Prepare a CIPP "Curing Report" for each CIPP installation.
1. Log actual temperature readings at various time increments as noted in the "Curing Report" during the curing process.
2. Submit to the Owner/Engineer upon request.
3. Refer to a sample "Curing Report" that follows this Section.

3.6 COOL-DOWN

A. Cool the new CIPP in accordance with ASTM F 1216 and ASTM F 1743.

B. Take care in the release of the static head or air pressure so as not to develop a vacuum that could damage the newly installed CIPP.

3.7 SEALING CIPP

A. Seal the manhole walls, at all manhole inverts in accordance with CIPP system manufacturer's recommendations.

B. Assure completed liner terminations are free of rough edges with smooth transition into the receiving structure.

C. Seal shall be of a resin mixture compatible with the installed liner system.

3.8 SERVICE CONNECTIONS

A. After the cured-in-place pipe has been installed, reconnect existing active house lead connections.
1. Cut a relief hole through the liner at each opening to relieve any water that has accumulated in the leads during the lining process.
2. Complete reconnections without excavation, and in the case of non-man entry pipes, from the interior of the pipeline by means of a television camera and a

cutting device that re-establishes the service connection to 100% of its original capacity.

a. Remove pipe fragments or liner fragments which may obstruct flow or snag debris.
b. Correct overcut openings with a repair patch of a resin mixture compatible with the liner system and of sufficient size to completely cover the overcut.
c. Brush the full circumference of all completed service connections to eliminate rough or jagged edges of the liner.

3. Record status and condition of each service connection.
4. Refer to sample Service Connection Documentation Form that follows this Section.

B. All leads to be reinstated shall be reconnected within 24 hours.
1. No lead shall remain out of service for more than 24 hours.
2. If a lead problem occurs where a lead will remain out of service, the Contractor will provide emergency service at his cost.
3. If sewage and groundwater flows in the lead start to back-up and risk basement flooding, the Contractor will provide emergency service at his cost.
4. Obviously inactive services do not need to be reinstated. Determination of an inactive service requires the approval by the Engineer.

C. Remove coupons of pipe material resulting from service tap cutting
1. Collect at the next manhole downstream of pipe rehabilitation operation prior to leaving site.
2. Coupons are prohibited from passing through the sewer collection system.

3.9 FINISH

A. The finished cured-in-place pipe shall be continuous over the entire length of an inversion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes and delamination.

B. Restore to existing condition all excavations required for proper inspection of CIPP. or repair of leads. Site restoration for the pipeline rehabilitation work is considered included in the cost of construction unless otherwise indicated under separate pay items listed in the Proposal.

C. Due to the concern for longitudinal shrinkage in CIPP installations, the owner reserves the right to re-inspect the cured-in-place pipe following installation to determine if openings cut for service connections remains properly aligned. The event that service connection openings shift from original location, the contractor shall be responsible for all costs associated with corrective measures for re-alignment and repair of lead openings.

3.10 FIELD QUALITY CONTROL

A. Testing of the installed cured-in-pace pipe shall be required by the Contractor using an approved, licensed third-party testing company. The test specimens for short term flexural properties shall be prepared per ASTM F1216 Section 8, ASTM F1743 Section 8 or ASTM F2019 Section 7.

B. Gravity pipe leakage testing in accordance with ASTM F1216, Section 8.2.

1. If pipe segment is greater than 36-inch in diameter or contains service laterals, gauge the water tightness of the CIPP under a positive head during the curing process.

C. Site Samples
1. Provide short-term flexural testing of the installed CIPP in accordance with ASTM F1216, ASTM F1743, or ASTM F2019.
2. Submit testing reports to the Owner within fourteen (14) days of CIPP installation.
3. Collect enough additional liner specimens for delamination testing should post-installation inspection determine it is necessary.

D. Styrene Odor Control Monitoring
1. Submit record of styrene level measurements to the Owner's Representative at the end of each working day.
2. If a styrene odor complaint is received, Contractor shall mobilize device to the site of the complaint and measure styrene levels every 15 minutes for a minimum of one hour at no additional cost to the Owner.
3. Read and record styrene levels every hour.
4. Measure styrene levels a maximum of ten feet away from the inversion manhole while the liner is being inverted and cured.
5. Implement mitigation procedures should styrene level readings exceed 50 ppm or if complaints of odors are received, including addition of styrene odor reduction agent compatible with the resin being used.

3.11 POST-INSTALLATION

A. Post-Installation Inspection of Pipelines
1. Thoroughly clean the newly installed cured-in-place pipe, removing all debris and build-up that may have accumulated during construction.
2. Refer to Section 02704 for the minimum requirements for inspection of pipelines
   a. Measurement and Payment article does not apply.
   b. Provide the Owner all required deliverables within ten (10) calendar days of the CIPP installation.
3. All costs associated with post inspection of pipelines shall be included in the unit price bid for **Sewer Lining, ___" RIFI-CIPP**.

3.12 NON-CONFORMING WORK

A. Non-conforming work is any work outside of the acceptable tolerances for the item of work identified within these specifications that is considered to affect the performance and/or future maintenance of the new CIPP.

B. The finished CIPP shall be continuous over the entire length of the liner and be free from visual defects such as foreign inclusions, dry spots, pinholes, and delamination.
I. Any visual defects shall be repaired at the Installation Contractor's expense in a manner mutually agreed upon by the Owner and the Installation Contractor.
2. Delamination testing in accordance with ASTM F 1216 may be required by the Owner at the expense of the Contractor should post-installation inspection reveal visual defects. Contractor is responsible for having extra test specimens available for testing.

C. Sections of continuous inward folding or overlapping of excess liner material (commonly referred to as "fins") of greater than three (3) times the pipe diameter will be reviewed with the Contractor and owner for non-conformity.
   1. Sections protruding greater than 10% of the inside diameter of the host pipe will be repaired by mechanical means.
   2. Continuous sections extending greater than 25% of the length of the pipe will be repaired by mechanical means.
   3. Continuous sections protruding greater than 10% of the inside diameter of the host pipe and extending greater than 25% of the length of the pipe will be rejected and the entire length of the CIPP installed shall be replaced.
   4. Repairs and replacements needed to remedy sections of continuous inward folding or overlapping of excess liner material shall be completed at no cost to the Owner.

D. If movement of the cured-in-place pipe has occurred such that the house lead is partially closed, the contractor shall excavate and reconnect the house lead by use of an approved saddle at no cost to the Owner.

E. Removal and replacement of out of tolerance CIPP installations, reconnection of blocked service lines, and all equipment, labor, and materials for excavations, backfill and surface restoration to complete the work shall be performed at no cost to the Owner.

3.13 WARRANTY

A. Warranty the installed product for a period of one (1) year.

B. If the owner finds evidence of a reversal of curvature, shortening of the ends or constriction of house leads, the contractor shall return and restore service and end seals promptly, as part of warranty work.

C. During the warranty period, repair any defects which will affect the integrity or strength of the cured-in-place pipe in a manner mutually agreed by the Owner and the Contractor.

D. The cost of cured-in-place pipe repairs during the warranty period shall be borne by the Contractor.

CIPP Quality Control/Quality Assurance Form

Example Service Connection Documentation Form

Contract:_____Contract No: _____Location: Street/RW _____ MH ___ to MH _____ Size _____ Length _____
Contractor: _____ _____Installer: _____ Inspector _____
Report No: _____ Weather: _____ Temp: _____
Other Work: By-pass Pumping:_____ Cleaning: _____ Point Repairs: _____CCTV: _____ Traffic Control: _____
INSPECTOR: Verify and document the condition of all service connections reinstated by the contractor.

Service Location	Type Defect	Repair Req'd	Comments	Defect Location	Type Defect	Repair Req'd	Comments
46.5	Leaking between CIPP & host pipe	Yes	Grout required				
78.9	Overcut Connection	Yes	Install Connection Hat				

Owners Representative: _____ Signature: _____Date: _____
Contractors Representative: _____ _____Signature: _____ _____Date: _____
Comments:_____:_____

Wet Out Report

Wet Out Request

Date _____
Project No. _____
Basin No. _____
Install No. _____
MH No.'s _____

Diameter, in _____
Thickness,mm _____
Measured Length, ft _____
Wet Out Length, ft _____
Dry Length, ft _____
Total Length, ft _____

Liner No. _____ **Liner Dia.** _____ **Liner Thickness** _____

Resin Type _____ **Lot No.** _____

Wet Out Lgth _____ ft X _____ Lbs/Ft = _____ Total lbs of Resin

Roller Gap Setting (T2+2mm) _____ mm

Totals

Total Resin Used _____ Lbs
Total Perkadox Used _____ Lbs
Total Trig KSM Used _____ Lbs
Total Styrene Used _____ Lbs
Total Acetone Used _____ Lbs

Liner Footage

0 _____	350 _____	700 _____	1050 _____
50 _____	400 _____	750 _____	1100 _____
100 _____	450 _____	800 _____	1150 _____
150 _____	500 _____	850 _____	1200 _____
200 _____	550 _____	900 _____	1250 _____
250 _____	600 _____	950 _____	1300 _____
300 _____	650 _____	1000 _____	1350 _____

Wet Out Time

Prep _____ Hrs
Mixing & Filling _____ Hrs
Conveyer _____ Hrs
Clean Up _____ Hrs

Total Hours to Wet Out _____ Hrs

Supervisor: _____ (Signature)
Date: _____

Crew: _____

Maintain complete and accurate records of every step of the curing process and record all thermocouple temperatures from the start of the process to complete cool down of the liner

WATER CURING LOG

NOTE: Continue to log pressure and temperature every 15 minutes through warm up, full water temperature and cool-down phase.

Date: _____ Job Name: _____
Sec. No.: _____

Job No.: _____ Diameter: _____
Length: _____ Thickness: _____
Boiler #: _____ Operator _____

From MH# _____ To MH# _____ _____

Direction of water flow: Upstream: _____
Downstream: _____

WEATHER	
Normal	
Hot	
Rain	
Cold	
Snow	

THERMOCOUPLES									
TIME/15 min interval	BOILER PRESSURE	TUBE PRESSURE	TUBE TEMPERATURE	THERMO #1	THERMO #2				
WARM UP									
EXOTHERM									
COOL DOWN									

Reviewed By: _____ Date: _____

CIPP Quality Control/Quality Assurance Form

Example Odor Documentation Form

Contract:_____ Contract No: _____ Location: Street/RW _____

Contractor: _____ Installer: _____ Inspector _____

Report No: _____ Weather: _____ Temp: _____

Other Work: By-pass Pumping:_____ Cleaning: _____ Point Repairs: _____ CCTV: _____ Traffic Control: _____

Inspector: Ensure that informational literature is distributed to affected properties and/or make arrangements to have measurements of the styrene concentrations, using the applicable Detector Tube testing device, taken by a testing laboratory. Document all readings taken.

MH-MH	Pipe Size (in)	Pipe Length (ft)	Quality Control Specified	Performance Standard	Acceptable Quality	Quality Assurance Performed	Inspection Yes	Inspection No	Comments

Owners Representative: _____ Signature: _____ Date: _____

Contractors Representative: _____ Signature: _____ Date: _____

Comments: _____

Note: Insert all Quality Control References included in the specifications

END OF SECTION

SECTION 2751
CLEANING OF SEWER LINES

PART 1 GENERAL

1.1 SUMMARY

A. It is the intent of these specifications to provide a basis by which a sanitary sewer line can be cleaned of all excess debris so that internal sewer inspections or other work can be carried out. This basis shall include methods, equipment, and payment of work. Cleaning of sewer lines shall be accomplished by trapping and collecting all sand, debris, and grease at the next manhole, upstream or downstream of the line being cleaned, and removal and proper disposal of said materials in accordance with applicable State and Local laws governing the disposal of such materials. Cleanup operations shall consist of cleaning all debris out of the manholes and off the ground around the manhole and should include removal and proper disposal of said materials.

B. The Contractor shall provide and furnish all required skilled and unskilled labor, materials, fuel, machinery, tools, so that the contract and all work required to be done under the contract can and will be carried on continuously and expeditiously to completion, in all respects to the satisfaction of the Owner.

C. The sewer lines for which cleaning are required are shown or identified in these Contract Documents or as directed by the Owner.

D. Related Sections:
1. Section 02704 - Internal Sewer Inspection
2. Section 02708 – Resin Impregnated Flexible Fabric Liner and Cured-in-Place Pipe

1.2 MEASUREMENT AND PAYMENT

A. Payment for cleaning of a sanitary sewer line shall include all supervision, labor, equipment, water, electrical bills, disposal of debris, cleanup and any other applicable item and shall be included to the rehabilitation and repair items as described in the Specifications herein.

B. "Pre-Lining Preparation, Cleaning & Video Inspection, __-inch Sewer, LF"
The Owner shall pay for a "three-pass" cleaning of sewer pipelines utilizing high pressure jetting equipment, brushes and swabs to allow for passage of the CCTV; removing small amounts of loose debris such as gravel, sand, small rocks, grease and other deleterious materials within the sewer line; and removal of root intrusions and mineral deposits. **"Pre-Lining Preparation, Cleaning & Video Inspection, __-inch Sewer, LF"** will be paid for at the contact unit price per foot measured from inside of manhole to inside of manhole.

D. Sewer Cleaning, Heavy .....Linear Foot

Should the sewer line have too much debris or blockage to allow a camera to pass through after the original three passes are made additional cleaning may be required. This work shall commence only upon the approval and direction of the Owner and/or the Owner's Representative/Engineer and will be defined as **"Sewer Cleaning, Heavy"**

The Owner shall pay for an additional "three-pass" cleaning of sewer pipelines utilizing high pressure jetting equipment, and mechanical cleaners such as bucket machines, scrapers, cutters and augers to allow for passage of the CCTV; removing obstructions and medium to large amounts of debris such as gravel, sand, rocks, grease and other deleterious materials within the sewer line; removal of mineral deposits in accordance with the cleaning standards detailed in Article 1.2.D and removal of all attached, or encrusted and hard compacted deposits; and removal of roots, root balls. **Sewer Cleaning, Heavy** will be paid for at the contact unit price per foot measured from inside of manhole to inside of manhole, regardless of sewer size.

E. Cleaning Types (deposits and debris)

1. Incidental Cleaning of "Loose" Deposits and Debris (prior to cleaning)
   a. Up to 12" diameter sewer - 25% of sewer height
   b. 13" to 24" diameter sewer - 15% of sewer height
   c. Over 24" diameter sewer - 10% of sewer height
2. Heavy Cleaning of "Attached/Compacted" Deposits and Debris (prior to cleaning)
   a. Up to 12" diameter sewer – over 25% of sewer height
   b. 13" to 24" diameter sewer - over 15% of sewer height
   c. Over 24" diameter sewer - over 10% of sewer height
3. Heavy Cleaning of "Attached/Compacted" Deposits and Debris (following three (3) passes with jetting equipment)
   a. Up to 15" diameter sewer – over 20% of sewer height
   b. 16" to 36" diameter sewer - over 15% of sewer height
   c. Over 36" diameter sewer - over 10% of sewer height

F. Refer to Section 02708 for other provisions related to cleaning the sewers to prepare the pipe for the sewer lining operation. Other pay items have been established for clearing the line of obstructions that are not removed after completion of work described in this Section.

1.3 REFERENCES

A. Abbreviations and Acronyms
   1. NASSCO – National Association of Sewer Service Companies
   2. PACP - Pipeline Assessment and Certification Program
   3. CCTV – Closed Circuit Televising

B. Definitions
   1. Three-Pass Cleaning –Flushing of a sewer with a maximum of (3) passes utilizing high pressure jetting system

C. NAASCO Reference Standards

1. In accordance with NASSCO standards, heavy cleaning may require a step cleaning approach usually by accessing the downstream manhole and cleaning from downstream to upstream. Step cleaning is a systematic and efficient method of cleaning pipe with medium to large amounts of debris. Small sections or lengths of the sewer segment (steps or passes) are cleaned in each pull of the cleaning nozzle. This prevents build-up of debris downstream in the pipe and at the manhole. This also prevents the nozzle from becoming stuck in a large build-up of debris.
2. It is common practice to follow the cleaning nozzle with visual inspection from upstream to downstream to verify that the cleaning process is effective and that the pipe is cleaned per NASSCO standards for accurate PACP coding. However, at times it may be necessary to clean a pipe from the upstream manhole to the downstream manhole (reverse set-up). The reasoning for a reverse set-up is based on the conditions, the access/location and the amount and type of debris in the pipe. Heavy cleaning may require specialized nozzles depending on the amount of debris, the type of deposit, the type of debris or obstruction and the debris location.

1.4 QUALIFICATIONS

A. The Contractor performing the work shall be a company specializing in performing cleaning sanitary sewers and shall have a minimum experience of at least three other projects of similar size and scope within the last five years that include cleaning operations as outlined herein.

1.5 SUBMITTALS

A. Prior to initiation of work, the Contractor shall submit for Owner review and approval the following:
1. Listing of and data sheets for equipment to be used for proposed cleaning work.
2. Proposed water source for cleaning and proposed disposal site for solids cleaned from sewer.

1.6 REQUIRED DELIVERABLES

A. All data pertinent to the line cleaned shall be duly recorded on an adequate cleaning log form as supplied by the Contractor. This form shall be turned over to and remain in the possession of the Engineer after a section of the line has been completed.

B. Landfill disposal logs for all debris.

1.7 ACCEPTANCE

A. A daily log of work accomplished shall be duly recorded and acknowledged by the Owner or Owner's representative and the Contractor's superintendent.

B. All inspection recordings and reports will be reviewed by the Owner. The Owner shall have the authority to reject all or any portion of recordings not conforming to Specifications. These areas shall be re-cleaned at no additional charge.

PART 2 PRODUCTS

2.1 EQUIPMENT

A. All equipment used for cleaning operations, any method, shall be equipment specifically designed for the type of work specified. Self-contained cleaning units shall be used for the work unless otherwise approved by the Owner.

PART 3 EXECUTION

3.1 GENERAL

A. The Contractor shall be responsible for securing the site and protection of the Owner's personnel and public. Any necessary traffic control shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices.

B. The contractor shall notify the residents/businesses one day prior to starting cleaning with a "Resident Notification Letter" informing the residents/businesses of the Contractor's cleaning activities and to provide contact information for the Contractor and Owner. The Contractor shall submit the letter for Owner review and approval prior to notification. This letter should include contact information for residents to call should clean pressures cause toilet overflows or drain backups.

C. The Contractor shall clean in the direction of flow unless approval is received prior to reverse flow cleaning by the Owner. The liquid filtrate may be drained back into the downstream manhole and shall be disposed of in accordance with all regulations. The Contractor is responsible for providing all required water.

D. Protection During Cleaning Operations - Satisfactory precautions shall be taken to protect the sewer lines from damage that might be inflicted by the improper use of cleaning equipment. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force, or any tools which retard the flow of water in the sewer line are used, precautions shall be taken to insure that the water does not cause damage or flooding to public or private property being served by the manhole section involved. The Contractor shall reduce the pressures at the direction of the Owner, or if notified by a resident that such problems are occurring. By reducing pressure, additional cleaning time or passes through needed and shall be done at no additional cost to the Owner.

3.2 METHODS

A. The methods of cleaning a sanitary or combined sewer line which are acceptable for use are outlined below. Approval from the Owner for the method chosen shall be obtained prior to any cleaning work.

B. Bucket Machine Method - This method shall consist of:

1. Rodding the sewer line with a power-driven continuous steel rod of sufficient length and gauge and with the proper cleaning heads or augers, so as to loosen all

solid materials. It shall also provide a means to thread a cable for the power winch.

2. Removal of all solids, materials and other debris by means of a clam-shell type bucket and/or other appliances dragged through the sewer line with power winches of suitable size and horsepower.
3. Brushing of the sewer line with a brush large enough to assure that the line has been cleaned sufficiently. This brush shall be mechanically driven, with the power mechanism properly sized.
4. All electrical drops required by the Contractor shall be arranged for by the Contractor.

C. Hydraulic Cleaning Method - This method shall consist of cleaning and flushing of the sewer line by means of water pumped into the line at a high velocity. This shall be accomplished using between 800 pounds per square inch (P.S.I.) and 1000 P.S.I. of pressure at the pump connected by a high pressure hose to deliver water to a self-propelled nozzle to do the necessary cleaning and flushing. As many passes as necessary shall be made to sufficiently clean the sewer line.

3.3 DISPOSAL OF DEBRIS AND CLEANUP

A. After removal of debris out of a manhole, the Contractor shall dispose of debris at a Type II landfill. The Owner will sign the manifest for the debris as the Generator and shall be provided with copies of the landfill invoices after delivery. Any testing required for proper disposal shall be at the Contractor's expense and included in the unit prices bid for sewer cleaning. If the testing indicates the debris is not acceptable for disposal at a Type II landfill, and disposal at a Type III landfill, or other specialized disposal facility is required, the Owner will negotiate a change order for the additional costs for the required disposal. Clean up operations shall consist of cleaning all debris out of the manhole and off the ground around the manhole. At no time shall the Contractor push the debris downstream in the sewer system.

3.4 CLEANUP

A. The Contractor shall be responsible to clean up any debris or spills during each day of work and restore conditions to existing as soon as possible.

END OF SECTION

SECTION 900
SUPPLEMENTAL SPECIFICATIONS

1.01 SCOPE

A. The Supplemental Specifications apply particularly to this Contract. If there are parts of these Specifications, which differ from other sections of these Specifications, the Supplemental Specifications shall control. The 2020 M.D.O.T. Standard Specifications for Construction shall apply for all work items within this contract, except as modified in this Contract Document.

B. The work covered by this Contract shall consist of those items listed in the proposal. The Contractor shall, for the amount of money earned, based on unit prices stated in the Contract Documents, furnish and provide all labor, tools, equipment and materials, and do all work required in excavating and laying new water main and sewer, removing and replacing existing pavement, and other work related to the project. All of the items of work are to be done in accordance with the plans and Contract Documents of which these Specifications are a part.

1.02 MATERIALS

A. All materials shall be new and of the grades specified, and shall be the best of their respective kinds for the uses intended. The terms "approved" and "or approved equal" mean that the Engineer must be consulted and approve the material before the material in question is purchased or installed in the work. The approval of any material by the Engineer does not mean the acceptance of the material actually furnished if it should be found defective or inadequate for the purpose intended.

B. Special brands or grades of material or devices specified or shown on the drawings are named for the purpose of establishing a standard of quality and character desired. Other materials of equality and adaptability for the purpose for which they are intended may be substituted, but shall have the approval of the Engineer as to the equality and adaptability before being incorporated in the work.

C. The Contractor shall order or arrange for materials well in advance of their expected use in the work, as far as practicable, in order to allow time for inspection, etc., and thus avoid unnecessary delays which may otherwise occur.

D. Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 PERMIT FEES

A. The sewer replacements for this project involves a single County drainage district. The City has submitted the project to the Oakland Co. Water Resources Commissioner's office (OCWRC) for permitting approval. Once approved, a permit inspection fee will be required to be paid to their office prior to starting construction. The permit fee is not currently known but is anticipated to be less than $1,000.00. The Contractor shall be responsible for payment of the actual fee, up to a cost of $1,000.00, incidental to the cost of installing these sewers. The terms and conditions stated within the forthcoming approval letter from OCWRC shall also apply to this contract, including providing necessary insurance and bonding information as an incidental cost to the contract. Furthermore, the contractor will be required to secure the permit and coordinate inspection for sanitary and/or combined sewer installations from OCWRC, based on their work schedule.

B. Temporary traffic control signage is proposed within the 14 Mile Road public Right-of-way, which is under jurisdiction of the Road Commission for Oakland County (RCOC). The City will submit for permit approval, and the Contractor will be required to secure the permit on behalf of the City, including providing necessary insurance and bonding information as an incidental cost

to the contract. Permit fees up to $1,000.00 shall also be paid by the Contractor as an incidental cost, and the City will pay any fees beyond this amount.

1.04 COMBINED SEWER, VARIOUS SIZES

A. All Combined Sewers shall be constructed of either Reinforced Concrete Pipe (RCP) or Polyvinyl Chloride (PVC) in the classes and sizes as indicated on the plans.

B. All combined sewers will require a permit from the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The City has applied for a permit from the above agency for the replacement of the public combined sewer. The Contractor shall be obligated to have this permit approved and in-hand prior to beginning work on these items.

C. All proposed sewers and leads, six (6) inches and up, shall be bedded and backfilled in accordance with the standard pipe bedding detail as shown in the plans. The pipe bedding shall be crushed stone as required in section 600 of the specifications to a minimum of six (6) inches over the top of the pipe. Within the proposed road surface, backfill shall consist of compacted sand up to the proposed aggregate road base. All bedding, backfill and compaction shall be incidental to the cost of the new sewer installation.

D. Removal of existing sewers is specified on the plans and included in separate pay items. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

E. Any small diameter pipes that are encountered during excavations for mainline combined sewers that are damaged and confirmed to be inactive shall be bulkheaded prior to backfilling. If these pipes are less than 8 inches or less in diameter, this work shall be considered incidental to the contract work for combined sewer installation and will not be paid for separately.

1.05 STORM SEWER, VARIOUS SIZES

A. All Storm Sewers shall be constructed of either Reinforced Concrete Pipe (RCP) or Polyvinyl Chloride (PVC) in the classes and sizes as indicated on the plans.

B. The contractor shall be responsible for installing gas traps, including sumps, in the first storm structure upstream from a combined sewer, or where specified on the plans. The method for installing gas traps is to install a PVC elbow one size below the pipe being installed, directed down into the sump, as specified on the City of Birmingham Standard Notes & Details.

C. All proposed sewers and leads, six (6) inches and up, shall be bedded and backfilled in accordance with the standard pipe bedding detail as shown in the plans. The pipe bedding shall be crushed stone as required in section 600 of the specifications to a minimum of six (6) inches over the top of the pipe. Within the proposed road surface, backfill shall consist of compacted sand up to the proposed aggregate road base. All bedding, backfill and compaction shall be incidental to the cost of the new sewer installation.

D. Removal of existing sewers is specified on the plans and included in separate pay items. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

1.06 SEWER SERVICE – VARIOUS SIZES

A. For sewer service replacements, the Contractor will be responsible to locate each service lead as construction progresses and maintain all flow therefrom. For homes where information on the location of the sewer lateral does not exist, the Engineer or his designee shall assist in working to gain access to the house as needed, or reviewing sewer videotape records, to locate said sewer laterals.

B. When installing a new sewer service to an existing sewer, the existing sewer shall be exposed only as much as necessary to verify the stability of it in the area and the condition of the original tap, and connect to it as directed by the Engineer. If the existing sewer is in good condition, it shall be connected with a Fernco adaptor or approved equal, and paid for separately, as detailed below. If the existing main line sewer is damaged and needs repair in the area of the connection, the Contractor and Engineer shall agree to a time and material payment method for repairs to the City sewer, to be charged to the Water and Sewer Allowance pay item. If a new tap is required at a new or existing sewer main, it will be paid for under SEWER SERVICE TAP pay item.

C. Assuming all underground work is completed early in the project, while the main pedestrian sidewalks are still in service; the Contractor shall backfill and provide a temporary walkable surface to accommodate pedestrian traffic in a safe manner until the City sidewalks are repaired. Installation of a temporary stable surface in the sidewalk or other pedestrian areas shall be included in the separate pay item for maintenance aggregate.

1.07 NEW MANHOLE, VARIOUS SIZES

A. All new manhole structures shall include an applicable EJ 1040 frame and cover with City of Birmingham logo and applicable text notation for "Sanitary", "Combined", or "Storm: sewer as applicable for each structure, and as detailed in the City of Birmingham Standard Notes & Details.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.

C. Where drop connections are required, they shall be constructed in accordance with applicable requirements shown on the City of Birmingham Standard Notes & Details.

1.08 CATCH BASINS WITH SEDIMENT TRAPS

A. New pre-cast catch basin structures shall meet applicable requirements of the City of Birmingham Sewer specifications and standard details, except they shall be furnished with a minimum sump depth of 4.0 feet. Where specified with an "offset grate", structures must be furnished with a pre-cast concrete "flat-top", and must be installed in the orientation shown in the drawings to meet specific dimensional requirements and horizontal offsets from other utilities.

B. Sediment trap outlets shall be in accordance with the 2020 MDOT Standard Specifications for Construction, section 403 of the MDOT Standard Plan R-1 series, and RCOC Special Provision RCOC20SP403D.

C. Sediment traps shall be: Snout Oil-Water Debris Separators (as manufactured by Best Management Products, Inc), or Nyloplast Envirohood (as manufactured by Advances Drainage Systems, Inc.).

D. Payment includes the pre-cast concrete structure, the EJ 5000Z4 DI / 5000M4 DI Hinged Assembly, and the furnishment and installation of the sediment trap as a single, complete pay item.

1.09 NEW CATCH BASIN OR INLET, VARIOUS SIZES

A. All new catch basins or inlet structures shall include an EJ 5000Z4 DI / 5000M4 DI Hinged Assembly (in the curb line), unless otherwise noted on the plans. Underdrain shall be connected to all inlets and catch basins as shown on plan sheets. A separate pay item has been provided for this work.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.

1.10 6" PERFORATED PIPE UNDERDRAIN (NO SOCK)

A. The Contractor shall prepare their base bid unit price for this work based on the assumption that edge drain shall be installed per plan, and connected to all new drainage inlets and catch basins located within pavement areas.

B. The unit price for this work shall include all labor, equipment and materials necessary for the complete installation of the underdrain, open-graded angular aggregate backfill and non-geotextile trench wrap as shown in the details on the plans. Connecting the edge drains to the appropriate structures shall be incidental to the unit price for the installation, when the connection is to a new catch basin or inlet. Taps to existing drainage structures shall be paid for separately as outlined below.

C. To limit weather exposure of subgrade soils, Underdrain installation must be performed in conjunction with installation of the proposed road aggregate base and any subgrade undercutting that will be performed in a given location It is required by the contractor to perform work for underdrain concurrently with installation of final 21AA Aggregate Base layer in a train like manner. The Contractor shall not leave any cut and prepared subgrade surface exposed overnight.

1.11 SEWER INVESTIGATION, LATERALS

A. The City conducted extensive internal sewer camera work within the project area to help prepare the plans for this project. Despite this effort, there will still be instances when it becomes necessary to confirm if an existing sewer service is active or inactive, and therefore if replacement of the service is warranted. The Contractor shall anticipate the City will assist in confirming status with property owners as feasible during installation of the mainline sewers. The purpose of this pay item is to have the contractor provide labor, time, and equipment as needed to help determine the status, location, or material of any unknown sewer services. In particular, this pay item may be used to have the Contractor perform excavation near existing sewer mains (which shall be maintained or replaced in accordance with the drawings), where service connections are believed to exist, in order for the City to determine material of the existing service line and if replacement of said service line is warranted.

B. The bid price shall cover all labor and equipment costs required to perform supplemental excavations as directed by the engineer, assist in dye testing procedures, and for downtime where the contractor may be delayed in completing other project work due to investigative efforts associated with sewer service investigation.

1.12 SEWER SERVICE TAP, VARIOUS SIZES

A. This pay item shall be used for sewer services that require a tap to the new combined sewer main. This work shall be paid for as a SEWER SERVICE TAP. Sewer service taps to all new reinforced concrete pipe or PVC pipe shall be paid under this pay item. In order to avoid misaligned sewer connections, sewer pipe shall not be cored and prepped off-site prior to delivery to the project. All

sewer taps in concrete pipe shall be cored and booted in the field once the proper location has been determined (taking the location of existing trees into consideration).

B. All taps to existing structures or sewers shall be core drilled. A flexible rubber boot and appropriate clamps shall be used at the joint. The tapping pipe outside of the structure or sewer will be supported by placing 2,500 PSI concrete fill under the pipe from springline to undisturbed earth. Width of concrete fill support shall be the tapping pipe outside diameter plus twelve (12) inch minimum. Payment for sewer taps shall be based on the unit price bid for sewer tap for the nominal inside diameter of tapping pipe.

1.13 SEWER SERVICE CONNECTION, VARIOUS SIZES

A. This pay item shall be used for sewer service connections to existing sewer pipe where the existing tap can be re-used. All sewer connections shall be made to the existing tap using a Fernco adaptor, or equal. Connections shall be made in the presence of the Engineer. If the Engineer determines that the existing sewer main is in poor condition at the tap requiring additional work, the Contractor shall be prepared to make a repair to the existing sewer while it is excavated, as directed. Such repairs shall be paid for separately under a time and material agreement, using the Water & Sewer Allowance pay item described in more detail below.

1.14 SEWER TAP, VARIOUS SIZES

A. Whenever the Contractor must core drill a new hole in an existing manhole or connect a new mainline sewer of different size or material that the existing pipe which shall be removed, it shall be paid for as a SEWER TAP. Connections into a new manhole or drainage structure that was planned for and shown on the plan sheets and represented on the sewer schedule are incidental to the cost of the manhole or drainage structure.

B. All taps to existing structures shall be core drilled. A flexible rubber boot and appropriate clamps shall be used at the joint. The tapping pipe outside of the structure or sewer will be supported by placing 2,500 PSI concrete fill under the pipe from springline to undisturbed earth. Width of concrete fill support shall be the tapping pipe outside diameter plus twelve (12) inch minimum. Payment for sewer taps shall be based on the unit price bid for various diameters and shall be based on the nominal inside diameter of tapping pipe.

1.15 RECONSTRUCT MANHOLE (IF & WHERE NEEDED)

A. Prior to starting work, the City shall inspect all existing manholes, catch basins, inlets, and gate wells to determine their condition, and recommend needed repairs. Reconstruction will be paid for by the vertical foot, and will vary from minor repairs to the chimney to extensive mortar joint and brick repairs throughout. Final cover adjustments to meet the final pavement grade shall be included in the cost for reconstruction, and shall not be paid for separately under "Adjusting Structure Cover".

B. All structure reconstructs shall be paid according to the pay item RECONSTRUCT MANHOLE (IF & WHERE NEEDED) regardless of the diameter of the structure being reconstructed.

1.16 REMOVE AND REPLACE STRUCTURE COVER

A. As a part of the work of this pay item, the Contractor shall furnish and install new EJ frames and covers on existing utility structures, in accordance with the frame & cover details shown on the City of Birmingham Standard Notes & Details. Necessary structure adjustments to raise or lower the final rim elevation as needed to meet the proposed grade shall be paid for under a separate pay item, but need to be coordinated to accommodate the height of the proposed replacement frame dimensions. Existing utility structures which are subject to having replacement frames and covers

installed as part of this pay item include: gate wells, sewer manholes, and catch/basin inlets. Locations for this pay item are indicated on the drawings where they are known during the design process, however, the Contractor shall also be responsible for coordinating and confirming a final inventory with the City prior to ordering the new materials from EJ. Any existing frames and castings removed shall be collected and delivered to the City of Birmingham Department of Public Service yard at 851 S. Eton Road, or disposed of by the Contractor, as directed by the Engineer at no additional cost to the Owner.

1.17 REMOVE EXISTING MANHOLES & DRAINAGE STRUCTURES

A. The Contractor shall remove and dispose of the entire structure, including any base sections, if present, remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the excavation with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor and shall be disposed of properly at no additional cost to the Owner.

1.18 ABANDON EXISTING SEWERS, VARIOUS SIZES (INCLUDING ALL BULKHEADS)

A. Sections of existing sewers shall be abandoned as shown on the plans and called for in the proposal. This pay item shall include pipe bulkheads as needed, and installing flowable fill in the pipe. The Contractor shall submit to the Engineer the mix design to be used for the flowable fill. ALL bulkheads required to complete the abandonment of the specified sewers shall be included in the cost of this work.

1.19 REMOVE EXISTING SEWERS, VARIOUS SIZES

A. The Contractor shall excavate, remove, and dispose of the entire sewer pipe, and backfill the excavation with compacted sand.

B. Depending on location, removal may be able to occur in conjunction with proposed sewer installations, or may require separate excavation(s). Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a watertight dumpster, in accordance with Oakland County Health Department regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

C. If existing sewers are called for on the plans to be Abandoned in place per applicable pay items, and are determined by the Contractor to be removed as incidental work to trenching or other site operations, the removal of the existing sewers will be considered to be incidental to the other work, and no additional payment will be made for removal of the sewer pipes.

1.20 BULKHEAD STRUCTURE, VARIOUS SIZES

A. The pay items for various sizes are included in this contract and intended to provide a water-tight repair at existing drainage structures as identified in the drawings, where a pipe is being proposed to be removed from the structure and the structure will be maintained.

1.21 BULKHEAD PIPE, LARGER THAN 8"

A. The pay item is to provide water-tight bulkheads for any pipes larger than 8 inches in diameter that are encountered during excavations for mainline combined sewers that are damaged and confirmed to be inactive. Bulkheads shall be performed prior to backfilling. Bulkheads for any pipes that are 8 inches or less in diameter shall be considered incidental to the contract work for combined sewer installation, and will not be paid for separately.

B. In the event that the City elects to abandon a section of existing sewer in place using flowable fill, any associated bulkheads required at existing pipe openings to contain the flowable fill shall be considered incidental to the cost for the sewer abandonment.

1.22 REMOVE HYDRANT

A. The Contractor shall remove existing hydrants at the locations specified. Cost of this work shall include necessary water main shut-downs and associated coordination with the City to provide business/resident notifications. The Contractor shall be encouraged to conduct this work when an adjacent water-main shut-down is perform for other work, or when an adjacent Hydra-Stop is in operation, to allow this work to be completed expeditiously and safely.

1.23 REMOVE EXISTING GATE VALVE WELL

A. The gate valves shall be abandoned in place. Both ends of the pipe shall be plugged and blocked, as appropriate. The Contractor shall bulkhead any other openings in the structure, remove and dispose of the upper three (3) feet of the structure (remove cone section, if present), remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the structure with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor, and shall be disposed of properly at no additional cost to the Owner.

1.24 RETROFIT EXISTING GATE VALVE WELL W/ 12" GATE VALVE

A. Work shall include removal of existing gate valve and pipe within the existing well structure to remain. The existing structure shall be cored and fitted with new boots at both pipe openings to accommodate the proposed 12" ductile iron pipe. The new 12" gate valve fitting will be furnished and installed in accordance with applicable City of Birmingham Standard Specifications and Details.

1.25 FIRE HYDRANT ASSEMBLY, COMPLETE

A. Payment for this item shall be made at the unit price bid per each. Payment shall include all materials, equipment and labor necessary to furnish and install complete hydrant assembly.

B. New hydrants shall be in accordance with the City of Birmingham Standard Notes & Details. The hydrant shall open **LEFT**. The hydrant shall be painted yellow by the manufacturer prior to delivery.

C. On both new hydrants and relocated hydrants, the gate valve and box shall not be paid separately but shall be included in the Hydrant pay item. The type of valve and box to be used is given in the Section 500 Water Main Construction of these Specifications, and as shown on the City of Birmingham Standard Notes & Details.

1.26 DUCTILE IRON CL 52 WATER MAIN W/ POLYWRAP, TRENCH A, VARIOUS SIZES

A. All new water mains installed on this job shall include polywrap as a part of the unit price per lineal foot bid as noted in the water main specification section.

1.27 NEW WATER MAIN CONNECTIONS TO EXISTING WATER MAIN (VARIOUS SIZES)

A. The Contractor shall notify the City at least forty-eight (48) hours before any scheduled water main shut down to make the proposed water main connections. The Contractor may also be required to assist in notifying the properties that will be affected by the shutdown. The Contactor shall complete all required testing on the new water main prior to making the connections to the existing water system.

B. Oversized fittings may be required for making connections to older existing water mains. Use of oversized fittings on water main connections is incidental to the bid price for water main connections.

1.28 NEW WATER SERVICE, VARIOUS SIZES, TRENCH A

A. For the short segments of water service extension needed on existing 1" or larger copper water services, the Contractor shall install Type K copper pipe. Installation of a new stop-box at the property line at these services shall be paid for under a separate pay item.

B. Water services that are being connected to a main that is now closer to the house than the original main shall not be paid for any footage of new pipe. The work required for these service connections shall be covered entirely in the cost per connection, each.

C. Assuming all underground work is completed early in the project, while the main pedestrian sidewalks are still in service, the Contractor shall backfill and provide a temporary walkable surface to accommodate pedestrian traffic in a safe manner until the City sidewalks are removed in their entirety. Installation of a temporary stable surface in the sidewalk or other pedestrian areas shall be included in the separate pay item for maintenance aggregate.

D. Where existing trees make installation of the new water service challenging, the Contractor shall move the new water service as needed to reduce damage to the tree, as directed by the Engineer, at no extra cost, other than the additional footage of pipe installed as measured.

1.29 WATER SERVICE CONNECTION, VARIOUS SIZES

A. This pay item is to connect replacement or new water services to a new or existing water main. Where the new main crosses an existing service, the Contractor will not be paid for any footage of new service pipe to connect the existing service to the new main. When a service needs to be extended from the location of the old main to the new main, the Contractor will be paid for the installation of NEW WATER SERVICE, TRENCH A in the appropriate size(s) for the length required.

1.30 INSTALL CURB STOP AND BOX

A. All water services that are replaced in their entirety shall have a new curb stop and box at the point designated by the Engineer. Said boxes shall generally be installed on or near the right-of-way (R.O.W.) line and behind the sidewalk. Curb Stop and Boxes shall be installed for such services when they are 2" diameter or less.

B. Bid pricing shall include all labor, equipment, and materials to furnish and install the curb stop and box to the correct finished grade elevation.

1.31 HYDRA-STOP, LINE STOP, VARIOUS SIZES

A. It is possible that some of the valves will not function as well as they should. When directed to do so by the Engineer, a Hydra-Stop system shall be available to temporarily stop the flow of water from one (1) or more of the adjacent water mains, thereby allowing a water main connection with a minimum of time lost. Time lost due to unexpected delays on a water main shutdown shall be compensated for (when said delay is outside of the control of the Contractor) when approved when itemized and submitted to the Engineer, under the "Water and Sewer Allowance" pay item.

B. It shall be noted that the Contractor shall coordinate with City Engineering & DPS to operate and test all necessary valves needed to shut down various portions of the existing water system to implement planned connections. The Contractor shall be prepared to provide the Hydra-Stops only if an inappropriately large shutdown area will be required to implement the connection work.

C. The costs for hydra-stop pay items shall be bid on per "each" basis, and each shall include necessary full-depth pavement removal, earth excavation, operation time, backfill, and pavement replacement (in kind). Additional payment will not be made for overnight fees or other associated fees that may be required to keep the line stop in operation for the duration of the required work is performed while the stop is in place.

1.32 ABANDON WATER MAINS, ENTIRE PROJECT

A. After acceptance of the new water main segments, the Contractor shall begin to abandon the old water main. The water main shall be abandoned as follows:

   A. At the designated locations, cut the water main.

   B. Install a water tight cap and plug to each end of the cut water main.

B. Abandonment of existing gate valve boxes and gate valve wells shall be included as a part of this pay item. Where directed by the Engineer, the gate valves shall be removed and transported to the Department of Public Services yard (851 S. Eton Rd.) for future City use. Both ends of the pipe shall be plugged and blocked. Any leftover materials not wanted by the City shall become the property of the Contractor, who shall properly dispose of them at no additional expense.

C. Abandonment of gate valve wells, where required, shall conform to the following procedure: The Contractor shall bulkhead any other openings in the structure, remove and dispose of the upper three (3) feet of the structure (remove cone section, if present), remove the frame and casting and deliver to the City of Birmingham Department of Public Services yard at 851 S. Eton Road (if directed by the Engineer), and backfill the structure with compacted sand. All portions of the structure removed that are not wanted by the City of Birmingham shall become the property of the Contractor, and shall be disposed of properly at no additional cost to the Owner.

D. Removal or portions of existing water main may be required to accommodate other proposed utility installations, which are typically shown on the plans, but may also be encountered at unknown locations during construction. In both known and unknown cases, the existing water main shall be removed as an incidental cost to this pay item where required. Caps shall be placed at ends of existing pipe to remain to accommodate the abandonment work of other water mains.

E. The Contactor shall be responsible for phasing all utility installations and developing means and methods to allow for the existing water main to remain in service until the proposed replacement water main is installed, tested, and in service for all locations within the project limits.

1.33 EARTH EXCAVATION

A. This work shall be done in accordance with the requirements of Section 205 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as herein described:

   A. The work of Earth Excavation shall consist of constructing earth grades by excavating soil or rock and placing embankment as necessary to develop the cross section and grade specified in the plans. The work shall include the salvaging and stockpiling of selected materials; disposing of surplus or unsuitable material; furnishing, placing and compacting of embankment materials; trimming of the earth grade and maintaining the work in a finished condition until acceptance by the Engineer.

   B. Any of the existing material that is excavated and deemed suitable, as determined by the Engineer, may be used for the road embankment material. The Contractor shall be responsible for the proper disposal of any existing material that is excavated and deemed unsuitable by the Engineer.

B. Earth Excavation shall include the following items:

A. Stripping of vegetation and topsoil within the grading limits.

B. Clearing of brush and the removal of trees less than four (4) inches in diameter (when approved by the Engineer).

C. Excavation for roadway, curb, sidewalk, drive approaches and driveways.

D. Backfilling behind the curb and adjacent to sidewalks, drive approaches and driveways with Engineer approved material.

E. Grading from the back of curb to sidewalk, right of way line or grading limits to the required depth in order to receive all topsoil and sod surfaces.

F. Proof-rolling subgrade in accordance with the final design.

C. The estimated quantity for earth excavation is based on "in-place" yards and does not account for trenching of underground utilities or subgrade underdrain.

D. The Contractor shall be responsible for determining his own volume of earth excavation required to construct the proposed roadway to the grade specified in the construction plans. No additional compensation will be made for any variation between the estimated amount stated above and the final amount of earth excavation required to construct the roadway.

1.34 SUBGRADE UNDERCUTTING, 21AA LIMESTONE

A. Once the subbase is exposed, it shall be proof rolled as a part of the preparation for new pavement. Proof rolling shall be done with a pneumatic tired roller capable of being loaded with ballast. The roller shall be operated in a systematic manner and uniform speed over the exposed subgrade soils so that all areas of the exposed surface are tested. Maximum vehicle speed during proof rolling shall not exceed five (5) MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.

B. Those areas that require additional excavation shall be verified by the Engineer prior to proceeding with additional excavation into the subbase. The additional excavation shall be paid for under the pay item, "Subgrade Undercutting, 21AA Limestone". All work of this nature shall be done in the presence of the Engineer. The areas excavated below the subbase grade shall be backfilled with 21AA Limestone, as a part of the cost of the unit price for "Subgrade Undercutting, 21AA Limestone."

C. Procedures for undercutting shall be in accordance with MDOT Standard Specifications for construction. Bid prices shall be based on an "in-place" measure, with compaction of all backfill materials meeting a minimum of 95% of dry density.

1.35 SUBGRADE UNDERCUTTING, 1" X 3" LIMESTONE

A. Once the subbase is exposed, it shall be proof rolled as a part of the preparation for new pavement. Proof rolling shall be done with a pneumatic tired roller capable of being loaded with ballast. The roller shall be operated in a systematic manner and uniform speed over the exposed subgrade soils so that all areas of the exposed surface are tested. Maximum vehicle speed during proof rolling shall not exceed five (5) MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.

B. Those areas that require additional excavation shall be verified by the Engineer prior to proceeding with additional excavation into the subbase. The additional excavation shall be paid for under the pay item, "Subgrade Undercutting, 1"x3" Limestone." All work of this nature shall be done in the

presence of the Engineer. The areas excavated below the subbase grade shall be backfilled with 1"x3" Limestone, as a part of the cost of the unit price for "Subgrade Undercutting, 1"x3" Limestone."

C. Procedures for undercutting shall be in accordance with MDOT Standard Specifications for construction. Bid prices shall be based on an "in-place" measure, with compaction of all backfill materials meeting a minimum of 95% of dry density.

1.36 SUBGRADE GEOGRID FABRIC, TENSAR TRIAX TX130S

A. The intent of this pay item is to provide additional pavement subgrade stabilization in conjunction with subgrade undercutting pay items, where directed by the Engineer.

B. Bid price shall include all labor, equipment, and material to furnish and install the geogrid fabric per manufacturer requirements.

1.37 REMOVE AND SALVAGE BRICK PAVERS

A. There are certain property owners within the construction zone that have installed brick pavers or other special hardscapes within the right of way that conflict with the proposed construction. The property owners shall be contacted by the City to verify if they wish to maintain ownership of the materials. If they do, the Contractor shall carefully remove and stack the pavers at a mutually agreeable location on the owner's property, within the front yard. Replacement of the pavers, if desired by the property owner, will be their responsibility after completion of this project. Measurement and payment for this item shall be per square foot of paver area removed and salvaged.

B. The Contractor shall work carefully to minimize the need to utilize this pay item, and to ensure that there is no damage to the brick paver materials. Brick paver walks shall only be removed and salvaged under this pay item where it is directly necessary to carry out the construction work. In general, the Contractor shall only remove brick paver service walks to three (3) feet behind the proposed curb to allow for road construction, unless otherwise directed by the Engineer. The Contractor shall backfill the remaining gap between the curb or sidewalk with gravel to allow the driveway or walkway to be used again until the adjacent owner can have these areas repaired at their expense. Backfilling these areas shall be included in the cost of this work.

C. While generally salvaged brick paver materials shall be stacked on private property to become the adjacent owner's responsibility, the exception shall be at those locations where the replacement of the City sidewalk has required the disruption of a paver walk or driveway on the private side of the sidewalk. In those cases, the Contractor shall be required to backfill and reset the pavers to match the previous conditions to the greatest extent possible, as a part of this pay item.

1.38 REMOVING CONCRETE DRIVE APPROACH

A. Concrete drive approaches shall only be removed as shown on the plans or as directed by the Engineer in the field. There may be some locations where a drive approach will be removed to either an existing joint line, or to a sawcut joint where specified by the Engineer. Any driveway approaches, or portions thereof, that are noted to remain on the plans that are damaged in the execution of the work on this project shall be removed and replaced at no expense to the City or the property owner.

B. The Contractor shall notify the City at least seven (7) days ahead of when they plan to remove any drive approaches so that the City can notify the property owners. The Contractor shall also work with the Engineer to contact property owners and tenants the day that the concrete will be removed to ensure that they will not be stuck in their driveways. During the period when the drive

approaches are being removed and replaced, it is imperative that the Contractor maintain the sidewalks along both sides of the street in a safe, passable condition to ensure that the pedestrians have access. The Contractor shall minimize the amount of time between driveway removal and driveway replacement.

C. The unit price for removing concrete drive approaches shall include all costs for the complete removal and disposal of the concrete sections, including any sawcutting required. If a drive approach is a concrete drive approach with an asphalt overlay, it shall be paid for as a concrete drive approach and the unit price for removal shall include the removal of both the asphalt overlay and the concrete drive approach.

1.39 REMOVING ASPHALT DRIVE APPROACH

A. Bituminous drive approaches shall only be removed as shown on the plans or as directed by the Engineer in the field. There may be some locations where a drive approach will be removed to either an existing joint line, or to a sawcut joint where specified by the Engineer. Any driveways, or portions thereof, that are noted to remain on the plans that are damaged in the execution of the work on this project shall be removed and replaced at no expense to the City or the property owner. All sawcutting required to produce a clean edge shall be included in the cost of this pay item, and shall not be paid for separately.

B. The Contractor shall notify the City at least seven (7) days ahead of when they plan to remove any drive approaches so that the City can notify the residents. The Contractor shall also work with the Engineer to contact homeowners the day that the asphalt will be removed to ensure that they will not be trapped in their driveways. During the period when the drive approaches are being removed and replaced, it is imperative that the Contractor maintain the sidewalks along both sides of the street in a safe, passable condition to ensure that the residents have access. The Contractor shall minimize the amount of time between driveway removal and driveway replacement.

C. The unit price for removing asphalt drive approaches shall include all costs for the complete removal and disposal of the proposed sections, including any sawcutting required.

1.40 REMOVING CONCRETE SIDEWALK & RAMP (SAWCUTTING INCLUDED)

A. Sections of City sidewalk will be removed and replaced as a part of the project. The sidewalks shall remain in place as long as possible to allow pedestrian access down the street. This provision is to provide a solid walking path for the residents that need to access their homes on foot as a result of the work.

B. The unit price for removing concrete sidewalks and ramps shall include all costs for the complete removal and disposal of the concrete sections, including any sawcutting required.

1.41 PULVERIZE, REMOVE, STOCKPILE, REPLACE, AND RE-SHAPE EXISTING BITUMINOUS PAVEMENT

A. Existing bituminous road surface materials exist in variable thicknesses on Wimbleton Drive, Warwick, and Poppleton within the project limits. The existing bituminous material shall be pulverized full-depth using methods outlined in Section 305 of the MDOT 2020 Standard Specifications for Construction. The pulverization depth shall include a minimum of 1" of underlying base material, which shall be reviewed for suitability by the City's on-site geotechnical engineer during pulverization operations.

B. Pulverization shall occur as a means for all existing pavement removal within the project area, and shall be completed prior to utility construction. Once the pulverization process is completed, the contractor shall remove the base material from the roadway in all areas that will be impacted by

utility trenching, and the material shall be stockpiled and stored in a location on site (to be determined with the City) so the material can be replaced and used as road base material once utility construction is completed. The intent is to generate, salvage, and re-use as much material as possible to reduce the amount of supplemental 21AA aggregate material that will be imported for the project.

C. Once utility construction is completed, the Contractor shall coordinate with the City's geotechnical engineer, and perform required proof-rolling, undercutting of the subgrade soils (as needed), grading and re-shaping of the subgrade as needed to achieve proposed finished grades on the road surfaces. The proposed road edges shall be staked-out by the City's engineering consultant to allow replacement of the salvaged base material to be placed at the correct road alignment and consistent widths in accordance with the proposed road cross-sections. The material shall be re-shaped to provide a crown or super-elevated road cross-section and placed at uniform thickness (approximately 5" to 6") to provide surface cross-slopes between 1% and 3% with the pulverized material.

D. Supplemental 21AA limestone aggregate base shall be imported and placed in a uniform thickness (approximately 2" to 3") on the prepared subgrade, and below the salvaged base layer as required to meet the total required thickness of 8" for road base using the "AGGREGATE BASE, MDOT 21AA LIMESTONE, 4" pay item. The final re-shaped base layer shall then be compacted to minimum 95% of the material dry density to provide a minimum 8" compacted thickness.

E. The graded and compacted road base shall be proof-rolled to determine if any additional undercutting is required.

F. The unit price for this work includes all costs necessary for the pulverizing, removing, stockpiling, replacing, re-grading, and re-compaction across the entire road sections. The unit price also includes for the Contractor to remove and legally dispose of any excess material generated from the pulverization process that cannot be used to create the required road cross-sections.

G. The new capeseal surface shall be applied over the final approved road base as a separate pay item.

1.42 AGGREGATE BASE, MDOT 21AA LIMESTONE, 4"

A. This pay item shall include all earth excavation and base compaction required to provide a stable surface to install the four (4) inch stone base, using 21AA limestone, required, as detailed in the proposed pavement cross sections. Installation of the aggregate base shall be paid for by the square yard.

B. To limit weather exposure of subgrade soils, 21AA Aggregate Base installation must be performed in conjunction with installation of proposed underdrains and any subgrade undercutting that will be performed in a given location It is required by the contractor to perform work for the final 21AA Aggregate Base layer concurrently with installation of underdrains in a train like manner. The Contractor shall not leave any cut and prepared subgrade surface exposed overnight.

1.43 CONCRETE DRIVE APPROACH, 6"

A. All concrete drive approaches on this project shall be a minimum of six (6) inches thick unless otherwise called for on the plans.

B. The concrete drive approaches shall be poured as soon as possible following the roadway curing to allow residents to access their driveways.

C. The Contractor is encouraged to review Section 301 of these Contract Documents relative to the required timing for the placement of the driveway approaches.

D. Typical residential driveway approaches shall be constructed using the City detail for "Type L" driveway approach.

E. Concrete Driveway Approaches shall be constructed on minimum 6 inches of 21AA limestone as incidental to the cost of the approaches.

1.44 CONCRETE SIDEWALK, 4"

A. This pay item is for replacement of sections of sidewalk removed as a part of this project for excavations, at intersections, or removed to install other work on this project.

B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete sidewalk, and sawcutting the sidewalk joints per the plans.

1.45 HANDICAP RAMP TRUNCATED DOMES

A. Each sidewalk ramp constructed as a part of this project shall include a detectable warning plate of truncated domes. The Contractor shall supply and install cast iron plates as manufactured by East Jordan Iron Works, or approved equal. Payment for the handicap ramp truncated domes shall be per square foot of detectable warning surface installed. In general, each ramp shall include a two (2) foot by five (5) foot detectable warning surface of truncated domes. In cases where there is not enough space for separate ramps, radial plates may be specified on the plans.

B. Contractors have experienced long lead times to obtain the cast iron detectable warning plates. The Contractor shall be encouraged to place the order for the necessary items well in advance of the proposed installation dates. Substitutions or changes in design due to lack of parts shall not be approved.

1.46 ADJUST STRUCTURE COVER

A. All manhole covers that are within the work area that need adjustment, but do not need any repairs below the top six (6) inches beneath the casting shall be paid for under this pay item. If additional work is required below the top six (6) inches beneath the casting, then all of the work, including the adjustment, shall be paid for under the "RECONSTRUCT MANHOLE (IF & WHERE NEEDED)". The repair shall be measured vertically from the top of the existing cover to the ending point of the repair. Adjustment of all new structures shall be included in the price of the new structure, and shall not be paid for under this pay item.

1.47 MAINTENANCE AGGREGATE FOR ENTIRE PROJECT

A. As noted elsewhere, the majority of the project will be closed to through traffic until the work on the project is completed. However, the contractor will be required to maintain access for local residents through most of the project. The only time that the road may be closed off completely from adjacent residents is when the road is being excavated to the base, limestone is being installed, and when the concrete street is being formed, poured, or cured. This pay item is to pay for all labor, materials and equipment to furnish and install temporary aggregate in the roadway and/or the sidewalks to ensure safe passage by the local residents. In particular, there are five (5) areas where the Contractor will be asked to ensure that safe travel is available during the project:

   A. Within the intersections on the project site that will remain open to cross traffic during the construction period.

   B. Within the intersections on job where sewer or water main work will extend out into the intersections.

C. To allow for access to all driveways on the project after pavement removals and utility work for the day. Conditions during the underground phases shall be such that residents shall be allowed and able to drive to and from a gap in the barricades to their driveways at all times, unless an excavation is underway in the immediate area of their driveway.

D. At all sidewalk transition areas, ensuring that pedestrians are safe at all times.

E. At all points where sidewalk has been removed but yet not replaced.

B. Contractor may use crushed concrete, or asphalt millings as long as they provide a smooth passable surface.

1.48 MOBILIZATION

A. The purpose of this pay item is to provide payment to the Contractor for the cost of delivering equipment and materials to the job site as needed throughout the project. The Contractor shall not charge more than 5% of the total cost of the project for this pay item. Providing a price in excess of 5% could be grounds for invalidation of the bid.

B. Payment for this pay item shall be divided into 2 parts. The first payment will be for 75% and the second payment for 25%, with payments arriving on each of the first two disbursements. The Contractor should anticipate being paid approximately every 30 days for work on this Contract.

1.49 TRAFFIC MAINTENANCE AND CONTROL

A. The Contract Proposal indicates that this pay item will be paid for by the Lump Sum. Although paid as a lump sum, note that the Engineer has experienced difficulty in the past with certain Contractors not maintaining signing and traffic control measures on a daily basis to the extent considered necessary to properly protect the work area. Therefore, the Contractor shall submit a written time schedule to be reviewed and approved by the Engineer no later than 7 calendar days after the pre-construction meeting, if not sooner. Once approved, the number of calendar days (not counting Sundays) that the schedule indicates are required to complete the project shall be agreed upon by the Engineer and the Contractor, as stipulated in the written time schedule.

The Engineer will be checking the completeness of the signing and road closure features on a daily basis, and will ask for corrections as noted. The Contractor shall have a minimum of one representative on site with the Engineer at the end of the work day verifying that the condition of the traffic control signage is approved before leaving the project site for the day. The following shall be grounds for not receiving payment for this pay item for any given day:

A. If the Engineer has requested signage to be addressed prior to the Contractor leaving the site and it has not been done, or has not been done satisfactorily. The Engineer shall photograph and document incomplete signage conditions when observed, for the record.

B. If the Contractor's staff has all left the job site for the day before determining whether or not traffic control conditions have been approved by the Engineer. If problems are later identified by the Engineer, they shall be photographed and documented, for the record.

C. When not paying for this pay item under the conditions noted in #2 above, the Engineer shall consider how the discrepancy may have occurred. For example, if the problem is located outside of an area that would have been impacted by the Contractor, and if it appears that the discrepancy was caused by the public (such as the relocation of a barricade) at a time of day that the Contractor would not have reasonably known about the problem, then payment will not be docked for that day. Nevertheless, it shall be the Contractor's responsibility to make the effort to check all pertinent areas at the end of the work day so that this condition does not routinely occur.

D. To calculate the reduction of payment on the LS pay item, the Engineer shall use the following basis as an example:

If the time schedule referenced above indicates that the project will require the maintenance of traffic control measures for 70 calendar days (not including Sundays), and should the Contractor not meet the terms of the pay item for one day under the terms noted above, then the LS pay item shall be reduced in the amount of 1/70 of the pay item for each such day that traffic maintenance has not been performed within the terms of the Contract.

B. Prior to closing any of the streets on this project to through traffic, the Contractor shall supply cones, barriers, and warning signs in accordance with the MUTCD. Road closure signage shall not be erected more than two (2) work days in advance of planned closing, and erection of signing shall not begin until approved by the Engineer. At all entrances to the job site, the Contractor shall always maintain the appropriate number of Type III barricades and an R11-2 (ROAD CLOSED) signs. Appropriate advance warning at entrances to the job site shall be defined as maintaining a Type III at the next end of the affected block and an R11-4 (ROAD CLOSED TO THRU TRAFFIC) sign. Additional barricades shall be supplied as needed when the road is completely closed, such as when preparing the stone grade for paving, and when the concrete pavement has been recently placed. Refer to the proposed Advanced Warning Signage (AWS) diagram for additional traffic control requirements.

C. Project-Specific Traffic Maintenance and Control Requirements:

1. In general, traffic controls shall be provided to prevent thru-traffic within the project limits but resident access must be maintained in at least one direction for the duration of the project. The Contractor shall keep the road accessible to all residents during all phases of the project, except as follows:

   If concrete or asphalt work is required across a driveway, the work shall be done expeditiously after removals, so as to keep residents parking on the street or other driveways to a minimum.

   If asphalt or concrete is being placed.

   If open trenching in the road makes driving in the immediate area hazardous.

2. The Contractor shall provide all materials, labor and equipment necessary to install, maintain, move, and remove traffic control devices as required due to changing traffic access needs during the project.

3. The Contractor shall maintain access to driveways (including using temporary maintenance gravel) at all times throughout the project unless otherwise directed by the Engineer. If a parcel has more than one driveway for access, one driveway may be closed for construction with approval from the engineer.

4. The Contractor shall provide all materials, labor and equipment necessary to install, maintain, move, and remove traffic control devices as required due to changing traffic access needs during the project.

5. The Contractor shall maintain pedestrian access to sidewalks and vehicular access to driveways (including using temporary maintenance gravel) at all times throughout the project unless otherwise directed by the Engineer. If a parcel has more than one driveway for access, one driveway may be closed for construction with approval from the engineer.

6. Due to a lack of alternate parking for residents near this project site, the Contractor shall provide phasing in their schedule for concrete driveway construction. The phasing shall allow for a maximum of 50% of residences within the project limits to be prohibited access to their driveway at any given time.

D. The Contractor shall be responsible for maintaining traffic control that allow local access to the residents as specified above, including having flag control or labor to move barricades as necessary to facilitate both their operations and local traffic.

E. Once the road pavement is installed, and seven (7) days curing has been accomplished, the Contractor shall immediately begin preparing for sidewalk and drive approach construction, again, placing concrete expeditiously to allow the curing time to begin as soon as practical. Particular attention to safe and accessible sidewalks shall be provided when the road is closed to all vehicular traffic, given that the sidewalks shall be the only means of access for residents. The Contractor shall repair all sidewalks in driveway areas at the same time as the adjacent drive approaches, again to reduce the time that driveways are out of service.

F. The Contractor shall maintain signs and barricades as necessary to maintain traffic on this route as shown on the traffic control diagrams in the drawings.

G. It is anticipated that a small number of residents will, due to health or handicapped access reasons, require almost continuous access to their driveway. With that in mind, the Contractor shall include in the cost of the bid up to two (2) gaps for specific driveway access on half of the width of the road. Communications with the homeowners will occur well in advance of the paving phase, and any gapping requirements will be made clear to the Contractor. The City will not encourage any pavement gapping with the public, and if they are not needed, the Contractor will not be asked to provide them.

H. The Contractor shall endeavor to keep the cross streets, as well as the local access within the construction zone as clean and dust free as practical during construction.

1.50 INSPECTOR CREW DAYS

A. The number of crew days for each pay period will be added as a pay item (up to the amount bid as a maximum) and the actual number of days used will be deducted from the overall total amount due with each pay estimate. If the total amount bid has not been used at the end of the contract, the bid amount will be paid on the final estimate.

B. If additional work other than what is noted herein is necessary to complete the project, the City will consider adjusting the inspector crew days number upon request. The adjustment shall be based upon the percentage increase in the total value of the project over what was originally bid.

1.51 WATER & SEWER ALLOWANCE

A. Due to gaps in some of the water & sewer records, there may be some exploratory work required to ensure that all homes are connected to the new water main and combined sewer. City staff will endeavor to assist the Contractor wherever possible to keep such work to a minimum. Unexpected work or time lost due to malfunctioning gate valves, or conflicts with the proposed pipeline shall also qualify as time and material work paid for under this allowance.

B. Payment under this pay item shall only apply when additional work was required as a result of missing information on sewer service connections, or for work that is not normally associated with the pay items as presented in the plans and specifications. The Contractor and the City shall agree to the time spent on a daily basis that will apply under this provision. In addition, the Contractor

shall submit a written statement for each such incident, documenting all labor and equipment charges on an hourly basis used, as well as any materials used, to be paid for under this provision.

C. For bidding purposes, the allowance shall be the flat amounts listed in the proposal sections. Any amendment may render the bid invalid.

1.52 PAVEMENT MARKINGS

A. All pavement markings must be provided to the size and color as noted, and using the material noted. All materials shall comply with MDOT standard specifications.

1.53 SALVAGE EXISTING SIGNS

A. The Contractor shall protect and work around all existing signs wherever possible. If signs need to be removed to accommodate underground work, they shall be replaced with a new post and salvaged sign prior to the end of the project.

B. Any STOP signs removed shall be erected again at the end of the day either on a temporary or permanent basis, with a permanent installation required prior to the end of the project. All sign removals and replacements, including relocations where noted on the plans, shall be paid for under the lump sum of Salvage Existing Signs.

C. Street name signs shall be stored in a safe location during construction, and installed back in the same location upon completion of the project. The salvaged signs shall be paid for accordingly.

1.54 SIGN POSTS, U-CHANNEL

A. All new signs posts shall be buried four (4) to five (5) feet below the ground, with an adequate length above the ground to mount all of the new proposed signs above the specified bottom height of the sign. Sign posts shall be a ridgeback U-channel galvanized steel, with a weight of three (3) pounds per linear foot.

1.55 TREE PROTECTION, 3" DIA. OR GREATER

A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist or the Engineer, such precautions are necessary.

B. On all trees greater than three (3) inches in diameter, but less than eighteen (18) inches away from the back of curb (from the edge of the trunk), straw bales shall be installed on end between the tree and the road. Straw bales shall be erected completely around the tree when said tree is in the median. The straw bales shall be wired to the tree around the entire trunk to ensure that they remain in place. If construction of sewer, water main, or concrete requires temporary removal, the bales shall be removed and set aside during that day. The bales shall be re-secured at the end of the work day as needed.

   A. Barriers shall remain in place until all site activities have been completed. Barriers may not be relocated or removed without the prior approval of the Staff Arborist.

   B. The barrier material must be visible and solid enough to withstand the pressure from anything piled up against it.

   C. Protection shall apply to all trees over three (3) inches in diameter.

C. All trees greater than three (3) inches in diameter, but less than eighteen (18) inches away from the back of the curb (from the edge of the trunk) shall have four (4) temporary fence posts installed around the base of the tree, with snow fence connected to all four (4) posts. Snow fence shall

remain in place at all times, except when excavation or paving work in the immediate area requires its temporary removal. After work is completed for the day, the snow fence shall be erected back into place by the Contractor.

D. Activity within the Root Protection Zone of a City owned tree (normally considered the drip line) shall be limited where practical as determined by the Engineer. These activities shall include, but not be limited to, changing grade, stripping topsoil, and/or placing solvents, building materials, construction equipment, or soil deposits within the Root Protection Zone. The Contractor shall be prepared to perform advance pruning of any City owned trees required for clearance during construction development activities. Pruning must be performed by a qualified arborist and not by untrained construction personnel. Any roots damaged during grading or development activities shall be exposed to sound tissue and cut cleanly with a saw following recommended standards and as directed by the Staff Arborist. Whenever possible, no excess soil, additional fill, liquids, or construction debris shall be placed within the Root Protection Zone of any City owned tree. Construction pruning and root pruning of any City owned trees directly affected by construction require obtaining prior approval from the Staff Arborist.

E. Trees shall be protected as described above for any tree over three (3) inches in diameter. Trees less than three (3) inches shall be protected at Contractor expense, however, trees shall be replaced at Contractor expense if there is any damage to the tree as determined by the Engineer or Staff Arborist.

1.56 MULCH, 3"

A. In areas where it will be difficult to establish grass around existing trees, the Contractor shall restore around the trees where directed by the Engineering with three (3) inches of topsoil, and then three (3) inches of hardwood landscape mulch as needed. No mulch shall be placed at trees where the root structure will allow the placement of sod instead. The three (3) inches of topsoil shall be paid for under the Topsoil pay item.

1.57 TOPSOIL, 3"

A. Topsoil shall be placed according to the Michigan Department of Transportation 2012 Standard Specifications for Construction, Modified to be screened with no objects greater that one (1) inch in diameter.

B. Topsoil shall be a loamy material. Payment shall be made for topsoil placed to the depth specified, per square yard. Payment shall include all labor, equipment and materials necessary to place the topsoil.

1.58 SOD, CLASS A

A. Restoration work of this nature shall be limited to the period of time between May 1st and October 31st of each year. Installation of sod (or seed) outside of these dates shall be with special approval only by the Engineer.

B. Payment on 50% of the pay items regarding restoration may be withheld until the sod or seed has satisfactorily germinated or been established.

C. The Contractor shall be responsible for watering all sod placed on the project for a period of fourteen (14) days, and at the end of fourteen (14) days, the sod areas shall be inspected by the City. Any sod areas that appear to be failing shall be marked for removal. Removal and replacement of failed sod areas shall be incidental.

D. A small percentage of the finished areas may be sloped (such as adjacent an existing tree) such that they cannot be sodded. These areas shall be seeded and included in the square yardage for sod

placed. Seed shall also be placed at the same price should any adjacent property owners request seed substitution for sod.

1.59 INLET FILTER, SILT SACK

A. Installation of this item shall follow the standard details prepared by the Oakland County Water Resources Commissioner. The detail for the "Inlet Filter" shall be modified appropriately to accommodate the proposed flat catch basin covers.

B. This pay item will be required on existing catch basins surrounding the project work zones, existing catch basins within the work zones (to either be maintained or removed, during all excavation, removal, subbase preparation, etc.), as well as for all proposed catch basin and storm inlets as they are installed.

C. Furnish and install "Silt Sack" inlet filters, or approved equal.

1.60 LAWN SPRINKLERS

A. In General, the Contractor shall take all necessary precaution to maintain all items placed in the right-of-way, and any items removed or damaged shall be replaced in kind. The exception to this is lawn sprinklers in the right-of-way. As long as the damage is not due to Contractor negligence, sprinklers that are in conflict with the construction may be removed and need not be replaced by the Contractor. The Contractor shall take precautions not to damage the sprinkler system any more than necessary, and shall notify the City of any sprinklers that are found during construction.

B. If a lawn sprinkler line located within the right-of-way is damaged, the Contractor shall sufficiently plug or cap the line to prevent the sprinkler line from discharging when the system is activated, and shall notify the City of the location of the damage.

C. Lawn sprinklers located on private property shall be the Contractor's responsibility to repair if damaged. For the purposes of this provision, private property shall be defined as any sprinkler damaged between the City sidewalk and the house.

1.61 DUST CONTROL

A. Dust & dirt control, and general cleanliness of the project work area and vicinity will be monitored by the Engineer on a regular basis. For unpaved surfaces, dust control can take the form of watering the grade, or treating the grade with calcium chloride. Particular attention shall be paid to areas where cross-streets generate more traffic than usual. For paved surfaces, streets must be swept on a regular basis to avoid excess dust being created by traffic. While minor sweeping can be accomplished by a broom tractor, larger sweeping jobs must be accomplished by a professional street sweeper so as to avoid throwing dust, dirt, and stones into the adjacent yards. Although not a direct pay item, the Contractor shall be prepared to address dust and dirt issues as requested by the Engineer within 24 hours. If such issues are not being addressed timely or inappropriately, the Engineer shall have the right to direct its own forces or other contractor to the job site to address the area in question. Such costs shall be charged against the final payment due to the Contractor.

1.62 PUMPING, BAILING, DRAINING, AND DEWATERING

A. The contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of water from trenches or other excavations, to maintain stable excavations.

B. Where the work is in ground containing an excessive amount of water, the contractor shall provide, install, maintain, and operate suitable deep wells or well points, connecting manifolds and reliable pumping equipment to operate the same to ensure proper construction of the work. Alternate dewatering methods may be implemented if approved by the Owner. Refer to the

geotechnical report (Appendix A) for pertinent information, and as applicable, the Contractor shall review identified areas with the potential need for well points for deeper excavations based upon discussions with the geotechnical report preparer.

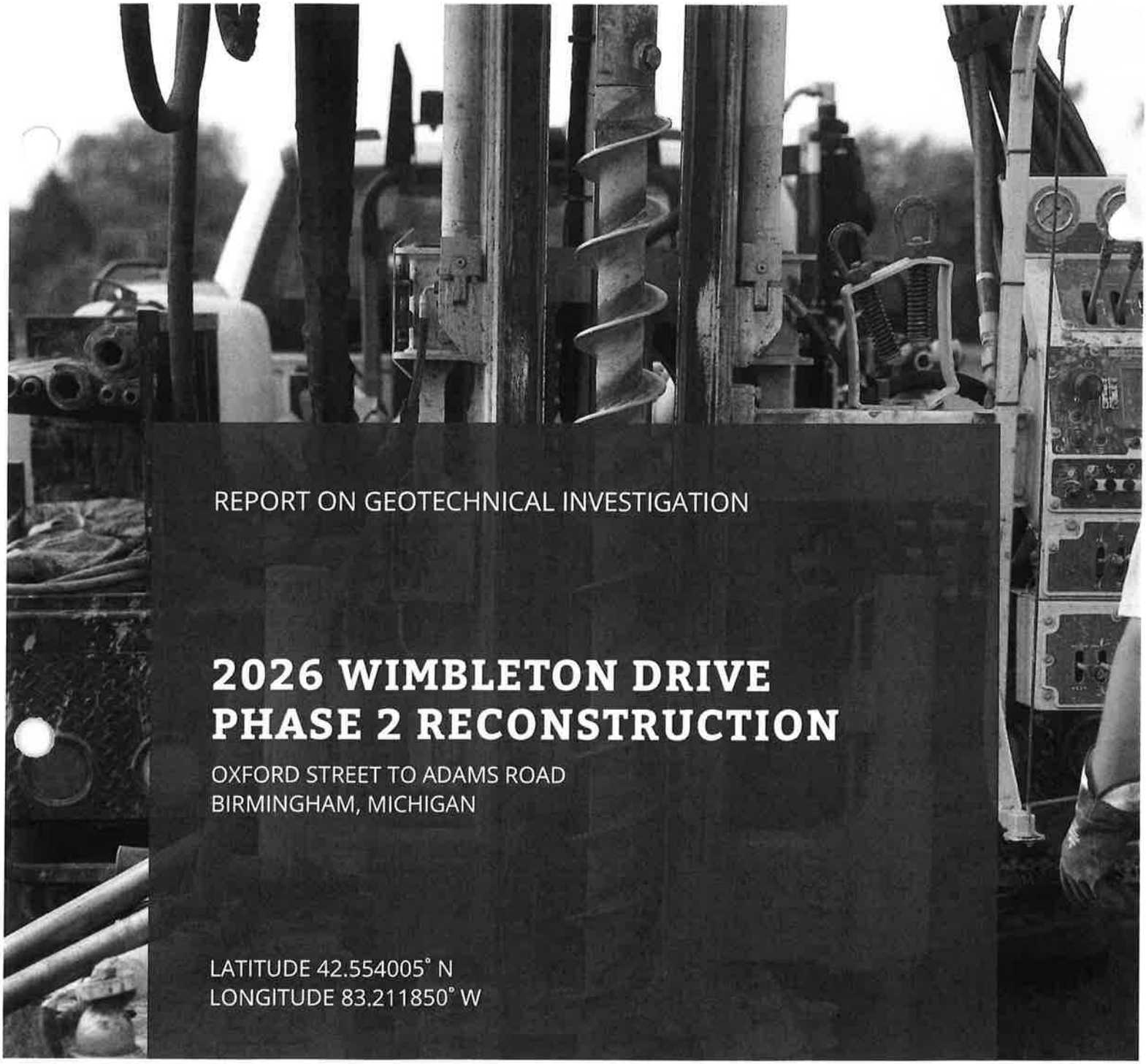
C. Drainage or discharge lines shall be connected to adjacent public storm water drains or extended to nearby water courses wherever possible. In any event, all pumping and drainage shall be done without damage to any highway or other property, public or private, and without interference with the rights of the public or private property owners and in accordance with the EGLE and local requirements for soil erosion and sedimentation control.

D. Costs for providing, maintaining, or operating any dewatering or drainage facilities will not be paid for separately and shall therefore be included in other items of work.

END OF SECTION

APPENDIX – A

SOIL BORING AND PAVEMENT CORE INFORMATION



REPORT ON GEOTECHNICAL INVESTIGATION

2026 WIMBLETON DRIVE PHASE 2 RECONSTRUCTION

OXFORD STREET TO ADAMS ROAD
BIRMINGHAM, MICHIGAN

LATITUDE 42.554005° N
LONGITUDE 83.211850° W

G2 CONSULTING GROUP

Prepared for:

Nowak & Fraus Engineers, Inc.
4777 Woodward Avenue
Pontiac, Michigan 48342

G2 Project No. 250772
November 12, 2025

CONSULTING GROUP
Smart.Results.Fast.

November 12, 2025

Mr. Brett J. Buchholz, P.E.
Principal
Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

RE: Report on Geotechnical Investigation
2026 Wimbleton Drive Phase 2 Reconstruction
Oxford Street to Adams Road
Birmingham, Michigan
G2 Project No. 250772

Dear Mr. Buchholz:

We have completed the geotechnical investigation for the proposed water main, sewer, and paving improvement project for the Wimbleton Drive Phase 2 project between Oxford Street and Adams Road within the City of Birmingham, Oakland County, Michigan. This report presents the results of our observations and analyses and our recommendations for pavement section design, underground utility replacement, and construction as they relate to the geotechnical conditions on site.

We appreciate the opportunity to be of service to the Nowak & Fraus Engineers, Inc., and the City of Birmingham on this project and look forward to discussing the recommendations presented. In the meantime, if you have any questions regarding this report or any other matter pertaining to the project, please contact us.

Sincerely,

G2 Consulting Group, LLC

Jeffrey M. Hayball, P.E.
Project Manager

James L. Berry, P.E.
Project Consultant

JMH/JLB/ljv

EXECUTIVE SUMMARY

The project consists of water main, sewer, and paving improvements for Wimbleton Drive between Oxford Street and Adams Road within the City of Birmingham, Michigan. Wimbleton Drive is generally a two-lane roadway within the project limits. The project also includes three additional roadway segments: the approach to Warwick Street, which extends north of Wimbleton Drive, and the two approaches of Poppleton Street, on the north and south sides of Wimbleton Drive. It is anticipated that paving will extend into the approaches a length of approximately 50 feet from Wimbleton Drive in each case.

Wimbleton Drive consists of bituminous concrete pavements with greenbelt present along the pavement edge. The existing bituminous concrete pavements are generally in fair to poor condition with areas of the surface exhibiting moderate transverse, reflective, and longitudinal cracking. Areas of high severity fatigue and block cracking are present to a lesser extent. The pavements are crowned allowing surface runoff water to drain into the adjacent greenbelt. Bituminous pavement along the routes is present and generally ranges in thickness from 4-3/4 to 6-1/2 inches. It appears the pavement is a combination of Hot-Mix-Asphalt that has been surfaced with one or multiple applications of a cape seal surface. The HMA pavement has been removed by recent construction at the ground surface of soil boring B-1. A natural medium compact gravelly sand aggregate base underlies the HMA pavement within borings B-1 through B-3 and extends to depths ranging from 12 inches to 3 feet below grade. Native stiff to hard silty clay is present below the pavement section within borings B-2 and B-3 and extends to depths of 4 and 17 feet, respectively. Native granular soils, consisting of very loose to compact silty sand, sandy silt, and silt, underlie the gravelly sand fill within boring B-1 and the native silty clay with borings B-2 and B-3, and extend to the explored depth of 25 feet.

Based on the proposed utility invert depths and existing ground water conditions, it will be necessary to temporarily lower the groundwater table prior to excavation in order to construct the utilities under dry conditions. We recommend temporary groundwater control consist of pumping from properly constructed sumps where the groundwater may need to be lowered only 1 to 2 feet. We recommend that well points be installed to lower the groundwater level more than 2 feet prior to beginning excavation operations.

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 2H:1V (horizontal: vertical) within the existing very loose to loose granular soils, 1-1/2H:1V within the medium compact to compact granular soils, and at a minimum of 1H:1V within the stiff to hard cohesive soils. Where seepage from excavation cuts is observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level.

Based on the proposed pavement section for Wimbleton Drive 2 inches of MDOT 5EML bituminous concrete wearing course, 3 inches of MDOT 3EML bituminous concrete leveling course, supported on a minimum of 8 inches of MDOT 21AA aggregate base. Alternatively, we recommend a Portland cement jointed plain concrete design section consisting of 7 inches of MDOT 3500HP Portland cement concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

This summary is not to be considered separate from the entire text of this report, with all the conclusions and recommendations mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the Appendix of this report.

PROJECT DESCRIPTION

The project consists of water main, sewer, and paving improvements for Wimbleton Drive between Oxford Street and Adams Road within the City of Birmingham, Michigan. Wimbleton Drive is generally a two-lane roadway within the project limits. The project also includes three additional roadway segments: the approach to Warwick Street, which extends north of Wimbleton Drive, and the two approaches of Poppleton Street, on the north and south sides of Wimbleton Drive. It is anticipated that paving will extend into the approaches a length of approximately 50 feet from Wimbleton Drive in each case.

Underground improvements include combined sewer upgrades and water main replacement along Wimbleton Drive. We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combined sewer. Current plans are to construct the pavements with a new Portland cement concrete or Hot Mix Asphalt (HMA) pavement section. No information regarding traffic counts along the roadway alignment was available upon completion of this report. We assume traffic volume and vehicle mix will be typical of residential streets in the Birmingham area.

SCOPE OF SERVICES

The field operations, laboratory testing, and engineering report preparation were performed under direction and supervision of a licensed professional engineer. Our services were performed according to generally accepted standards and procedures in the practice of geotechnical engineering in this area. Our scope of services for this project is as follows:

1. We performed a total of six (6) pavement cores, C-1 through C-3 and B-1 through B-3 through the existing pavements along Wimbleton Drive within the project limits. Three soil borings were performed at locations B-1 through B-3, extending to a depth of 25 feet each. We measured the existing pavement section material (HMA pavement and aggregate base) and identified the type and condition of subgrade soils.

2. We performed laboratory testing on representative samples obtained from our subsurface exploration. Laboratory testing included visual engineering classification, natural moisture content, grain-size distribution, and unconfined compressive strength determinations.

3. We prepared this engineering report. Our report includes recommendations for pavement reconstruction and underground utility replacement construction.

FIELD OPERATIONS

G2 Consulting Group, LLC, selected the number, depth, and location of the pavement core/soil borings. The pavement core/soil borings were located in the field by a G2 representative by measuring from existing site features and landmarks using conventional taping methods. The approximate pavement core/soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available at the time of the field investigation. We recommend the soil boring locations of B-1 through B-3, be surveyed so that soil and groundwater conditions can be referenced by elevation for use in construction.

We used a gas powered core rig equipped with a 6-inch diameter diamond-tipped core barrel to core the pavement at the pavement core/soil boring location. The pavement cores were drilled through the full depth of the existing pavement structure to obtain an accurate determination of the pavement thickness. The core samples were delivered to our laboratory for length measurement and photograph.

The soil borings were drilled using a truck-mounted rotary drilling rig. Continuous flight, 2-1/4-inch inside diameter, hollow-stem augers were used to advance the boreholes. The soil samples were obtained at intervals of 2-1/2 feet

within the upper 10 feet and at 5 feet intervals below 10 feet by the Standard Penetration Test (SPT) method ASTM D1586, which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N). The blow counts for each 6-inch increment and the resulting N-value are presented on the soil boring logs.

The soil samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. During the drilling operations, the drilling crew maintained logs of the encountered subsurface conditions, including changes in stratigraphy and observed groundwater levels of the soil borings to be used in conjunction with our analyses of the subsurface conditions. The final boring logs are based on the field logs and laboratory soil classification and testing. After completion of the drilling operations, the boreholes were backfilled with excavated soil and capped with cold patch.

LABORATORY TESTING

The pavement core sample and soil samples from the boring were delivered to the G2 laboratory in Troy, Michigan for photographs and length measurements of the core sample and basic index tests on soil samples. A photograph and length measurement for the core samples are presented as Figure Nos. 8 through 12 in the Appendix.

Representative soil samples were subjected to laboratory testing to determine soil parameters pertinent to pavement design and underground utility construction. An experienced geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System.

Laboratory testing included grain size distribution, natural moisture content, and unconfined compressive strength determinations. Grain-size distribution was determined in general conformance with ASTM C 136 method of testing. The unconfined compressive strengths were determined using a spring-loaded hand penetrometer. The hand penetrometer estimates the unconfined compressive strength to a maximum of 4-1/2 tons per square foot (tsf) by measuring the resistance of the soil sample to the penetration of a calibrated spring-loaded cylinder.

The results of the moisture content and unconfined compressive strength laboratory tests are indicated on the soil boring logs at the depths the samples were obtained. The grain-size analyses are presented in the Appendix as Grain Size Distribution, Figure No. 7. We will hold the soil samples for 60 days from the date of this report. If you would like the samples, please let us know.

PAVEMENT AND SUBSURFACE SOIL CONDITIONS

The project begins on Wimbleton Drive, east of Oxford Street, with an eastbound and westbound travel lane until the project limits at Adams Road. The project also includes the approaches at Warwick Street and Poppleton Street. Residential properties are present along Wimbleton Drive within the project limits. A topographic survey was not available upon completion of this report. However, site grades along Wimbleton Drive are relatively level as any minor grade changes are gradual along the roadway alignment.

Wimbleton Drive consists of bituminous concrete pavements with greenbelt present along the pavement edge. The existing bituminous concrete pavements are generally in fair to poor condition with areas of the surface exhibiting moderate transverse, reflective, and longitudinal cracking. Areas of high severity fatigue and block cracking are present to a lesser extent. The pavements are crowned allowing surface runoff water to drain into the adjacent greenbelt.

Bituminous pavement along the routes is present and generally ranges in thickness from 4-3/4 to 6-1/2 inches. It appears the pavement is a combination of Hot-Mix-Asphalt that has been surfaced with one or multiple

applications of a cape seal surface. The HMA pavement has been removed by recent construction at the ground surface of soil boring B-1. A natural gravelly sand aggregate base underlies the HMA pavement within borings B-1 through B-3 and extends to depths ranging from 12 inches to 3 feet below grade.

Native silty clay is present below the pavement section within borings B-2 and B-3 and extends to depths of 4 and 17 feet, respectively. Native granular soils, consisting of silty sand, sandy silt, and silt, underlie the gravelly sand fill within boring B-1 and the native silty clay with borings B-2 and B-3, and extend to the explored depth of 25 feet.

The gravelly sand fill within boring B-1 is medium compact with a Standard Penetration Test of 17 blows per foot (bpf). The native silty clay is stiff to hard in consistency with natural moisture contents ranging from 12 to 19 percent and unconfined compressive strengths ranging from 2,500 to 9,000 pounds per square feet (psf). The native granular soils are generally very loose to medium compact with SPT N-values ranging from 0 to 16 bpf. However, the native granular soils within boring B-2 between 13 and 18 feet and within boring B-3 below 21 feet are compact with SPT N-values ranging from 41 to 48 bpf.

The stratification depths shown on the soil boring logs represent the soil conditions at the boring locations. Variations may occur between borings. Additionally, the stratigraphic lines represent the approximate boundaries between soil types. The transition may be more gradual than what is shown. We have prepared the boring logs on the basis of laboratory classification and testing as well as field logs of the soils encountered.

Soil Boring Location Plan, Plate No. 1, Soil Boring Logs, Figure Nos. 1 through 6, and Grain Size Distribution, Figure No. 7, are presented in the Appendix. Photographs of the pavement core samples are included as Figure Nos. 8 through 12. The soil profiles described above are generalized descriptions of the conditions encountered at the boring locations. General Notes Terminology defining the nomenclature used on the soil boring logs and elsewhere in this report are presented on Figure No. 13.

GROUNDWATER CONDITIONS

Groundwater observations were made during and upon completion of drilling operations. During drilling operations, groundwater was observed within borings B-1 through B-3 at depths ranging from 6 to 17 feet. Upon completion of drilling operations, groundwater was measured at an approximate depth of 13-1/2 feet within boring B-1. No measurable groundwater was observed within borings B-2 and B-3 upon completion of drilling operations. Fluctuations in perched and long-term groundwater levels should be anticipated due to seasonal variations and following periods of prolonged precipitation.

UNDERGROUND UTLITY CONSTRUCTION RECOMMENDATIONS

General

We assume underground utilities will be installed using open-cut installation methods. It is assumed that maximum excavation depths for the water main will extend up to 6-1/2 feet and between 9 to 15 feet for the combine sewer. Once the proposed pipeline profile becomes available and the pipeline installation methods for each segment of the pipeline alignment have been established, G2 should be notified so that we can review our recommendations presented herein.

Groundwater Control

Groundwater was observed within the soil borings depths ranging from 9 to 17 feet during drilling operations. The proposed water main invert is approximately 6-1/2 feet below existing grades and sewer invert depths ranging from 9 to 15 feet below existing grades. Therefore, it will be necessary to temporarily lower the groundwater table

prior to excavation in order to construct the utilities under dry conditions. We anticipate construction dewatering will be required near borings B-1 and B-2.

We recommend temporary groundwater control consist of pumping from properly constructed sumps where the groundwater may need to be lowered only 1 to 2 feet. We anticipate this will be required in the areas of soil boring B-2 for the new water main construction. We recommend that well points be installed to lower the groundwater level more than 2 feet prior to beginning excavation operations. We anticipate well points may be required in the areas of soil borings B-1 and B-2 for construction of the combined sewer. Well point dewatering may be required in the area of boring B-3 if excavations extend below a depth of approximately 17 feet. The well points should be installed by a qualified dewatering contractor.

The number of wells will depend on the depth of the wells, the size of the pump that will be used, and the effective hydraulic conductivity of the soils being dewatered. The dewatering contractor should perform his own pump tests to determine the actual hydraulic conductivity of the soil and establish prevailing groundwater levels in the area at the time of construction. For estimation purposes, it may be assumed that the silty sand will have approximate hydraulic conductivities ranging from $1x10^{-3}$ to $1x10^{-4}$ cm/s, and the sand silt and silt will have approximate hydraulic conductivities ranging from $1x10^{-4}$ to $1x10^{-6}$ cm/s.

Open Cut Excavations

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 2H:1V (horizontal: vertical) within the existing very loose to loose granular soils, 1-1/2H:1V within the medium compact to compact granular soils, and at a minimum of 1H:1V within the stiff to hard cohesive soils. Where seepage from excavation cuts is observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the embankments to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in slope faces should be inspected by qualified personnel so modifications of the slopes can be made if variations in the soil or water conditions occur. If sufficient space for open cut consideration is not available trench box shoring may be used.

Trench box shoring may be used provided some lateral deflection of adjacent soils can be tolerated. If a trench box is used, excavations should be performed from within the trench box, such that no unsupported vertical cut is allowed to exist. A trench box is not recommended where adjacent utilities, roadways, or structures are located less than a lateral distance delineated by a plane extending upward from the bottom edges of the excavation at a 1H:1V slope.

All excavations should be safely sheeted, shored, sloped, or brace in accordance with MI-OSHA requirements. If material is stored or equipment is operated near the excavation, stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should always be exercised when excavating near existing buildings, roadways, or utilities to avoid undermining. In no case should excavations extend below the level of adjacent structures or utilities unless underpinning is planned.

Pipeline Support

Based on the observed subsurface conditions and the anticipated invert elevations, we expect the proposed combined sewer and water main will generally be supported on very loose to medium compact granular soils and very stiff to hard silty clay. In general, these soils are adequate for support of the utilities; however, where very loose granular soils are present within any open-cut excavations, we recommend the water main trench invert at approximate depths of 6-1/2 feet be compacted to further densify any loose granular material. Bedding material for the proposed sewer should consist of MDOT 6A open-graded material. Differential movements of the sewer

pipeline may occur if the trench bottom is not adequately stabilized. The exposed subgrade should be visually evaluated for stability prior to the backfilling of the construction excavations.

Trench Backfill

The existing gravelly sand fill and native silty clay are not suitable to be reused as backfill within construction excavations. However, the existing native silty sand can be reused as engineered fill provided it is place near its optimum moisture content. We recommend clean granular engineered fill should be used to backfill around water main and the remainder of the utility trench. We recommend open graded pipe bedding or MDOT Class II sand be used as backfill around the sewer or water main pipe up to the springline of the pipe, while making sure that the void beneath the haunches of the pipe are completely filled. The initial lift should be compacted using light-duty compaction equipment, such as walk-behind vibratory plate compactors, and should be compacted in a manner that will not disturb the pipe alignment. The next lift of engineered fill may then be placed to 9 inches above the top of the pipe. Again, light-duty compaction equipment should be used to complete the compaction of the engineered fill.

After the bedding material and initial lift of backfill has been placed and compacted, the remainder of the trench should be backfilled in an engineered manner. The engineered fill should be free of organic matter, frozen soil, clods, or other harmful material. All engineered backfill should be placed in loose layers not to exceed 9 inches in thickness and should be mechanically compacted to achieve a density of at least 95 percent of the materials maximum dry density as determined by the Modified Proctor compact test (ASTM D1557) or in accordance with the latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". Granular engineered fill material should be placed and compacted at moisture contents within 2 percent above or below the optimum moisture content.

PAVEMENT RECOMMENDATIONS

General

The proposed Wimbleton Drive pavement improvements are to reconstruct the existing pavements over newly installed underground utilities with a new Portland cement concrete or bituminous concrete pavement section. At the time of the investigation, finished site grades were not available. The underlying subgrade soils should be suitable for support of proposed pavements following satisfactory completion of subgrade preparation operations as described in the Pavement Subgrade Preparation Recommendations section of this report.

Pavement Subgrade Preparation Recommendations

The existing bituminous concrete pavements should be completely removed. The exposed subgrade soils should be graded to promote effective subsurface drainage and then compacted. Once a rough grade has been achieved, the exposed subgrade soils should be evaluated for stability. We recommend the existing granular subgrade soils be proof compacted with a large vibratory roller. We recommend the roller make a minimum of 10 passes across the granular subgrade soils. If cohesive soils are present, we recommend cohesive subgrade soils be proof rolled with a fully loaded tri-axle dump truck. Any unstable or unsuitable areas noted should be improved by additional compaction or removed and replaced with engineered fill.

Subgrade undercuts, if required, should be evaluated by a qualified engineering technician to determine if subgrade stabilization is necessary. We recommend that undercut excavations, where required, be backfilled MDOT 21AA placed in an engineered manner. Lift thicknesses should not exceed 9 inches. All engineered fill should be compacted to a density of at least 95 percent of the maximum density determined by the Modified Proctor (ASTM D 1557) method of testing or in accordance with the latest version of the Michigan Department of Transportation "Density Testing and Inspection Manual". All engineered fill material should be placed and

compacted at approximately the optimum moisture content. Frozen material should not be used as fill, nor should fill be placed on a frozen subgrade.

Pavement Design

We performed pavement design analyses in accordance with the "AASHTO Guide for Design of Pavement Structures". The subgrade soils will generally consist of fill soils and engineered fill placed over utilities. Based on the existing subgrade soils, we have provided design pavement sections based on an effective subgrade resilient modulus of 5,000 pounds per square inch (psi) and an effective modulus of subgrade reaction, k, of 50 pounds per cubic inch (pci).

For the proposed new pavement section, we estimated a serviceability loss of 2.0, a standard deviation of 0.39 for rigid pavements, a standard deviation of 0.49 for flexible pavements, a reliability factor of 0.95, load transfer coefficient of 3.2, a drainage coefficient of 1.0, a Portland cement concrete modulus of rupture of 670 psi, and an elastic modulus of the Portland cement concrete slab of 4,200,000 psi all in accordance with MDOT design guidelines. The bituminous concrete pavement materials are described in MDOT Section 501 and can be assigned a structural coefficient number of 0.42. Any imported aggregate base material can be assigned a structural coefficient number of 0.14. The proposed pavement section is designed to support 200,000 18-kip Equivalent Single-Axle Loads over a 20 year design life. If traffic volume information changes, G2 Consulting Group should be notified so we can reevaluate our recommendations.

Based on the proposed pavement section for Wimbleton Drive 2 inches of MDOT 5EML bituminous concrete wearing course, 3 inches of MDOT 3EML bituminous concrete leveling course, supported on a minimum of 8 inches of MDOT 21AA aggregate base. Alternatively, we recommend a Portland cement concrete design section consisting of 7 inches of MDOT 3500HP Portland cement jointed plain concrete supported on a minimum of 8 inches of MDOT 21AA aggregate base.

Binder grades PG 64-28 are suitable for use with the bituminous concrete mixtures. Top course mixtures should be limited to Tier 1 Recycled Asphalt Percentage (RAP) addition requirements as noted in MDOT Special Provision 12SP501(E) to reduce early age cracking. Any imported aggregate base should consist of MDOT 21AA aggregate. MDOT 3500HP grade concrete is recommended for mainline paving. It is recommended that 3500HP grade concrete mixtures contain at most 25 percent GGBFS substitution for Portland cement or use low alkali (0.6% or less total cement alkali) Type I, Type II, or Type IL cement. If Type IL cement is used, a maximum water / cementitious (w/cm) ratio of 0.43 is recommended for the mixtures. All pavement materials are specified within the 2020 Standard Specifications for Construction from the Michigan Department of Transportation.

All pavement materials are specified within the 2020 Standard Specifications for Construction from the Michigan Department of Transportation. The bituminous concrete pavement materials are described in Section 501 and can be assigned a structural coefficient number of 0.42. Any imported aggregate base material can be assigned a structural coefficient number of 0.14.

Pavement Drainage

We recommend the proposed pavement have Portland cement concrete curbs with catch basins to provide surface drainage. We recommend subgrade under drains be provided continuously along curbs since they can become a source of water infiltration into the pavement subgrade. Such drains should extend to minimum depths of 4 inches below the bottom of the proposed aggregate base course or granular fill placed within undercut areas. These drains could be connected to nearby catch basins. The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding. We also recommend pavement subbase materials consist of non-frost-susceptible aggregates where possible.

Pavement Maintenance

We recommend that the joints within newly constructed Portland cement concrete pavements be sealed with hot rubber to prevent moisture intrusion into the subgrade soils below, as well as prevent spalling of the joint due to material entering the joint.

Regular timely maintenance should be performed on the pavement to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils. In addition, regular joint maintenance should be performed.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to underground utility construction, site preparation, and pavement reconstruction on the basis of data provided to us relating to the general location for the proposed pavement improvements. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions.

The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the new underground utilities, pavements, and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

We have based the analyses and recommendations submitted in this report upon the data from soil borings performed at the approximate locations shown on the Soil Boring Location Plan, Plate No. 1. This report does not reflect variations that may occur between the actual boring locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

Soil conditions at the site could vary from those generalized on the basis of soil borings made at specific locations. It is, therefore, recommended that G2 Consulting Group, LLC be retained to provide soil engineering services during the site preparation and pavement construction phases of the proposed project. This is to observe compliance with the design concepts, specifications, and recommendations. Also, this allows design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction.

APPENDIX

SOIL BORING LOCATION PLAN	PLATE NO. 1
SOIL BORING LOGS	FIGURE NOS. 1 THROUGH 6
GRAIN SIZE DISTIBUTION	FIGURE NO. 7
PHOTOGRAPHIC DOCUMENTATION	FIGURE NOS. 8 THROUGH 12
GENERAL NOTES TERMINOLOGY	FIGURE NO. 13



Legend

Pavement Core/Soil Borings performed by 2G Drilling on November 3, 2025

Soil Boring Location Plan

2026 Wimbleton Phase 2 Reconstruction
Oxford Street to Adams Road
Birmingham, Michigan

2G CONSULTING GROUP Smart.Results.Fast.

Project No. 250772	
Drawn by: JMH	
Date: 11/11/2025	Plate No. 1
Scale: NTS	

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No. 250772

Soil Boring No. B-1

CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Fill: Medium Compact Dark Brown Gravelly Sand with little clay	
		3.0	
5		Very Loose Brown Silty Sand with trace clay and gravel	5
10			10
		12.0	
15		Very Loose Brown Silty Sand with trace gravel	15
20		20.0	20
25		Medium Compact Gray Silty Sand with trace clay and gravel	25
		25.0	
		End of Boring @ 25 ft	
30			30

SOIL SAMPLE DATA

SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
S-1	9 10 7	17			
S-2	2 1 2	3			
S-3	2 2 2	4			
S-4	4 4 2	6			
S-5	1 0 0	0			
S-6	1 0 0	0			
S-7	7 6 10	16			

Total Depth: 25 ft
Drilling Date: November 03, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
12 feet during; 13-1/2 feet upon completion

Notes:
Pavement is a mix of HMA and Chip Seal
Borehole collapsed at 14.5 ft after auger removal

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 1

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No. 250772

Soil Boring No. B-2

CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

- HMA Pavement (4-3/4 inches) — 0.4
- Fill: Dark Brown Gravelly Sand with little clay — 1.5
- Stiff Brown Silty Clay with trace sand and gravel — 4.0
- Loose Brown Silty Sand with trace clay and gravel — 8.5
- Medium Compact to Compact Gray Sandy Silt with trace clay and gravel — 23.0
- Medium Compact Gray Silt with trace clay, sand, and gravel — 25.0
- End of Boring @ 25 ft

SOIL SAMPLE DATA

DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
	S-1	2 2 3	5	18.1		2500*
	S-2	3 3 4	7			
5	S-3	4 4 4	8			
	S-4	7 7 9	16			
10	S-5	14 18 23	41			
15	S-6	6 6 10	16			
20	S-7	7 9 7	16			
25						
30						

Total Depth: 25 ft
Drilling Date: November 03, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
6 feet during; dry upon completion

Notes:
Pavement is a mix of HMA and Chip Seal
Borehole collapsed at 14.0 ft after auger removal
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 2

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No. 250772

Soil Boring No. B-3

CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE	
		HMA Pavement (6 inches) 0.5
		Fill: Dark Brown Gravelly Sand with little clay 1.0
5		Very Stiff to Hard Brown and Gray Silty Clay with trace sand and gravel, occasional sand seams
10		13.0
15		Very Stiff Gray Silty Clay with trace sand and gravel
		17.0
20		Medium Compact Gray Sandy Silt with trace clay and gravel
		21.0
25		Compact Gray Silt with trace clay, sand, and gravel
		25.0
30		End of Boring @ 25 ft

SOIL SAMPLE DATA

DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
	S-1	2 2 3	5	18.5		2500*
5	S-2	2 2 4	6			3000*
	S-3	4 6 8	14			7000*
10	S-4	6 8 10	18			9000*
	S-5	3 4 6	10			5000*
15						
	S-6	3 5 6	11			
20						
	S-7	18 20 28	48			
25						
30						

Total Depth: 25 ft
Drilling Date: November 03, 2025
Inspector:
Contractor: 2G Drilling
Driller: Q. Torres

Drilling Method:
6-inch diameter diamond tipped core barrel; 2-1/4 inch inside diameter hollow-stem augers

Water Level Observations:
17 feet during; dry upon completion

Notes:
Pavement is a mix of HMA and Chip Seal
Borehole collapsed at 18.5 ft after auger removal
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger Cuttings and capped with cold patch

Figure No. 3

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No. 250772

Soil Boring No. C-1

G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		HMA Pavement (6-1/2 inches) 0.5							
		End of Boring @ 0 ft							
5			5						
10			10						
15			15						
20			20						
25			25						
30			30						

Total Depth: 1 ft
Drilling Date: October 27, 2025
Inspector:
Contractor: G2 Consulting Group, LLC
Driller: A. Nolan

Drilling Method:
6-inch diameter diamond tipped core barrel

Water Level Observations:
Dry during and upon completion

Notes:
Pavement is a mix of HMA and Chip Seal

Excavation Backfilling Procedure:
Cold Patch

Figure No. 4

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No. 250772

Soil Boring No. C-2

G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		HMA Pavement (5-1/4 inches) 0.4							
		End of Boring @ 0 ft							
5			5						
10			10						
15			15						
20			20						
25			25						
30			30						

Total Depth: 1 ft
Drilling Date: October 27, 2025
Inspector:
Contractor: G2 Consulting Group, LLC
Driller: A. Nolan

Drilling Method:
6-inch diameter diamond tipped core barrel

Water Level Observations:
Dry during and upon completion

Notes:
Pavement is a mix of HMA and Chip Seal

Excavation Backfilling Procedure:
Cold Patch

Figure No. 5

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No. 250772

Soil Boring No. C-3

G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		HMA Pavement (6-1/2 inches) 0.5							
		End of Boring @ 0 ft							
5			5						
10			10						
15			15						
20			20						
25			25						
30			30						

Total Depth: 1 ft
Drilling Date: October 27, 2025
Inspector:
Contractor: G2 Consulting Group, LLC
Driller: A. Nolan

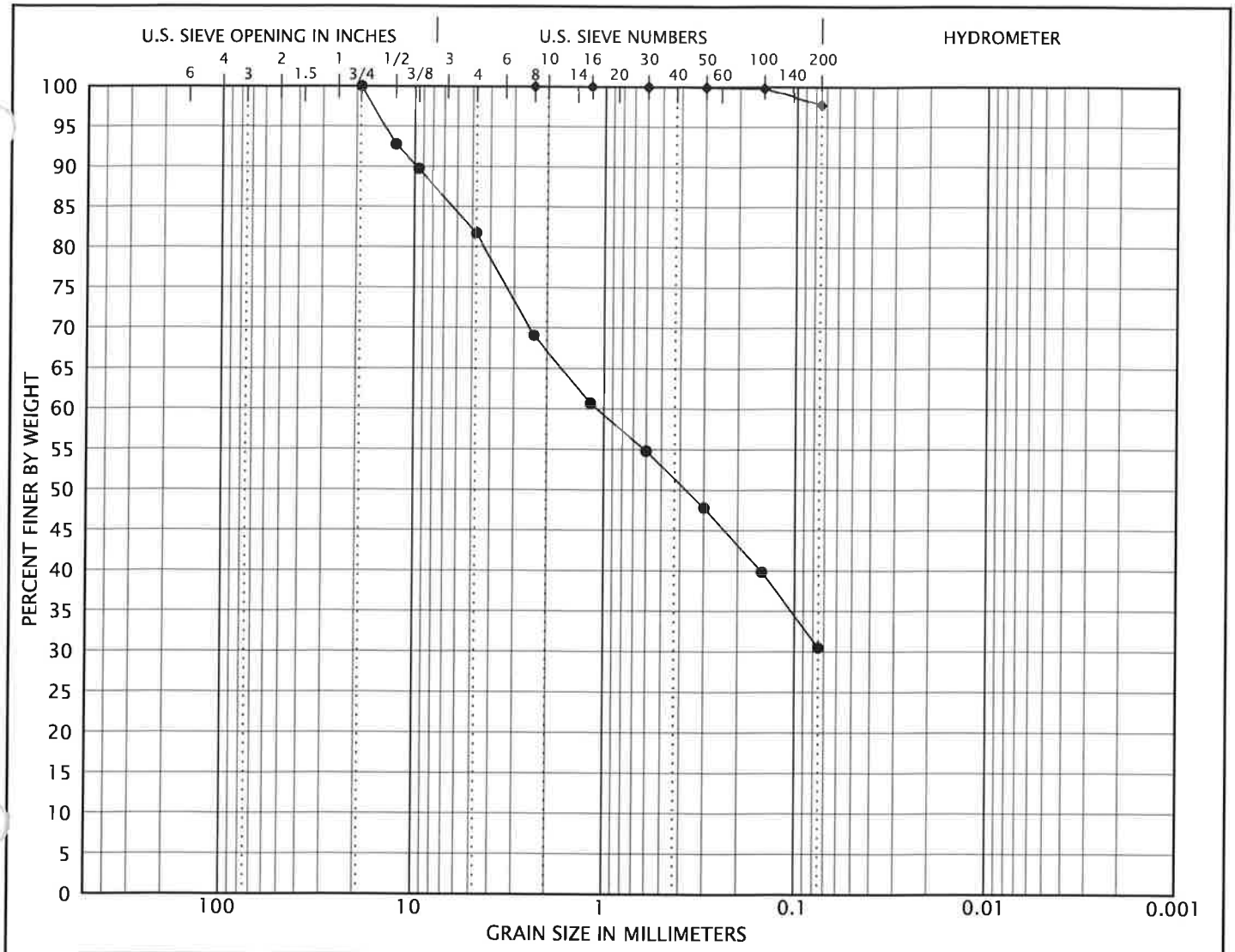
Drilling Method:
6-inch diameter diamond tipped core barrel

Water Level Observations:
Dry during and upon completion

Notes:
Pavement is a mix of HMA and Chip Seal

Excavation Backfilling Procedure:
Cold Patch

Figure No. 6



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen ID		Description	Cc	Cu
●	B-1	S-6	Gray Silty Sand with little gravel		
◆	B-2	S-5	Gray Silt with trace sand		

	Specimen ID		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-1	S-6	19	1.112			18.3	51.2	30.5	
◆	B-2	S-5	2.36						97.7	

CONSULTING GROUP

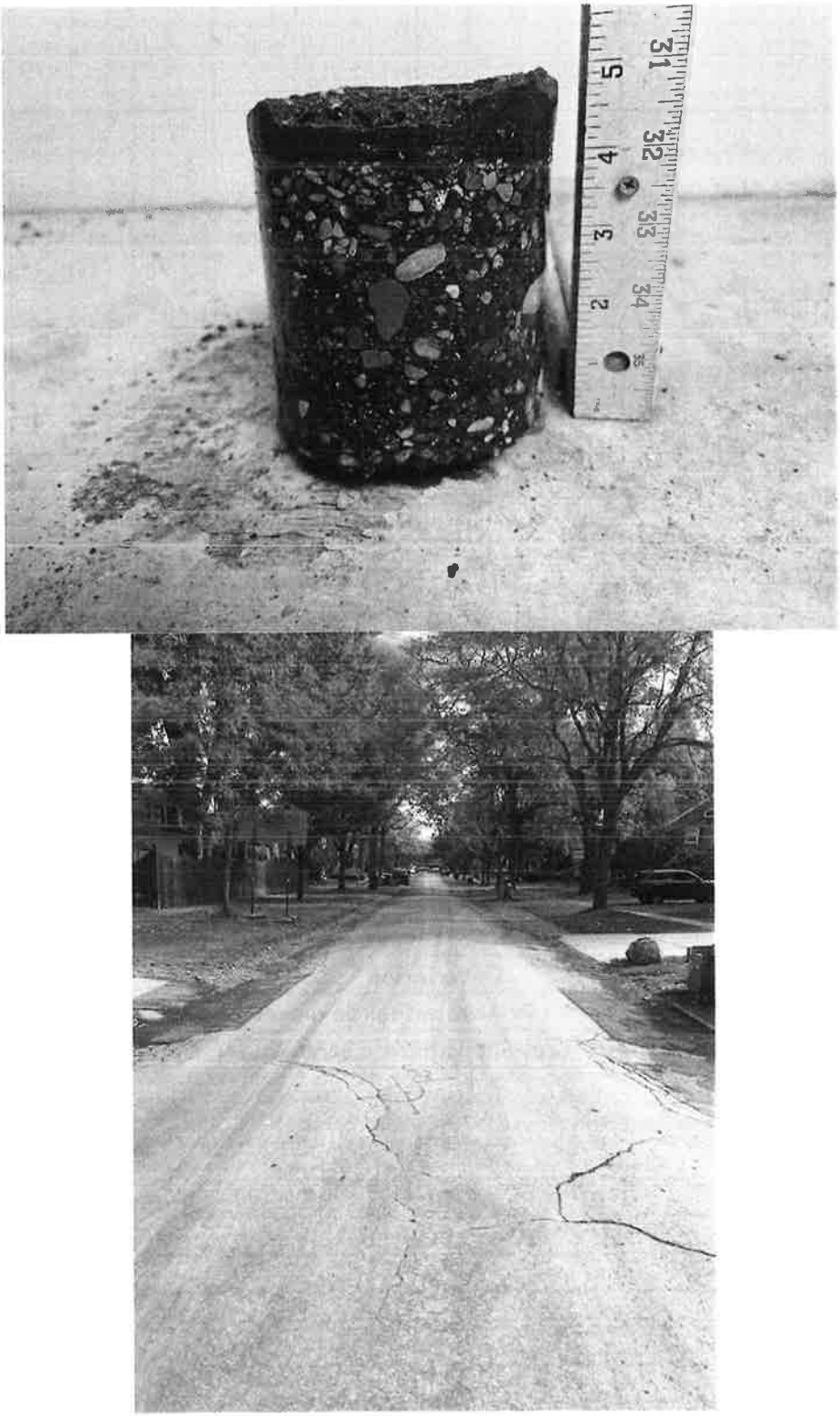
GRAIN SIZE DISTRIBUTION

Project Name: 2026 Wimbleton Phase 2 Reconstruction

Project Location: Oxford Street to Adams Road
Birmingham, Michigan

G2 Project No.: 250772

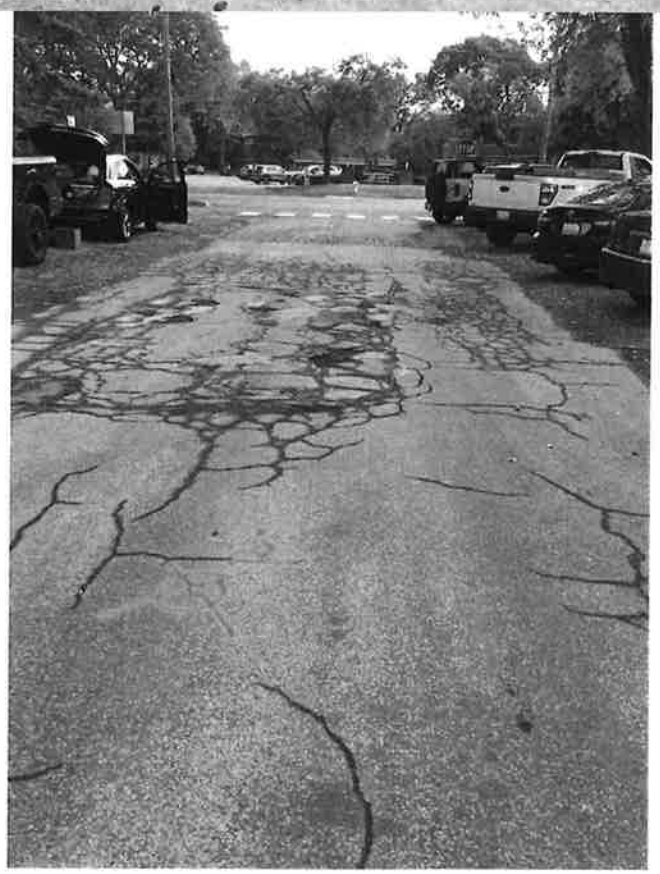
Figure No. 7



Core Photograph B-2: HMA Pavement = 4-3/4 inches

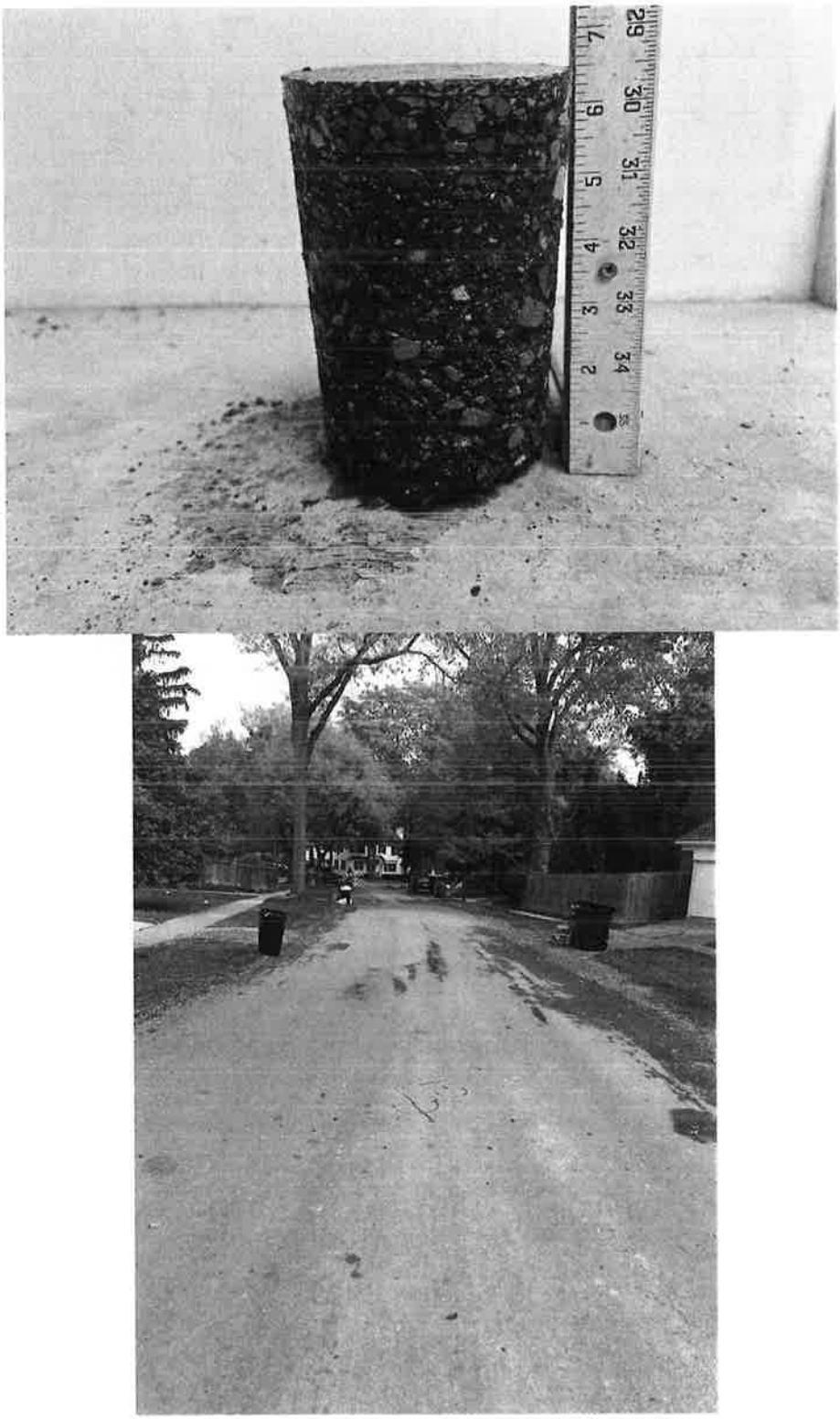
Figure No. 8





Core Photograph B-3: HMA Pavement = 6 inches

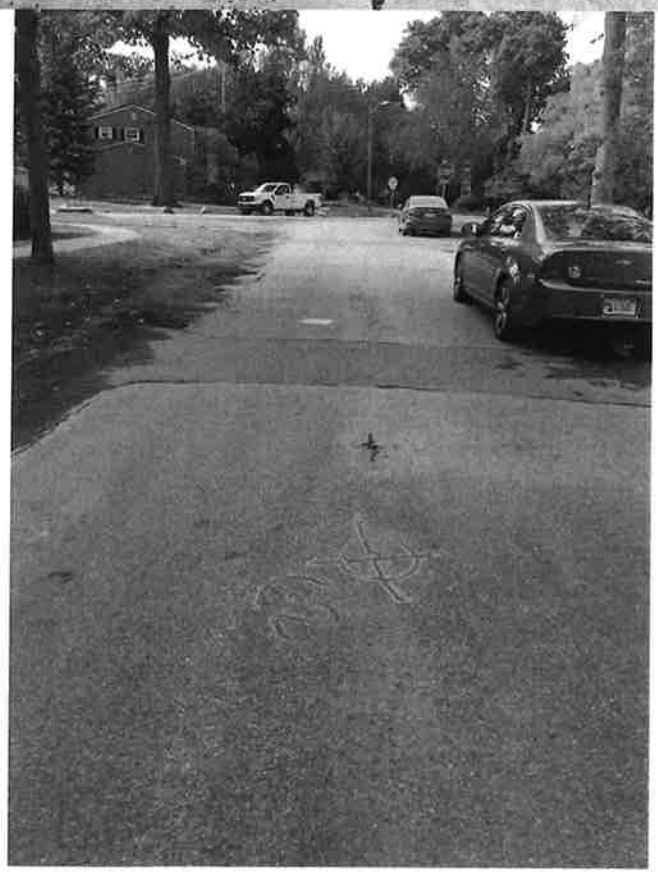
Figure No. 9



Core Photograph C-1: HMA Pavement = 6-1/2 inches

Figure No. 10





Core Photograph C-2: HMA Pavement = 5-1/4 inches

Figure No. 11



Core Photograph C-3: HMA Pavement = 6-1/2 inches

Figure No. 12

GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM D 653.

PARTICLE SIZE

Boulders		- greater than 12 inches
Cobbles		- 3 inches to 12 inches
Gravel	- Coarse	- 3/4 inches to 3 inches
	- Fine	- No. 4 to 3/4 inches
Sand	- Coarse	- No. 10 to No. 4
	- Medium	- No. 40 to No. 10
	- Fine	- No. 200 to No. 40
Silt		- 0.005mm to 0.074mm
Clay		- Less than 0.005mm

CLASSIFICATION

The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows:

Second Major Constituent (percent by weight)	Minor Constituent (percent by weight)
Trace - 1 to 12%	Trace - 1 to 12%
Adjective - 12 to 35%	Little - 12 to 23%
And - over 35%	Some - 23 to 33%

COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with the other major soil constituent as modifier, i.e. sandy clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils, i.e. silty clay, trace sand, little gravel.

Consistency	Unconfined Compressive Strength (psf)	Approximate Range of (N)
Very Soft	Below 500	0 - 2
Soft	500 - 1,000	3 - 4
Medium	1,000 - 2,000	5 - 8
Stiff	2,000 - 4,000	9 - 15
Very Stiff	4,000 - 8,000	16 - 30
Hard	8,000 - 16,000	31 - 50
Very Hard	Over 16,000	Over 50

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon the Standard Penetration Resistance (N).

COHESIONLESS SOILS

Density Classification	Relative Density %	Approximate Range of (N)
Very Loose	0 - 15	0 - 4
Loose	16 - 35	5 - 10
Medium Compact	36 - 65	11 - 30
Compact	66 - 85	31 - 50
Very Compact	86 - 100	Over 50

Relative Density of cohesionless soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

SAMPLE DESIGNATIONS

AS - Auger Sample – Cuttings directly from auger flight
BS - Bottle or Bag Samples
S - Split Spoon Sample - ASTM D 1586
LS - Liner Sample with liner insert 3 inches in length
ST - Shelby Tube sample - 3 inch diameter unless otherwise noted
PS - Piston Sample - 3 inch diameter unless otherwise noted
RC - Rock Core - NX core unless otherwise noted

STANDARD PENETRATION TEST (ASTM D 1586) - A 2.0 inch outside-diameter, 1-3/8 inch inside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

Figure No. 13

CITY OF BIRMINGHAM
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

ADDENDUM
NO. 1

Friday, March 27, 2026

The following is a summary of the scope of work revisions and revisions to the bidding/contract documents that shall be incorporated into the project as Addendum #1:

1. **Specifications:**
    a. **Revised Proposal Form Section 100:**
        i. Bidders are hereby instructed to use the revised Section 100 Proposal form for completing their bids, which contains pay item and quantity revisions based on the revised scope of work described herein. The revised proposal form includes acknowledgement of receipt of addendum #1 and the addendum #1 date of 03/27/26.
    b. **Supplemental Instructions to Bidders Section 301:**
        i. Bidders are hereby instructed to review this revised document thoroughly, as it contains revised scheduling/phasing information:
            1. Stipulations on project phasing/schedule requirements to coordinate with the 2026 Woodward Avenue Dream Cruise event.
            2. Penalties associated with construction trucking/traffic routes outside of the allowable routes that have been added to the project drawings and described in this addendum ($10,000.00 per occurrence).
            3. Revised substantial and final completion date information (Storm Outfall Division 5 pay item work has separate dates to allow this work to potentially be completed later in 2026).
2. **Drawings**
    a. Cover sheet:
        i. Allowable trucking routes have been added to the cover sheet. No construction trucks shall be allowed to access the portion of Wimbleton Drive between Woodward Avenue and Oxford Drive (the recently completed Phase 1 project), including the Wimbleton/Oxford intersection. Other routes shown are to provide ingress/egress access from Adams Road.
    b. Utility Plan Sheets C01 thru C09:
        i. Storm inlet/CB sizing and configurations have been revised. Typical orientation now includes a 2' inlet on the north side of the road, which flows into a 4' CB with 4 deep sump and sediment trap, which then flows into the storm manhole built over the main storm conveyance system that flows east and west. The previous pay item for 4' CB's with 4' sump and offset grates has been removed

from the scope of work, and the detail has been removed from sheet C19. 4' deep sumps and sediment traps are still required at all 4' diameter catch basins (see section 900 specifications for sediment trap material requirements).

ii. Minor revisions to the water main elevations, proposed crossing locations & schedule information, and utility profile sheets have been completed to account for the storm/inlet revisions.

c. Utility Service Plan Sheets C10 thru C11:
   i. Additional callouts have been added to reflect trees that need to be maintained and trees that will be removed in advance of construction by City DPS.
   ii. Tree protection details and notes have been added.
   iii. Minor callout/service schedule updates to the water/sewer replacement scope of work:
      1. #871 Poppleton requires initial investigation of existing water service to be performed in advance of water main construction work to determine if lead is present (this initial investigation work is included as incidental to other work in the contract, and does not have a separate pay item).
      2. Similarly, a callout has been added for #612 Wimbleton to determine if any lead material is present (this verification can occur concurrent with other water main or service work, as the city records indicate an old lead service line was previously disconnected but left in the ground).
      3. #887 water service line replacement to the north ROW line has been added. A new pay item has also been added for "New Water Service, 1.5", Trench A, Copper" to cover this replacement.
   iv. Paving and Grading Plan Sheets C12 thru C18:
      1. Minor grading updates and clarifications of proposed grading design.
      2. Callouts added to sheets C12, C13, and C15 to clarify scope of work for removing, salvaging, and replacing the minimal amounts of existing signs on this project.
   v. Advanced Warning and Signage (AWS) Traffic Diagram
      1. Note added to clarify reference the allowable construction traffic/trucking routes and stipulate that construction traffic will not be allowed on Wimbleton between Woodward Avenue and the westerly construction limits (including Oxford intersection).
      2. Note added to reference storm outfall plans for additional traffic control requirements associated with mobilization for the storm outfall work on Woodward Avenue.
   vi. Quantities Q1
      1. Pay items and quantities updated based on the scope of work revisions.
      2. Note that pay item for Tree Removals to be completed by the contractor has been added as a pay item, and is specific for the tree removals included as part of the Division 5 Storm Outfall work.

End of Addendum

CITY OF BIRMINGHAM
WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

ADDENDUM NO. 2

Tuesday, April 5, 2026

The following is a summary of the scope of work revisions and revisions to the bidding/contract documents that shall be incorporated into the project as Addendum #1:

1. **Specifications:**
    a. **Revised Proposal Form Section 100:**
        i. Bidders are hereby instructed to use the revised Section 100 Proposal form for completing their bids, which contains the following pay item/quantity revisions:
            1. Quantity for Pay Item No. 69 "Bituminous Mixture No. 4EML (Handpatching)" is reduced to 3 tons (from previous 300 tons).
        ii. This change is to correct a previous typographical error in the quantity for this pay item.
        iii. The revised proposal form includes acknowledgement of receipt of addendum #2 and the addendum #2 date of 04/05/26.

End of Addendum

ANGCIV

ACORD INSURANCE BINDER

DATE 04/30/26

THIS BINDER IS A TEMPORARY INSURANCE CONTRACT, SUBJECT TO THE CONDITIONS SHOWN ON THE REVERSE SIDE OF THIS FORM.

PRODUCER		COMPANY	BINDER #
PHONE (A/C, No, Ext): 248-355-4411 FAX (A/C, No): 248 355-2175		Selective Insurance Company of Amer	BINDER132572
ZERVOS GROUP INC 24724 Farmbrook Rd Southfield, MI 48034-1211		EFFECTIVE DATE: 04/30/26 TIME: 12:01 X AM / PM	EXPIRATION DATE: 05/30/26 X 12:01 AM / NOON
CODE: 38-3112729	SUB CODE:	THIS BINDER IS ISSUED TO EXTEND COVERAGE IN THE ABOVE NAMED COMPANY PER EXPIRING POLICY #:	
AGENCY CUSTOMER ID: 7304		DESCRIPTION OF OPERATIONS/VEHICLES/PROPERTY (Including Location)	
INSURED: City of Birmingham 151 Martin St Birmingham MI 48009		Wimbleton Drive, Birmingham, MI	

COVERAGES

TYPE OF INSURANCE	COVERAGE/FORMS	LIMITS: DEDUCTIBLE	COINS %	AMOUNT
PROPERTY — CAUSES OF LOSS: ☐ BASIC ☐ BROAD ☐ SPEC				
GENERAL LIABILITY — X COMMERCIAL GENERAL LIABILITY; ☐ CLAIMS MADE X OCCUR	Owners Contractors Protective RETRO DATE FOR CLAIMS MADE:	EACH OCCURRENCE		$ 3,000,000
		DAMAGE TO RENTED PREMISES		$
		MED EXP (Any one person)		$
		PERSONAL & ADV INJURY		$
		GENERAL AGGREGATE		$ 3,000,000
		PRODUCTS - COMP/OP AGG		$
AUTOMOBILE LIABILITY — ☐ ANY AUTO; ☐ ALL OWNED AUTOS; ☐ SCHEDULED AUTOS; ☐ HIRED AUTOS; ☐ NON-OWNED AUTOS		COMBINED SINGLE LIMIT		$
		BODILY INJURY (Per person)		$
		BODILY INJURY (Per accident)		$
		PROPERTY DAMAGE		$
		MEDICAL PAYMENTS		$
		PERSONAL INJURY PROT		$
		UNINSURED MOTORIST		$
				$
AUTO PHYSICAL DAMAGE — DEDUCTIBLE: ☐ COLLISION: ☐ OTHER THAN COL:	☐ ALL VEHICLES ☐ SCHEDULED VEHICLES	☐ ACTUAL CASH VALUE ☐ STATED AMOUNT ☐ OTHER		$
GARAGE LIABILITY — ☐ ANY AUTO		AUTO ONLY - EA ACCIDENT		$
		OTHER THAN AUTO ONLY: EACH ACCIDENT		$
		AGGREGATE		$
EXCESS LIABILITY — ☐ UMBRELLA FORM; ☐ OTHER THAN UMBRELLA FORM	RETRO DATE FOR CLAIMS MADE:	EACH OCCURRENCE		$
		AGGREGATE		$
		SELF-INSURED RETENTION		$
WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY		☐ WC STATUTORY LIMITS		
		E.L. EACH ACCIDENT		$
		E.L. DISEASE - EA EMPLOYEE		$
		E.L. DISEASE - POLICY LIMIT		$
SPECIAL CONDITIONS/ OTHER COVERAGES: Nowak and Fraus Engineers PLLC 46777 Woodward Ave (See attached Spec Conditions/Other Covs page.)		FEES		$
		TAXES		$
		ESTIMATED TOTAL PREMIUM		$

NAME & ADDRESS

Anglin Civil LLC
13000 Newburgh Rd
Livonia, MI 48150

☐ MORTGAGEE ☐ LOSS PAYEE ☐ ADDITIONAL INSURED X Contractor

LOAN #

AUTHORIZED REPRESENTATIVE: Michael C. Zervos

ACORD 75 (2001/01) 1 of 3 #6327 NOTE: IMPORTANT STATE INFORMATION ON REVERSE SIDE SEL © ACORD CORPORATION 1993

CONDITIONS

This Company binds the kind(s) of insurance stipulated on the reverse side. The Insurance is subject to the terms, conditions and limitations of the policy(ies) in current use by the Company.

This binder may be cancelled by the Insured by surrender of this binder or by written notice to the Company stating when cancellation will be effective. This binder may be cancelled by the Company by notice to the Insured in accordance with the policy conditions. This binder is cancelled when replaced by a policy. If this binder is not replaced by a policy, the Company is entitled to charge a premium for the binder according to the Rules and Rates in use by the Company.

Applicable in California

When this form is used to provide insurance in the amount of one million dollars ($1,000,000) or more, the title of the form is changed from "Insurance Binder" to "Cover Note".

Applicable in Delaware

The mortgagee or Obligee of any mortgage or other instrument given for the purpose of creating a lien on real property shall accept as evidence of insurance a written binder issued by an authorized insurer or its agent if the binder includes or is accompanied by: the name and address of the borrower; the name and address of the lender as loss payee; a description of the insured real property; a provision that the binder may not be canceled within the term of the binder unless the lender and the insured borrower receive written notice of the cancellation at least ten (10) days prior to the cancellation; except in the case of a renewal of a policy subsequent to the closing of the loan, a paid receipt of the full amount of the applicable premium, and the amount of insurance coverage.

Chapter 21 Title 25 Paragraph 2119

Applicable in Florida

Except for Auto Insurance coverage, no notice of cancellation or nonrenewal of a binder is required unless the duration of the binder exceeds 60 days. For auto insurance, the insurer must give 5 days prior notice, unless the binder is replaced by a policy or another binder in the same company.

Applicable in Nevada

Any person who refuses to accept a binder which provides coverage of less than $1,000,000.00 when proof is required: (A) Shall be fined not more than $500.00, and (B) is liable to the party presenting the binder as proof of insurance for actual damages sustained therefrom.

SPECIAL CONDITIONS/OTHER COVERAGES (Cont. from page 1)

Pontiac, MI 48342
Including their owners, directors, officers, consultants, agents and employees
Type: Additional Insured

G2 Consulting Group LLC
1775 Crooks Rd
Troy, MI 48084
Including their owners, directors, officers, consultants, agents and employees
Type: Additional Insured

Client#: 7304 ANGCIV

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 4/30/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ZERVOS GROUP INC 24724 Farmbrook P O Box 2067 Southfield, MI 48037-2067	CONTACT NAME: Michael Zervos/Sarah Laney PHONE (A/C, No, Ext): 248 355-4411 FAX (A/C, No): 248 355-2175 E-MAIL ADDRESS: sarah@zervosgroup.com
INSURED ANGLIN CIVIL LLC 13000 Newburgh Rd Livonia, MI 48150	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Selective Way Insurance Company INSURER B : Safety National Casualty Corporation INSURER C : Evanston Insurance Company INSURER D : INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR X X,C,U X Contractual GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC OTHER:	X	X	S2727418	07/10/2025	07/10/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$1,000,000 $500,000 $15,000 $1,000,000 $2,000,000 $2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY [ ] SCHEDULED AUTOS X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	X	X	S2727418	07/10/2025	07/10/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000 $ $ $
A	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED RETENTION $	X	X	S2727418	07/10/2025	07/10/2026	EACH OCCURRENCE AGGREGATE	$5,000,000 $5,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N [Y] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	ANGLIC	05/01/2025	04/30/2026	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$1,000,000 $1,000,000 $1,000,000
C	Pollution Liab			MKLV3ENV105577	11/06/2025	11/06/2026	$3,000,000 occ/agg	
A	Leased/rented			S2727418	07/10/2025	07/10/2026	$100,000	
A	Contractor Equp			S2727418	07/10/2025	07/10/2026	See limit below	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more apace is required)

Re: Wimbleton Drive Phase 2 Contract # 6-26W

The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees, consultants, and volunteers thereof, Nowak and Fraus Engineers PLLC, their owners, directors, officers, consultants, agents and employees, and G2 Consulting Group LLC, their owners, directors, officers, consultants, agents and employees (See Attached Descriptions)

CERTIFICATE HOLDER	CANCELLATION
City of Birmingham 151 Martin Street Birmingham, MI 48009	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Michael G. Zervos

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DESCRIPTIONS (Continued from Page 1)

are included as an additional insured on the general, auto and umbrella liability when required by written contract on a primary and non contributory basis. Written 30 Day notice of cancellation shall be provided by the issuing carrier.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NOTICE OF CANCELLATION OR NONRENEWAL FOR DESIGNATED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under this policy: S2727418

SCHEDULE

Policy Period: Effective date: 07/01/2025 to Expiration date: 07/01/2026		
Name of Person or Organization:	Project I.D.:	Mailing Address or Email Address:
City of Birmingham	Wimbleton Drive Phase 2	151 Martin Street, Birmingham Mi 48009
Nowak and Faus Engineers PLLC	Wimbleton Drive Phase 2	46777 Woodward Ave Pontiac MI 48342
G2 Consulting Group LLC	Wimbleton Drive Phase 2	1775 Crooks Rd, Troy MI 48084
Information required to complete this Schedule, if not shown above, will be shown in the Declarations or additional separate Schedule.		

The following **Condition** is added:

If we cancel or nonrenew this policy, other than for non-payment of premium or at the request of the Named Insured, we will provide advance written notice of such cancellation or nonrenewal to the person(s) or organization(s) listed in the SCHEDULE above. Such notice will be provided to such person(s) or organization(s) no less than the number of days in advance of the effective date of cancellation that we are required to provide to the Named Insured for such cancellation or nonrenewal. At our election, the notice shall either be mailed by first class mail, postage prepaid to the address indicated in the SCHEDULE for such person or organization or sent by electronic mail to the email address set forth in the SCHEDULE for such person or organization. Such notice shall identify the policy, including the identity of the Named Insured, being cancelled or nonrenewed and provide the effective date of cancellation or nonrenewal. If sent by first class mail, proof of mailing constitutes proof of notice. If sent by email, proof of sending constitutes proof of notice.

Our obligation to send notice to the person or organization listed in the SCHEDULE above shall terminate the earlier of: i) the end of the current Policy Period; or ii) when you no longer have a legal or contractual obligation to such person or organization to maintain insurance coverage under a policy which requires that such person or organization be notified in the event of cancellation or nonrenewal.

ElitePac®
Commercial Automobile Extension

COMMERCIAL AUTO
CA 78 09 04 24

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Business Auto Coverage Form apply unless modified by the endorsement.

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AMENDMENT TO SECTION I - COVERED AUTOS COVERAGES AND SECTION II - COVERED AUTOS LIABILITY COVERAGE

If this policy provides Auto Liability coverage for Owned Autos, the following extension is applicable:

EMPLOYEE OWNED AUTOS - BUSINESS USE

Solely for purposes of the coverage extended by this endorsement:

A. The following is added to **SECTION I, A. Description of Covered Auto Designation Symbols**:

Coverage symbols 1, 2, 3, 4, 5, 6 and 7 are amended to include the following:

Any "auto" owned by an "employee" specifically described on the Declarations page or on file with us when issued on a non-specified "auto" basis is considered an "auto" you own and not a covered "auto" you hire, borrow or lease; and

B. The following is added to **SECTION II, A.1. Who Is An Insured**:

An "employee" who is the owner of a specifically described "auto" on the Declarations page or on file with us when issued on a non-specified "auto" basis is an "insured".

If the "employee" owned "auto" is used:

1. Without your permission;
2. Outside the scope of any policies and procedures your business has for acceptable vehicle usage;
3. For any purpose other than the conduct of your business; or
4. By anyone other than the "employee" who owns the "auto", except another "employee",

the limits of liability available to the "employee" or anyone other than a named "insured" under all coverages shall be limited to the higher of:

1. $250,000; or
2. The compulsory or financial responsibility law limits where the "auto" is licensed and principally garaged.

AMENDMENTS TO SECTION II - LIABILITY COVERAGE

A. If this policy provides Auto Liability coverage for Owned Autos, the following extensions are applicable accordingly:

NEWLY ACQUIRED OR FORMED ORGANIZATIONS

The following is added to **SECTION II, A.1. - Who Is An Insured:**

Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no similar insurance available to that organization. However:

1. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier;
2. Coverage does not apply to "bodily injury" or "property damage" resulting from an "accident" that occurred before you acquired or formed the organization.

No person or organization is an "insured" with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

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EXPENSES FOR BAIL BONDS AND LOSS OF EARNINGS

Paragraphs **(2)** and **(4)** of **SECTION II, A.2.a. - Supplementary Payments** are deleted in their entirety and replaced with the following:

(2) Up to the Limit of Insurance shown on the ElitePac Schedule for the cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" covered under this policy. We do not have to furnish these bonds.

(4) All reasonable expenses incurred by the "insured" at our request. This includes actual loss of earnings because of time off from work, which we will pay up to the Limit of Insurance shown on the ElitePac Schedule.

EMPLOYEE INDEMNIFICATION AND EMPLOYER'S LIABILITY AMENDMENT

The following is added to **SECTION II, B.4. - Exclusions:**

This exclusion does not apply to a "volunteer worker" who is not entitled to workers compensation, disability or unemployment compensation benefits.

FELLOW EMPLOYEE COVERAGE

The **Fellow Employee** Exclusion, **SECTION II, B.5. -** is deleted in its entirety.

CARE, CUSTODY OR CONTROL AMENDMENT

The following is added to **SECTION II, B.6. - Exclusions:**

This exclusion does not apply to property owned by anyone other than an "insured", subject to the following:

1. The most we will pay under this exception for any one "accident" is the Limit of Insurance stated in the ElitePac Schedule; and

2. A per "accident" deductible as stated in the ElitePac Schedule applies to this exception.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

B. If this policy provides Auto Liability coverage for Owned Autos, Non-Owned Autos or Hired Autos, the following extensions are applicable accordingly:

LIMITED LIABILITY COMPANIES

The following is added to **SECTION II, A.1. - Who Is An Insured:**

If you are a limited liability company, your members and managers are "insureds" while using a covered "auto" you don't own, hire or borrow during the course of their duties for you.

BLANKET ADDITIONAL INSUREDS - As Required By Contract

The following is added to **SECTION II, A.1. - Who Is An Insured:**

Any person or organization whom you have agreed in a written contract, written agreement or written permit that such person or organization be added as an additional "insured" on the Business Auto Coverage Part on your policy is an additional "insured", but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by your ownership, maintenance or use of a covered "auto". This coverage shall be primary and non-contributory with respect to the additional "insured". This provision only applies if:

1. It is required in the written contract, written agreement or written permit identified in this section;

2. It is permitted by law; and

3. The written contract or written agreement has been executed (executed means signed by a named insured) or written permit issued prior to the "bodily injury" or "property damage".

C. If this policy provides Auto Liability coverage for Non-Owned Autos, the following extension is applicable accordingly:

EMPLOYEES AS INSUREDS

If this policy provides Auto Liability coverage for Non-Owned Autos, the following is added to **SECTION II, A.1. - Who Is An Insured:**

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in that "employee's" name with your permission, while performing duties related to the conduct of your business.

AMENDMENTS TO SECTION III - PHYSICAL DAMAGE COVERAGE

For those covered "autos" for which Comprehensive, Specified Causes of Loss or Collision coverage shown in the Declaration, the following extensions of coverage are applicable:

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TOWING AND LABOR

SECTION III, A.2. - Towing is deleted in its entirety and replaced with the following:

We will pay all reasonable towing and labor costs up to the applicable Limit of Insurance shown on the ElitePac Schedule per tow each time a covered "Private Passenger Auto", "Social Service Van or Bus", "Light Truck" or any commercial "auto" with a gross vehicle weight rating or gross combination weight greater than 10,000 pounds is disabled.

For labor charges to be eligible for reimbursement the labor must be performed at the place of disablement.

Coverage for towing and labor costs afforded by any other endorsement added to the commercial auto policy shall apply in excess of the coverage afforded by this ElitePac.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

GLASS BREAKAGE DEDUCTIBLE

The following is added to **SECTION III, A.3. - Glass Breakage - Hitting A Bird Or Animal - Falling Objects or Missiles:**

If damaged glass is repaired rather than replaced, no deductible will apply for such repair. This extension does not apply to Emergency Services Organizations and Governmental Entities.

ADDITIONAL TRANSPORTATION EXPENSES

SECTION III, A.4.a. - Transportation Expenses is deleted in its entirety and replaced with the following:

We will pay up to the Limit of Insurance shown on the ElitePac Schedule for temporary transportation expenses that you incur because of any "loss" to a covered "auto", but only if the covered "auto" carries the coverages and meets the requirements described in Paragraphs **1.** or **2.** below:

1. We will pay temporary transportation expenses for total theft of a covered "auto". We will only pay for such expenses incurred during the period beginning 24 hours after the theft and ending, regardless of the policy's expiration, when the covered "auto" is returned to use or we pay for its "loss".
2. For "loss" other than total theft of a covered "auto" under Comprehensive or Specified Causes of Loss Coverage, or for any "loss" under Collision Coverage to a covered "auto", we will only pay for those temporary transportation expenses incurred during a period of time reasonably required to repair or replace the covered "auto", even if that time period extends beyond the policy expiration date.

   Paragraph **2.** of this extension does not apply while there are spare or reserve "autos" available to you for your operations.

   The 24 hour waiting period found on any other form endorsed onto the Auto Coverage part does not apply for any covered Rental Reimbursement "loss".

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

HIRED AUTO PHYSICAL DAMAGE COVERAGE

If Comprehensive, Specified Causes of Loss or Collision coverage applies to a covered "auto", the following is added to **SECTION III, A.4. - Coverage Extensions:**

Physical Damage coverage is hereby extended to apply to Physical Damage "loss" to "autos" leased, hired, rented or borrowed without a driver. We will provide coverage equal to the broadest coverage available to any covered "auto" shown on the Declarations; however, the most we will pay for "loss" to each "auto" under this coverage extension is the lesser of:

1. The Limit of Insurance stated in the ElitePac Schedule; or
2. The actual cash value of the damaged or stolen property as of the time of the "loss"; or
3. The actual cost of repairing or replacing the damaged or stolen property with other property of like kind and quality. A part is of like kind and quality when it is of equal or better condition than the pre-accident part. We will use the original equipment from the manufacturer when:
   - **(a)** The operational safety of the vehicle might otherwise be impaired;
   - **(b)** Reasonable and diligent efforts to locate the appropriate rebuilt, aftermarket or used part have been unsuccessful; or
   - **(c)** A new original equipment part of like kind and quality is available and will result in the lowest overall repair cost.

For each leased, hired, rented or borrowed covered "auto" our obligation to pay each applicable "loss" will be reduced by the hired "auto" deductible on this policy. If there is no hired "auto" coverage symbol 8 for physical damage coverage on the policy, our obligation to pay for each "loss" will be reduced by the deductible equal to the highest deductible applicable to any owned "auto" for that coverage. No deductible will be applied to any "loss" caused by fire or lightning.

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SECTION IV, B.5. Other Insurance Condition, Paragraph **5.b.** is deleted in its entirety and replaced by the following:

For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:

1. Any covered "auto" you lease, hire, rent, or borrow; and
2. Any covered "auto" hired or rented by your "employee" under a contract or agreement in that "employee's" name, with your permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

HIRED AUTO LOSS OF USE COVERAGE

If Comprehensive, Specified Causes of Loss or Collision coverage applies to a covered "auto", the following is added to **SECTION III, A.4. - Coverage Extensions:**

We will pay expenses for which you are legally responsible to pay for loss of use of a leased, hired, rented or borrowed "auto" if it results from an "accident". The per day limit in the Business Auto Coverage form does not apply and the most we will pay per "accident" is the Limit of Insurance shown on the ElitePac Schedule.

Loss of Use Expense limits afforded by any endorsement added to the commercial auto policy shall apply in excess of the coverage afforded by this ElitePac form.

This coverage extension does not apply to Emergency Services Organizations, Governmental Entities, and Schools.

AUTO LOAN/LEASE GAP COVERAGE (Not Applicable in New York)

If Comprehensive, Specified Causes of Loss or Collision coverage applies to a covered "auto", the following is added to **SECTION III, A.4. - Coverage Extensions:**

In the event of a total "loss" to a covered "auto" we will pay any unpaid amount due on the lease or loan for a covered "auto", less:

1. The amount paid under the Physical Damage Coverage Section of the policy; and
2. Any:
   a. Overdue or any deferred lease/loan payments at the time of "loss";
   b. Financial penalties imposed under a lease for excessive use, abnormal wear and tear, high mileage or similar charges;
   c. Security deposits not refunded by the lessor or financial institution;
   d. Costs for extended warranties, credit life, health, accident, or disability insurance purchased with the loan or lease; and
   e. Carry-over balances from previous leases or loans.

You are responsible for the deductible applicable to the "loss" for the covered "auto".

The insurance provided by this coverage provision is excess over any other collectible insurance including but not limited to any coverage provided by or purchased from the lessor or any financial institution.

PERSONAL EFFECTS

The following is added to **SECTION III, A.4. - Coverage Extensions:**

If this policy provides Comprehensive Coverage for a covered "auto" you own and that covered "auto" is stolen, we will pay up to the Limit of Insurance shown on the ElitePac Schedule, without application of a deductible, for lost personal effects that were in the covered "auto" at the time of theft. Personal effects do not include jewelry, tools, money, or securities. This coverage is excess over any other collectible insurance.

AIRBAG COVERAGE

The following is added to **SECTION III, B.3.a. - Exclusions:**

Mechanical breakdown does not include the accidental discharge of an airbag.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

EXPANDED AUDIO, VISUAL, AND DATA ELECTRONIC EQUIPMENT COVERAGE

SECTION III, B.4. - Exclusions

This exclusion does not apply to the following:

1. Global positioning systems;
2. "Telematic devices"; or
3. Electronic equipment that reproduces, receives or transmits visual or data signals and accessories used with such equipment, provided such equipment is:
   a. Permanently installed in or upon the covered "auto" at the time of the "loss";

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b. Removable from a housing unit that is permanently installed in the covered "auto" at the time of the "loss";

c. Designed to be solely operated by use of power from the "auto's" electrical system; or

d. Designed to be used solely in or upon the covered "auto".

For each covered "loss" to such equipment, a deductible of $50 shall apply, unless the deductible otherwise applicable to such equipment is less than $50, at which point the lower deductible, if any, will apply.

COMPREHENSIVE DEDUCTIBLE - LOCATION TRACKING DEVICE

The following is added to **SECTION III, D. - Deductible:**

Any Comprehensive Coverage Deductible shown in the Declarations will be reduced by 50% for any "loss" caused by theft if the covered "auto" is equipped with a location tracking device and that device was the sole method used to recover the "auto".

PHYSICAL DAMAGE LIMIT OF INSURANCE

SECTION III, C. - Limit Of Insurance is deleted in its entirety and replaced with the following:

The most we will pay for a "loss" in any one "accident" is the lesser of:

1. The actual cash value of the damaged or stolen property as of the time of the "loss"; or
2. The cost of repairing or replacing the damaged or stolen property with other property of like kind and quality.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

GREEN AUTOMOBILE REPLACEMENT COVERAGE

In the event of a total "loss" to an owned "auto" that is a "gasoline powered auto" for which Comprehensive, Specified Causes of Loss, or Collision coverage applies, Physical Damage coverage will be amended as follows:

If the owned "gasoline powered auto" is replaced by you with a "green auto", we will pay an additional 10% of the "gasoline powered auto's" actual cash value up to a maximum of $3,000, provided the "auto" is replaced and a copy of a bill of sale or new lease agreement is received by us within 60 calendar days of the date of the "loss".

Regardless of the number of "autos" deemed a total loss, the most we will pay under this coverage extension for any one "loss" is $10,000.

AMENDMENTS TO SECTION IV - BUSINESS AUTO CONDITIONS

DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS

The following is added to **SECTION IV, A.2.a. - Duties In The Event Of Accident, Claim, Suit Or Loss:**

The notice requirements for reporting "accident" claim, "suit" or "loss" information to us, including provisions related to the subsequent investigation of such "accident", claim, "suit" or "loss" do not apply until the "accident", claim, "suit" or "loss" is known to:

1. You, if you are an individual;
2. A partner, if you are a partnership;
3. An executive officer or insurance manager, if you are a corporation;
4. Your members, managers or insurance manager, if you are a limited liability company;
5. Your elected or appointed officials, trustees, board members or your insurance manager, if you are an organization other than a partnership, joint venture or limited liability company.

However, this section does not amend the provisions relating to notification of police or protection or examination of the property that was subject to the "loss".

WAIVER OF SUBROGATION

SECTION IV, A.5. - Transfer Of Rights Of Recovery Against Others To Us is deleted in its entirety and replaced with the following:

We waive any right of recovery we may have against any person or organization because of payments we make for "bodily injury" or "property damage" resulting from the ownership, maintenance or use of a covered "auto" but only when you have assumed liability for such "bodily injury" or "property damage" in an "insured contract". In all other circumstances, if a person or organization to or for whom we make payment under this Coverage Form has rights to recover damages from another, those rights are transferred to us.

MULTIPLE DEDUCTIBLES

The following is added to **SECTION IV, A. - Loss Conditions:**

If a "loss" from one event involves two or more covered "autos" and coverage under Comprehensive or Specified Causes of Loss applies, only the highest applicable deductible will be applied.

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CONCEALMENT, MISREPRESENTATION OR FRAUD

The following is added to **SECTION IV, B.2. - Concealment, Misrepresentation Or Fraud:**

If you should unintentionally fail to disclose any existing hazards in your representations to us prior to the inception date of the policy or during the policy period in connection with any newly discovered hazards, we will not deny coverage under this Coverage Form based upon such failure.

POLICY PERIOD, COVERAGE TERRITORY

SECTION IV, B.7. - Policy Period, Coverage Territory is deleted in its entirety and replaced with the following:

Under this Coverage Form, we cover "accidents" and "losses" occurring:

a. During the policy period shown in the Declarations; and

b. Within the "Coverage Territory".

We also cover "loss" to or "accidents" involving a covered "auto" while being transported between any of these places.

TWO OR MORE COVERAGE FORMS OR POLICIES ISSUED BY US - DEDUCTIBLES

The following is added to **SECTION IV, B.8. - Two Or More Coverage Forms Or Policies Issued By Us:**

If a "loss" covered under this Coverage Form also involves a "loss" to other property resulting from the same "accident" that is covered under this policy or another policy issued by us or any member company of ours, only the highest applicable deductible will be applied.

AMENDMENTS TO SECTION V - DEFINITIONS

BODILY INJURY INCLUDING MENTAL ANGUISH (Not Applicable in New York)

The definition of bodily injury is deleted in its entirety and replaced by the following:

"Bodily injury" means bodily injury, sickness, or disease sustained by a person, including death resulting from any of these. "Bodily injury" includes mental anguish resulting from bodily injury, sickness or disease sustained by a person.

ADDITIONS TO SECTION V - DEFINITIONS

COVERAGE TERRITORY

"Coverage Territory" means:

1. The United States of America (including its territories and possessions), Canada and Puerto Rico; and
2. Anywhere in the world, except for any country or jurisdiction that is subject to trade or other economic sanction or embargo by the United States of America, if a covered "auto" is leased, hired, rented, or borrowed without a driver for a period of 30 days or less, and the insured's responsibility to pay "damages" is determined in a "suit" on the merits in and under the substantive law of the United States of America (including its territories and possessions), Puerto Rico, or Canada, or in a settlement we agree to.

If we are prevented by law, or otherwise, from defending the "insured" in a "suit" brought in a location described in Paragraph **2.** above, the insured will conduct a defense of that "suit". We will reimburse the "insured" for the reasonable and necessary expenses incurred for the defense of any such "suit" seeking damages to which this insurance applies, and that we would have paid had we been able to exercise our right and duty to defend.

GASOLINE POWERED AUTO

An "auto" that is designed to be solely powered by petroleum-based fuel.

GREEN AUTO

An "auto" that is designed to be powered by both petroleum-based fuel and electric power; or solely by electricity or any other renewable energy source.

LIGHT TRUCK

"Light Truck" means a truck with a gross vehicle weight rating of 10,000 pounds or less.

PRIVATE PASSENGER AUTO

"Private Passenger Auto" means a four-wheel "auto" of the private passenger or station wagon type. A pickup, panel truck or van not used for business is included within the definition of a "private passenger auto".

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SOCIAL SERVICE VAN OR BUS

"Social Service Van or Bus" means a van or bus used by a government entity, civic, charitable or social service organization to provide transportation to clients incidental to the social services sponsored by the organization, including special trips and outings.

TELEMATIC DEVICE

"Telematic Device" includes devices designed for the collection and dissemination of data for the purpose of monitoring vehicle and/or driver performance. This includes Global Positioning System technology, wireless safety communications and automatic driving assistance systems, all integrated with computers and mobile communications technology in automotive navigation systems.

VOLUNTEER WORKER

"Volunteer worker" means a person who is not your "employee" and who donates their work and acts at the direction of you and within the scope of duties determined by you, and is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.

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Client#: 7304 ANGCIV

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 4/30/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ZERVOS GROUP INC 24724 Farmbrook P O Box 2067 Southfield, MI 48037-2067	CONTACT NAME: Michael Zervos/Sarah Laney PHONE (A/C, No, Ext): 248 355-4411 FAX (A/C, No): 248 355-2175 E-MAIL ADDRESS: sarah@zervosgroup.com
INSURED ANGLIN CIVIL LLC 13000 Newburgh Rd Livonia, MI 48150	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Selective Way Insurance Company INSURER B : Safety National Casualty Corporation INSURER C : Evanston Insurance Company INSURER D : INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE / X OCCUR X X,C,U X Contractual GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:	X	X	S2727418	07/10/2025	07/10/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$1,000,000 $500,000 $15,000 $1,000,000 $2,000,000 $2,000,000 $
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY	X	X	S2727418	07/10/2025	07/10/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$1,000,000 $ $ $ $
A	X UMBRELLA LIAB / X OCCUR EXCESS LIAB / CLAIMS-MADE DED / RETENTION $	X	X	S2727418	07/10/2025	07/10/2026	EACH OCCURRENCE AGGREGATE $	$5,000,000 $5,000,000 $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: Y (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	X	ANGLIC	05/01/2025	04/30/2026	X PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
C	Pollution Liab			MKLV3ENV105577	11/06/2025	11/06/2026	$3,000,000 occ/agg	
A	Leased/rented			S2727418	07/10/2025	07/10/2026	$100,000	
A	Contractor Equp			S2727418	07/10/2025	07/10/2026	See limit below	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Wimbleton Drive Phase 2 Contract # 6-26W

The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees, consultants, and volunteers thereof, Nowak and Fraus Engineers PLLC, their owners, directors, officers, consultants, agents and employees, and G2 Consulting Group LLC, their owners, directors, officers, consultants, agents and employees (See Attached Descriptions)

CERTIFICATE HOLDER

City of Birmingham
151 Martin Street
Birmingham, MI 48009

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Michael C. Zervos

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DESCRIPTIONS (Continued from Page 1)

are included as an additional insured on the general, auto and umbrella liability when required by written contract on a primary and non contributory basis. Written 30 Day notice of cancellation shall be provided by the issuing carrier.

ElitePac®
General Liability Extension Endorsement

COMMERCIAL GENERAL LIABILITY
CG 73 00 10 23

SUMMARY OF COVERAGES (including index)

This is a summary of the various additional coverages and coverage modifications provided by this endorsement. No coverage is provided by this summary. Refer to the actual endorsement (Pages **3**-through-**9**) for changes affecting your insurance protection.

DESCRIPTION	PAGE FOUND
Additional Insureds — Primary and Non-Contributory Provision	Page 8
Blanket Additional Insureds — As Required By Contract	Page 5
• Owners, Lessees or Contractors (includes Architects, Engineers or Surveyors) • Lessors of Leased Equipment • Managers or Lessors of Premises • Mortgagees, Assignees and Receivers • Any Other person or organization other than a joint venture • Grantors of Permits	
Broad Form Vendors Coverage	Page 7
Damage To Premises Rented To You (Including Fire, Lightning or Explosion)	Page 3
Electronic Data Liability ($100,000)	Page 4
Employee Definition Amended	Page 9
Employees As Insureds Modified	Page 5
Employer's Liability Exclusion Amended (Not applicable in New York)	Page 3
Incidental Malpractice Exclusion modified	Page 8
Knowledge of Occurrence, Claim, Suit or Loss	Page 8
Liberalization Clause	Page 8
Mental Anguish Amendment (Not applicable to New York)	Page 10
Newly Formed or Acquired Organizations	Page 5
Non-Owned Aircraft	Page 3
Non-Owned Watercraft (under 60 feet)	Page 3
Not-for-profit Members — as additional insureds	Page 5
Personal And Advertising Injury — Discrimination Amendment (Not applicable in New York)	Page 9
Products Amendment (Medical Payments)	Page 4
Supplementary Payments Amended — Bail Bonds ($5,000) and Loss of Earnings ($1,000)	Page 4
Two or More Coverage Parts or Policies Issued By Us	Page 9
Unintentional Failure to Disclose Hazards	Page 8
Waiver of Transfer of Rights of Recovery (subrogation)	Page 8
When Two or More Coverage Parts of this Policy Apply to a Loss	Page 3

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INSURED'S COPY

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ElitePac®
General Liability Extension Endorsement

COMMERCIAL GENERAL LIABILITY
CG 73 00 10 23

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies the insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The **SECTIONS** of the Commercial General Liability Coverage Form identified in this endorsement will be amended as shown below. However, **if (a) two or more Coverage Parts of this policy, or (b) two or more forms or endorsements within the same Coverage Part apply to a loss,** coverage provision(s) with the broadest language will apply, unless specifically stated otherwise within the particular amendment covering that loss.

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

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COVERAGES — Amendments

SECTION I — COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY

EXCLUSIONS

Employer's Liability Amendment

(This provision is not applicable in the State of New York).

The following is added to Exclusion **e. Employer's Liability** under **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. Exclusions:**

This exclusion also does not apply to any "temporary worker".

Non-Owned Aircraft, Auto or Watercraft

A. Paragraph **(2)** of Exclusion **g. Aircraft, Auto Or Watercraft** under **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. Exclusions** is deleted in its entirety and replaced with the following:

(2) A watercraft you do not own that is:

(a) Less than 26 feet long and not being used to carry persons or property for a charge; or

(b) At least 26 feet, but less than 60 feet long, and not being used to carry persons or property for a charge. Any person is an insured who uses or is responsible for the use of such watercraft with your expressed or implied consent. However, if the insured has any other valid and collectible insurance for "bodily injury" or "property damage" that would be covered under this provision, or on any other basis, this coverage is then excess, and subject to Condition **4. Other Insurance, b. Excess Insurance** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS.**

B. The following is added to Exclusion **g. Aircraft, Auto Or Watercraft** under **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. Exclusions:**

This exclusion does not apply to:

(6) Any aircraft, not owned or operated by any insured, which is hired, chartered or loaned with a paid crew. However, if the insured has any other valid and collectible insurance for "bodily injury" or "property damage" that would be covered under this provision, or on any other basis, this coverage is then excess, and subject to Condition **4. Other Insurance, b. Excess Insurance** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS.**

Damage To Premises Rented to You

A. The last paragraph of Paragraph **2. Exclusions** under **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE** is deleted in its entirety and replaced with the following:

Exclusions **c. through n.** do not apply to damage by fire, lightning or explosion to premises rented to you or temporarily occupied by you with the permission of the owner. A separate limit of insurance applies to this coverage as described in **SECTION III — LIMITS OF INSURANCE.**

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B. Paragraph **6.** under **SECTION III — LIMITS OF INSURANCE** is deleted in its entirety and replaced with the following:

6. Subject to Paragraph **5.** above, the most we will pay under **COVERAGE A** for damages because of "property damage" to any one premises, while rented to you, or in the case of damage caused by fire, lightning or explosion, while rented to you or temporarily occupied by you with permission of the owner, for all such damage caused by fire, lightning or explosion proximately caused by the same event, whether such damage results from fire, lightning or explosion or any combination of the three, is the amount shown in the Declarations for the Damage To Premises Rented To You Limit.

C. Paragraph **a.** of Definition **9.** "Insured contract" under **SECTION V — DEFINITIONS** is deleted in its entirety and replaced with the following:

a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning or explosion to premises while rented to you or temporarily occupied by you with the permission of the owner is not an "insured contract";

Electronic Data Liability

A. Exclusion **p. Access or Disclosure Of Confidential Or Personal Information And Data-related Liability** under **COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, 2. Exclusions** is deleted in its entirety and replaced by the following:

p. Access or Disclosure Of Confidential Or Personal Information And Data-related Liability

Damages arising out of:

(1) Any access to or disclosure of any person's or organization's confidential or personal information, including patents, trade secrets, processing methods, customer lists, financial information, credit card information or any other type of nonpublic information; or

(2) The loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate "electronic data" that does not result from physical injury to tangible property.

This exclusion applies even if damages are claimed for notification costs, credit monitoring expenses, forensic expenses, public relations expenses or any other loss, cost or expense incurred by you or others arising out of that which is described in Paragraph **(1)** or **(2)** above.

B. The following paragraph is added to **SECTION III — LIMITS OF INSURANCE:**

Subject to **5.** above, the most we will pay under **COVERAGE A** for "property damage" because of all loss of "electronic data" arising out of any one "occurrence" is a sub-limit of $100,000.

SECTION I — COVERAGE C MEDICAL PAYMENTS

EXCLUSIONS

Any Insured Amendment

Exclusion **a. Any Insured** under **COVERAGE C MEDICAL PAYMENTS, 2. Exclusions** is deleted in its entirety and replaced with the following:

a. Any Insured

To any insured.

This exclusion does not apply to:

(1) "Not-for-profit members";

(2) "Golfing facility" members who are not paid a fee, salary, or other compensation; or

(3) "Volunteer workers".

This exclusion exception does not apply if **COVERAGE C MEDICAL PAYMENTS** is excluded by another endorsement to this Coverage Part.

Product Amendment

Exclusion **f. Products-Completed Operations Hazard** under **COVERAGE C MEDICAL PAYMENTS, 2. Exclusions** is deleted in its entirety and replaced with the following:

f. Products-Completed Operations Hazard

Included within the "products-completed operations hazard".

This exclusion does not apply to "your products" sold for use or consumption on your premises, while such products are still on your premises.

This exclusion exception, does not apply if **COVERAGE C MEDICAL PAYMENTS** is excluded by another endorsement to this Coverage Part.

SECTION I — SUPPLEMENTARY PAYMENTS — COVERAGES A AND B

Expenses For Bail Bonds And Loss Of Earnings

A. Subparagraph **1.b.** under **SUPPLEMENTARY PAYMENTS — COVERAGES A AND B** is deleted in its entirety and replaced with the following:

b. Up to $5,000 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

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B. Subparagraph **1.d.** under **SUPPLEMENTARY PAYMENTS — COVERAGES A AND B** is deleted in its entirety and replaced with the following:

d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to $1,000 a day because of time off from work.

SECTION II — WHO IS AN INSURED — Amendments

Not-for-Profit Organization Members

The following paragraph is added to **SECTION II — WHO IS AN INSURED:**

If you are an organization other than a partnership, joint venture, or a limited liability company, and you are a not-for-profit organization, the following are included as additional insureds:

1. Your officials;

2. Your trustees;

3. Your members;

4. Your board members;

5. Your commission members;

6. Your agency members;

7. Your insurance managers;

8. Your elective or appointed officers; and

9. Your "not-for-profit members".

However only with respect to their liability for your activities or activities they perform on your behalf.

Employees As Insureds Modified

A. Subparagraph **2.a.(1)(a)** under **SECTION II — WHO IS AN INSURED** does not apply to "bodily injury" to a "temporary worker" caused by a co-"employee" who is not a "temporary worker".

B. Subparagraph **2.a.(2)** under **SECTION II — WHO IS AN INSURED** does not apply to "property damage" to the property of a "temporary worker" or "volunteer worker" caused by a co-"employee" who is not a "temporary worker" or "volunteer worker".

C. Subparagraph **2.a.(1)(d)** under **SECTION II — WHO IS AN INSURED** does not apply to "bodily injury" caused by cardio-pulmonary resuscitation or first aid services administered by a co-"employee".

With respect to this provision only, Subparagraph **(1)** of Exclusion **2. e. Employer's Liability** under **SECTION I — COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY** does not apply.

Newly Formed Or Acquired Organizations

A. Subparagraph **3.a.** under **SECTION II — WHO IS AN INSURED** is deleted in its entirety and replaced with the following:

a. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier. However, **COVERAGE A** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization.

B. The following paragraph is added to **SECTION II — WHO IS AN INSURED,** Paragraph **3:**

If you are engaged in the business of construction of dwellings three stories or less in height, or other buildings three stories or less in height and less than 25,000 square feet in area, you will also be an insured with respect to "your work" only, for the period of time described above, for your liability arising out of the conduct of any partnership or joint venture of which you are or were a member, even if that partnership or joint venture is not shown as a Named Insured. However, this provision only applies if you maintain or maintained an interest of at least fifty percent in that partnership or joint venture for the period of that partnership or joint venture.

This provision does not apply to any partnership or joint venture that has been dissolved or otherwise ceased to function for more than thirty-six months.

With respect to the insurance provided by this provision, **Newly Formed or Acquired Organizations,** the following is added to **SECTION IV — COMMERCIAL GENERAL LIABILITY**, Paragraph **4. Other Insurance,** Subparagraph **b. Excess Insurance:**

The insurance provided by this provision, **Newly Formed or Acquired Organizations,** is excess over any other insurance available to the insured, whether primary, excess, contingent or on any other basis.

(All other provisions of this section remain unchanged)

Blanket Additional Insureds — As Required By Contract

A. Subject to the **Primary and Non-Contributory** provision set forth in this endorsement, **SECTION II — WHO IS AN INSURED** is amended to include as an additional insured:

1. Owners, Lessees or Contractors/Architects, Engineers and Surveyors

a. Any person or organization for whom you are performing operations when you and such person or organization have agreed in a written contract, written agreement or written permit that such person or organization be added as an additional insured on your commercial general liability policy; and

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b. Any other person or organization, including any architects, engineers or surveyors not engaged by you, whom you are required to add as an additional insured under your policy in the contract or agreement in Paragraph **a.** above:

Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

(1) Your acts or omissions; or

(2) The acts of omissions of those acting on your behalf;

in the performance of your ongoing operations performed for the additional insured in Paragraph **a.**, above.

However, this insurance does not apply to:

"Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services by or for you, including:

(1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and

(2) Supervisory, inspection, architectural or engineering activities.

Professional services do not include services within construction means, methods, techniques, sequences and procedures employed by you in connection with your operations in your capacity as a construction contractor.

A person or organization's status as an additional insured under this endorsement ends when your operations for the person or organization described in Paragraph **a.** above are completed.

2. Other Additional Insureds

Any of the following persons or organizations with whom you have agreed in a written contract, written agreement or written permit that such persons or organizations be added as an additional insured on your commercial general liability policy:

a. Lessors of Leased Equipment

Any person or organization from whom you lease equipment, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person or organization.

With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

b. Managers or Lessors of Premises

Any person or organization from whom you lease premises, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by you or those acting on your behalf in connection with the ownership, maintenance or use of that part of the premises leased to you.

This insurance does not apply to any "occurrence" which takes place after you cease to be a tenant of that premises.

c. Mortgagees, Assignees or Receivers

Any person or organization with respect to their liability as mortgagee, assignee or receiver and arising out of the ownership, maintenance or use of your premises.

This insurance does not apply to any "occurrence" which takes place after the mortgage is satisfied, or the assignment or receivership ends.

d. Any Person or Organization Other Than A Joint Venture

Any person or organization (other than a joint venture of which you are a member), but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts of omissions of those acting on your behalf in the performance of your ongoing operations or in connection with property owned by you.

e. State or Governmental Agency or Political Subdivision — Permits or Authorizations

Any state or governmental agency or subdivision or political subdivision, but only with respect to:

(1) Operations performed by you or on your behalf for which the state or governmental agency or subdivision or political subdivision has issued a permit or authorization; or

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(2) The following hazards for which the state or governmental agency or subdivision or political subdivision has issued a permit or authorization in connection with premises you own, rent or control and to which this insurance applies:

(a) The existence, maintenance, repair, construction, erection or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoist away openings, sidewalk vaults, street banners or decorations and similar exposures;

(b) The construction, erection or removal of elevators; or

(c) The ownership, maintenance or use of any elevators covered by this insurance.

This insurance does not apply to:

i. "Bodily injury" or "property damage" arising out of operations performed for the federal government, state or municipality; or

ii. "Bodily injury" or "property damage" included within the "products-completed operations hazard".

With respect to Paragraphs **2.b.** through **2.d.**, this insurance does not apply to structural alterations, new construction or demolition operations performed by or on behalf of such person or organization.

B. The insurance coverage afforded to the additional insureds in this coverage extension:

1. Does not apply unless the written contract or written agreement has been signed by the Named Insured or written permit issued prior to the "bodily injury" or "property damage" or "personal and advertising injury";
2. Only applies to the extent permitted by law; and
3. Will not be broader than that which you are required by the written contract, written agreement, or written permit to provide to such additional insured.

Broad Form Vendors Coverage

Subject to the **Primary and Non-Contributory** provision set forth in this endorsement, **SECTION II — WHO IS AN INSURED** is amended to include as an additional insured any person or organization (referred to below as vendor) for whom you have agreed in a written contract or written agreement to provide coverage as an additional insured under your policy. Such person or organization is an additional insured only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business. However, the insurance afforded the vendor does not apply to:

a. "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement; however this exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;

b. Any express warranty unauthorized by you;

c. Any physical or chemical change in the product made intentionally by the vendor;

d. Repackaging, unless unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

e. Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business in connection with the sale of the product; or

f. Products which, after distribution or sale by you, have been labeled or re-labeled or used as a container, part of ingredient of any other thing or substance by or for the vendor; however this insurance does not apply to any insured person or organization, from who you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

The provisions of this coverage extension do not apply unless the written contract or written agreement has been signed by the Named Insured prior to the "bodily injury" or "property damage".

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Incidental Malpractice

Subparagraph **2.a.(1)(d)** under **SECTION II — WHO IS AN INSURED** is deleted in its entirety and replaced with the following:

(d) Arising out of his or her providing or failing to provide professional health care services.

This does not apply to nurses, emergency medical technicians or paramedics if you are not in the business or occupation of providing any such professional services.

This also does not apply to "bodily injury" caused by cardio-pulmonary resuscitation or first aid services administered by a co-"employee".

This provision does not apply if you are a Social Service or Senior Living risk.

SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS — Amendments

Knowledge Of Occurrence, Claim, Suit Or Loss

The following is added to Paragraph **2. Duties in the Event of Occurrence, Offense, Claim or Suit** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS:**

The requirements under this paragraph do not apply until after the "occurrence" or offense is known to:

1. You, if you are an individual;
2. A partner, if you are a partnership;
3. An "executive officer" or insurance manager, if you are a corporation;
4. Your members, managers or insurance manager, if you are a limited liability company; or
5. Your elected or appointed officials, officers, members, trustees, board members, commission members, agency members, or your administrator or your insurance manager if you are an organization other than a partnership, joint venture, or limited liability company.

Primary and Non-Contributory Provision

The following is added to Paragraph **4. Other Insurance, b. Excess Insurance** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS:**

This insurance is primary to and we will not seek contribution from any other insurance available to an additional insured under this policy provided that:

(1) The additional insured is a Named Insured under such other insurance; and

(2) You have agreed in a written contract, written agreement or written permit that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

Unintentional Failure To Disclose Hazards

The following is added to Paragraph **6. Representations** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS:**

However, if you should unintentionally fail to disclose any existing hazards in your representations to us at the inception date of the policy, or during the policy period in connection with any additional hazards, we shall not deny coverage under this Coverage Part based upon such failure to disclose hazards.

Waiver Of Transfer Of Rights Of Recovery

The following is added to Paragraph **8. Transfer of Rights Of Recovery Against Others To Us** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS**:

We will waive any right of recovery against a person or organization because of payments we make under this Commercial General Liability Coverage Part. This waiver applies only if the insured has agreed in a written contract or written agreement to:

1. Waive any right of recovery against that person or organization; or
2. Assume the liability of that person or organization pursuant to a written contract or written agreement that qualifies as an "insured contract"; and
3. Include such person or organization as an additional insured on your policy.

Such waiver by us applies only to that person or organization identified above, and only to the extent that the insured has waived its right of recovery against such person or organization prior to loss.

Liberalization

The following condition is added to **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS:**

If we revise this Coverage Part to provide more coverage without additional premium charge, subject to our filed company rules, your policy will automatically provide the additional coverage as of the day the revision is effective in your state.

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Two or More Coverage Parts or Policies Issued By Us

(This provision is not Applicable in the state of New York or Wisconsin).

The following condition is added to **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS:**

It is our intention that the various coverage parts or policies issued to you by us, or any company affiliated with us, do not provide any duplication or overlap of coverage. We have exercised diligence to draft our coverage parts and policies to reflect this intention. However, if the facts and circumstances that will respond to any claim or "suit" give rise to actual or claimed duplication or overlap of coverage between the various coverage parts or policies issued to you by us or any company affiliated with us, the limit of insurance under all such coverage parts or policies combined shall not exceed the highest applicable limit under this coverage, or any one of the other coverage forms or policies.

This condition does not apply to any Excess or Umbrella policy issued by us specifically to apply as excess insurance over this coverage part or policy to which this coverage part is attached.

SECTION V — DEFINITIONS

Discrimination

(This provision does not apply in New York).

A. The following is added to Definition **14.** "Personal and advertising injury":

"Personal and advertising injury" also means "discrimination" that results in injury to the feelings or reputation of a natural person, however only if such "discrimination" or humiliation is:

1. Not done by or at the direction of:

a. The insured; or

b. Anyone considered an insured under **SECTION II — WHO IS AN INSURED;**

2. Not done intentionally to cause harm to another person.

3. Not directly or indirectly related to the employment, prospective employment or termination of employment of any person or persons by any insured.

4. Not arising out of any "advertisement" by the insured.

B. The following definition is added to **SECTION V — DEFINITIONS:**

"Discrimination" means:

a. Any act or conduct that would be considered discrimination under any applicable federal, state, or local statute, ordinance or law;

b. Any act or conduct that results in disparate treatment of, or has disparate impact on, a person, because of that person's race, religion, gender, sexual orientation, age, disability or physical impairment; or

c. Any act or conduct characterized or interpreted as discrimination by a person based on that person's race, religion, gender, sexual orientation, age, disability or physical impairment.

It does not include acts or conduct characterized or interpreted as sexual intimidation or sexual harassment, or intimidation or harassment based on a person's gender.

Electronic Data

The following definition is added to **SECTION V — DEFINITIONS:**

"Electronic data" means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cell, data processing devices or any other media which are used with electronically controlled equipment. For the purpose of the Electronic Data Liability coverage provided by this endorsement, Definition **17.** "Property damage" is deleted in its entirety and replaced by the following:

17. "Property damage" means:

a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or

b. Loss of, loss of use of, damage to, corruption of, inability to access, or inability to properly manipulate "electronic data", resulting from physical injury to tangible property. All such loss of "electronic data" shall be deemed to occur at the time of the "occurrence" that caused it.

For the purpose of the Electronic Data Liability coverage provided by this endorsement, "electronic data" is not tangible property.

Employee Amendment

Definition **5.** "Employee" under **SECTION V — DEFINITIONS** is deleted in its entirety and replaced by the following:

5. "Employee" includes a "leased worker", or a "temporary worker". If you are a School, "Employee" also includes a student teacher.

Golfing Facility

The following definition is added to **SECTION V — DEFINITIONS:**

"Golfing facility" means a golf course, golf club, driving range, or miniature golf course.

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Mental Anguish Amendment

(This provision does not apply in New York).

Definition **3.** "Bodily injury" under **SECTION V — DEFINITIONS** is deleted in its entirety and replaced with the following:

3. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time. This includes mental anguish resulting from any bodily injury, sickness or disease sustained by a person. (In New York, mental anguish has been determined to be "bodily injury").

Not-for-profit Member

The following definition is added to **SECTION V — DEFINITIONS:**

"Not-for-profit member" means a person who is a member of a not-for-profit organization, including clubs and churches, who receives no financial or other compensation.

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Contracting, Installation, Service and Repair General Liability Extended ElitePac® Endorsement

COMMERCIAL GENERAL LIABILITY
CG 79 88 10 23

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

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A. BLANKET ADDITIONAL INSUREDS

1. Ongoing Operations

SECTION II — WHO IS AN INSURED is amended to include as an additional insured:

a. Any person or organization for whom you are performing operations when you and such person or organization have agreed in a written contract, written agreement or written permit that such person or organization be added as an additional insured on your commercial general liability policy; and

b. Any other person or organization, including any architects, engineers or surveyors not engaged by you, whom you are required to add as an additional insured under your policy in the contract or agreement in Paragraph **1.** above;

If the written contract, written agreement, or written permit requires the additional insured be added with respect to liability arising out of your ongoing operations, or requires coverage for the additional insured to be included by the use of ISO's Additional Insured - Owners, Lessees or Contractors - Scheduled Person Or Organization endorsement CG 20 10 10-01 edition or its equivalent, such person or organization is an additional insured only with respect to liability arising out of your ongoing operations performed under that contract, agreement, or permit.

If the written contract, written agreement, or written permit does not require that the additional insured be added with respect to liability arising out of your ongoing operations, or requires coverage for the additional insured to be included by the use of ISO's Additional Insured - Owners, Lessees or Contractors - Scheduled Person Or Organization endorsement CG 20 10 07-04 (or subsequent) edition or its equivalent, then such person or organization is an additional insured only with respect to "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by your ongoing operations performed under that contract, agreement, or permit.

2. Completed Operations

SECTION II — WHO IS AN INSURED is amended to include as an additional insured:

a. Any person or organization for whom you are performing or have performed operations when you and such person or organization have agreed in a written contract, written agreement or written permit that such person or organization be added as an additional insured on your commercial general liability policy; and

b. Any other person or organization, including any architects, engineers or surveyors not engaged by you, whom you are required to add as an additional insured under your policy in the contract or agreement in Paragraph **1.** above;

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If the written contract, written agreement, or written permit requires the additional insured be added with respect to liability arising out of "your work" performed under that contract, agreement, or permit and included in the "products-completed operations hazard", or requires coverage for the additional insured to be included by the use of ISO's Additional Insured - Owners, Lessees or Contractors - Completed Operations endorsement CG 20 37 10-01 edition or its equivalent, such person or organization is an additional insured only with respect to their liability arising out of "your work" performed under that contract, agreement, or permit and included in the "products-completed operations hazard".

If the written contract, written agreement, or written permit does not require that the additional insured be added with respect to liability arising out of "your work" performed under that contract, agreement, or permit and included in the "products-completed operations hazard", or requires coverage for the additional insured to be included by the use of ISO's Additional Insured - Owners, Lessees or Contractors - Completed Operations endorsement CG 20 37 07-04 (or subsequent) edition or its equivalent, then such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by "your work" performed under that contract, agreement, or permit and included in the "products-completed operations hazard".

3. The insurance afforded to the additional insureds in Paragraphs **1.** and **2.** above:

   a. Does not apply unless the written contract or written agreement has been signed by the Named Insured or written permit issued prior to the "bodily injury", "property damage" or "personal and advertising injury";

   b. Only applies to the extent permitted by law; and

   c. Will not be broader than that which you are required by the written contract, written agreement, or written permit to provide to such additional insured.

4. **Exclusions**

   a. With respect to the insurance afforded to additional insureds under **a. Ongoing Operations** the following is added to **2. Exclusions** under **SECTION I — COVERAGE A — BODILY INJURY AND PROPERTY DAMAGE LIABILITY:**

   This insurance does not apply to "bodily injury", "property damage", or "personal and advertising injury" occurring after:

   (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or

   (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

   b. With respect to the insurance afforded to these additional insureds under **a. Ongoing Operations** and **b. Completed Operations**, the following is added to **2. Exclusions** under **SECTION I — COVERAGE A — BODILY INJURY AND PROPERTY DAMAGE LIABILITY:**

   This insurance does not apply to:

   "Bodily injury", "property damage", or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

   (1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

   (2) Supervisory, inspection, architectural or engineering activities.

5. **Conditions**

   With respect to the insurance afforded to these additional insureds under **a. Ongoing Operations** and **b. Completed Operations** the following is added to Paragraph **4. Other Insurance, a. Primary Insurance** under **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS:**

   This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under this policy provided that:

   a. The additional insured is a Named Insured under such other insurance; and

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b. You have agreed in a written contract, written agreement or written permit that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

B. PROPERTY DAMAGE CARE, CUSTODY OR CONTROL

1. The following is added to **Exclusion j.** under **SECTION I — COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY:**

Paragraphs **(4)** and **(5)** of this exclusion do not apply for the limited purpose of providing the coverage and sub-limits of liability as set forth below.

We will pay those sums that the insured becomes legally obligated to pay as damages because of "property damage" to:

a. Personal property, including keys, in the care, custody or control of an insured; and

b. That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations.

The most we will pay under **a.** and **b.** above in any one "occurrence" or for all damages during any one policy period is a sub-limit of $100,000.

These limits are included in and not in addition to the Limits of Insurance shown in the Declarations of the Commercial General Liability Policy.

Our right and duty to defend the insured against any "suit" for damages under **a.** and **b.** above ends when we have used up the applicable sub-limit of liability in the payment of judgments or settlements under it.

2. With respect this provision only, the following is added to Definition **17.** under **SECTION V — DEFINITIONS**:

"Property damage" also includes adjustment of locks to fit new keys or the cost of new locks, including their installation, when replacing keys covered in Paragraph **1.(a)** above provided that such "property damage" is not a result of any dishonest act on the part of any insured, or the insured's employees or agents, whether acting alone or in collusion.

C. OTHER INSURANCE AMENDMENT — SUPPLEMENTAL COVERAGE FOR INSURED'S INVOLVEMENT IN A CONTROLLED (WRAP-UP) INSURANCE PROGRAM

1. The following is added to **SECTION IV — COMMERCIAL GENERAL LIABILITY CONDITIONS,** Paragraph **4. Other Insurance b. Excess Insurance (1)(a):**

(v) That is covered by a "controlled (wrap-up) insurance program" in which you are enrolled for your ongoing operations or operations included within the "products-completed operations hazard", unless such "controlled (wrap-up) insurance program" is specifically excluded from coverage on this policy.

2. The following is added to **SECTION V — DEFINITIONS**:

"Controlled (wrap-up) insurance program" means a centralized insurance program under which one party has secured either insurance or self-insurance covering some or all of the contractors or subcontractors performing work on one or more specific project(s).

D. FELLOW EMPLOYEE EXTENSION

Under **SECTION II — WHO IS AN INSURED** Paragraphs **2.a.** and **2.a. (1)** are replaced by the following:

a. Your "volunteer workers" only while performing duties related to the conduct of your business, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture, or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business. However, none of these "employees" or "volunteer workers" are insureds for "bodily injury" or "personal and advertising injury" arising out of his or her providing or failing to provide professional health care services.

With respect to this provision only, Subparagraph **(1)** of Exclusion **2. e. Employer's Liability** under **SECTION I — COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY** does not apply.

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E. CONTRACTUAL LIABILITY (RAILROADS)

Definition 9. under **SECTION V — DEFINITIONS** is amended as follows:

1. Paragraph **c.** is deleted in its entirety and replaced by the following:

   c. Any easement or license agreement;

2. Paragraph **f.(1)** is deleted in its entirety.

F. CONTRACTUAL LIABILITY AMENDMENT — (PERSONAL AND ADVERTISING INJURY)

If it is required in a written contract, written agreement or written permit with the insured that any contractual liability exclusion for personal injury be removed from the policy, then Exclusion **e. Contractual Liability** under **COVERAGE B PERSONAL AND ADVERTISING INJURY, 2. Exclusions** is deleted in its entirety and replaced by the following:

e. Contractual Liability

"Personal and advertising Injury" for which the insured has assumed liability in a contract or agreement arising out of an "advertisement". This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement".

G. WAIVER OF GOVERNMENTAL IMMUNITY

We will waive, both in the adjustment of claims and in the defense of "suits" against the insured, any governmental immunity of the insured, unless the insured requests in writing that we not do so.

Waiver of immunity as a defense will not subject us to liability for any portion of a claim or judgment in excess of the applicable limit of insurance.

H. DAMAGE TO PREMISES RENTED TO YOU

The Limit of Insurance for Damage To Premises Rented To You is increased to $1,000,000.

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Bond No. RCB0066096

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned Anglin Civil, LLC - 13000 Newburgh Rd., Livonia, MI 48150 as Principal, and RLI Insurance Company - 9025 N. Lindbergh Dr., Peoria, IL 61615 as Sureties, are hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of TWO MILLION FIVE HUNDRED TWO THOUSAND SEVEN HUNDRED THIRTY ONE AND 16/100 Dollars ($ 2,502,731.16), in lawful money of the United States, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns this 28th day of April, 2026.

WHEREAS, the above bounded Principal has entered a certain written contract with the above-named City of Birmingham, Michigan dated _____ day of _____, 2026 for the construction of Wimbleton Drive Phase 2 Project - Contract #6-26(W),

which contract is hereby referred to and made a part hereof as fully and to the same extent as if the same were entirely written herein,

AND THE SAID SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder of the specifications accompanying the same shall in anywise affects its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work or to the specifications.

NOW, THEREFORE, the condition of the above obligation is such that if the Principal shall fully perform the annexed contract according to the terms thereof, or as such terms may be changed or modified by mutual agreement, and shall guarantee all work furnished against all defects and incidental damage to other property for a period of one (1) year following final acceptance of the work, then this obligation shall be void, otherwise the same shall remain in full force and effect.

This Bond is provided in compliance with and subject to the provisions of Act 213 of the Public Acts of Michigan for 1963, as amended by Act 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et. seq.

WITNESSED:

Anglin Civil

J Mersell

Joe Mersille

Anglin Civil, LLC

Director of Construction

Principal

RLI Insurance Company

Courtney Saunders

Courtney Saunders, Attorney-in-Fact

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

Bond No. RCB0066096

WIMBLETON DRIVE PHASE 2 PROJECT
CONTRACT #6-26(W)

PAYMENT BOND

KNOW ALL PEOPLE BY THESE PRESENTS, that we Anglin Civil, LLC of 13000 Newburgh Rd., Livonia, MI 48150 hereinafter called the "Principal" and RLI Insurance Company - 9025 N. Lindbergh Dr., Peoria, IL 61615 hereinafter called the "Surety", are held and firmly bound unto those persons known as "Claimants", as defined in MCL §129.206(6) supplying labor or materials to the Principal or his subcontractors and the prosecution of the work provided for in a certain Contract by and between the City of Birmingham and the Principal in the sum of TWO MILLION FIVE HUNDRED TWO THOUSAND SEVEN HUNDRED THIRTY ONE AND 16/100 Dollars ($ 2,502,731.16), in lawful money of the United States, for the payment whereof, we bid ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally this 28th day of April, 2026.

WHEREAS the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, 2026, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials Wimbleton Drive Phase 2 Project - Contract #6-26(W)

and,

WHEREAS this Bond is given in compliance with and subject to the provisions of Act No. 213 of the Public Acts of Michigan for 1963, as amended by Act. No. 351 of the Public Acts of Michigan for 1972, also known as MCL §129.201 et seq.

NOW, THEREFORE, the condition of the above obligation is such that if all persons or claimants as defined in Public Act 213 of 1963 supplying labor or materials to the principal contractor or his subcontractors in the prosecution of the work provided for in the contract are paid, the obligation of this Bond shall be void; otherwise, it shall be in full force and effect.

WITNESSED:

Anglin Civil

Joe Merrill

Anglin Civil, LLC

Director of Construction
Principal

RLI Insurance Company

Courtney Saunders, Attorney-in-Fact
Surety

POWER OF ATTORNEY

RLI Insurance Company
Contractors Bonding and Insurance Company

9025 N. Lindbergh Dr. Peoria, IL 61615
Phone: 800-645-2402

Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes executed, but may be detached by the approving officer if desired.

That **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, each an Illinois corporation, (separately and together, the "Company") do hereby make, constitute and appoint:

Angelo G. Zervos, Courtney Saunders, jointly or severally

in the City of Coconut Creek, State of Florida its true and lawful Agent(s) and Attorney(s) in Fact, with full power and authority hereby conferred, to sign, execute, acknowledge and deliver for and on its behalf as Surety, in general, any and all bonds and undertakings in an amount not to exceed **Twenty Five Million** Dollars (**$25,000,000.00**) for any single obligation.

The acknowledgment and execution of such bond by the said Attorney in Fact shall be as binding upon the Company as if such bond had been executed and acknowledged by the regularly elected officers of the Company.

RLI Insurance Company and/or **Contractors Bonding and Insurance Company**, as applicable, have each further certified that the following is a true and exact copy of a Resolution adopted by the Board of Directors of each such corporation, and is now in force, to-wit:

> "All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or Agents who shall have authority to issue bonds, policies or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

IN WITNESS WHEREOF, the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, as applicable, have caused these presents to be executed by its respective Vice President with its corporate seal affixed this 19th day of May, 2023.

CONTRACTORS BONDING AND INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI Insurance Company
Contractors Bonding and Insurance Company

By: _____
Barton W. Davis — Vice President

State of Illinois }
County of Peoria } SS

On this 19th day of May, 2023, before me, a Notary Public, personally appeared Barton W. Davis, who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company** and acknowledged said instrument to be the voluntary act and deed of said corporation.

By: _____
Catherine D. Geiger — Notary Public

CATHERINE D. GEIGER
OFFICIAL SEAL
Notary Public - State of Illinois
My Commission Expires
December 05, 2026

CERTIFICATE

I, the undersigned officer of **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company** this 28th day of April, 2026.

RLI Insurance Company
Contractors Bonding and Insurance Company

By: _____
Jeffrey D. Fick — Corporate Secretary

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Wimbleton Phase 2 (Contract 6-26W) - 2026

NORTH SIDE

Adress	DBH	Species RED=PROHIBITED SP. LIST	Proposed Action	Comments
554	15"	Honeylocust	Maintain	
554	13"	Honeylocust	Remove	Poor condition, branch tip dieback throughout canopy and recent root damage from construction
554	6"	Bur oak	Maintain	
554	3"	Chinese elm	Maintain	
612	39"	American Elm	Remove	Decay on stem, included bark and weak attachments on all major leads. Poor root system and significant hardscape damage (6 slabs). Potential DED or elm yellow but lab testing required for confirmation.
636	22"	Honeylocust	Remove	Girdling roots, imbalanced canopy with overextended 16" limb toward house, water service replacement w/in 6' of trunk, water main within dripline.
652	17"	Honeylocust	Maintain	
680	19"	Hybrid elm	Maintain	
700	18"	Hybrid elm	Remove	Poor root system causing significant hardscape damage, water/sewer leads replacement w/in 6' of trunk, water main within dripline
871 Poppleton	11"	Hybrid elm	Maintain	On Wimbleton Frontage
871 Poppleton	19"	Hybrid elm	Maintain	On Wimbleton Frontage- Stop sign alignment to be adjusted for better visibility
871 Poppleton	16"	Freeman maple	Remove	On Poppleton South Frontage- Poor root system, road edge to be moved <2' from trunk
871 Poppleton	12"	Freeman maple	Remove	On Poppleton South Frontage- Poor root system, road edge to be moved <2' from trunk
871 Poppleton	17"	Freeman maple	Remove	On Poppleton South Frontage- Poor root system, road edge to be moved <2' from trunk
812 Wimbleton	21"	Freeman maple	Maintain	On Poppleton South Frontage
812 Wimbleton	5"	Hybrid elm	Maintain	On Poppleton South Frontage
812 Wimbleton	38"	Northern red oak	Maintain	Additional tree protection in easement requested by DPS to preserve roots and prevent equipment storage. Deadwood pruning needed outside of oak wilt season.
840	19"	Honeylocust	Maintain	
868	34"	Honeylocust	Maintain	
868	29"	Honeylocust	Maintain	
886	19"	Honeylocust	Maintain	

886	18"	Honeylocust	Maintain	
900	17"	Honeylocust	Remove	Poor condition, 30% deadwood, sewer lead replacement within dripline of tree
930	9"	Callery pear	Remove	Invasive
930	8"	Callery pear	Remove	Invasive
1038	15"	Honeylocust	Remove	Planted above grade

SOUTH SIDE

Adress	Tree		Proposed Action	Comments
541	21"	Honeylocust	Maintain	
541	12"	Sugar maple	Maintain	
625	27"	Honeylocust	Maintain	
625	18"	Honeylocust	Maintain	
647	20"	Honeylocust	Maintain	
669	10"	Hybrid elm	Maintain	
669	4"	Ginkgo	Maintain	
701	5"	Tuliptree	Monitor/Remove	Still no foliage as of 5/12/26, Likely Removal
715	33"	Honeylocust	Remove	Sewer lead replacement ~3' from base of tree, sewer installation within dripline of tree, sidewalk already replaced within 3" of base of tree. ~50% of critical root zone is covered in pavement. Tree is in decline with previous storm dmg and deadwood and its no longer compartmentalizing pruning wounds. 12" diameter limb over road has hollows by branch union, wound will not compartmentalize if removed and could allow decay to enter stem.
715	8"	Norway maple	Maintain	
733	3"	White oak	Maintain	
777	3"	Silver linden	Maintain	On Poppleton North Frontage
921	34"	Bitternut hickory	Maintain	On Poppleton North Frontage
921	4"	Silver linden	Maintain	On Poppleton North Frontage
928	11"	Red maple	Maintain	On Poppleton North Frontage
928	6"	Honeylocust	Maintain	
928	8"	Zelkova	Maintain	
928	17"	Honeylocust	Maintain	
887	25"	Honeylocust	Maintain	
887	20"	Honeylocust	Remove	Poor condition and structure, ~40 degree lean
983	18"	Hybrid elm	Maintain	
1005	18"	Honeylocust	Remove	Poor condition, dieback, decay and mushrooms at base of tree

NORTH SIDE SUMMARY	
Total Trees	26
OK - Maintain	15
Monitor	
Further Investigate	
Remove	11
SOUTH SIDE SUMMARY	
Total Trees	22
Maintain	20
Further Investigate	1
Remove	3

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

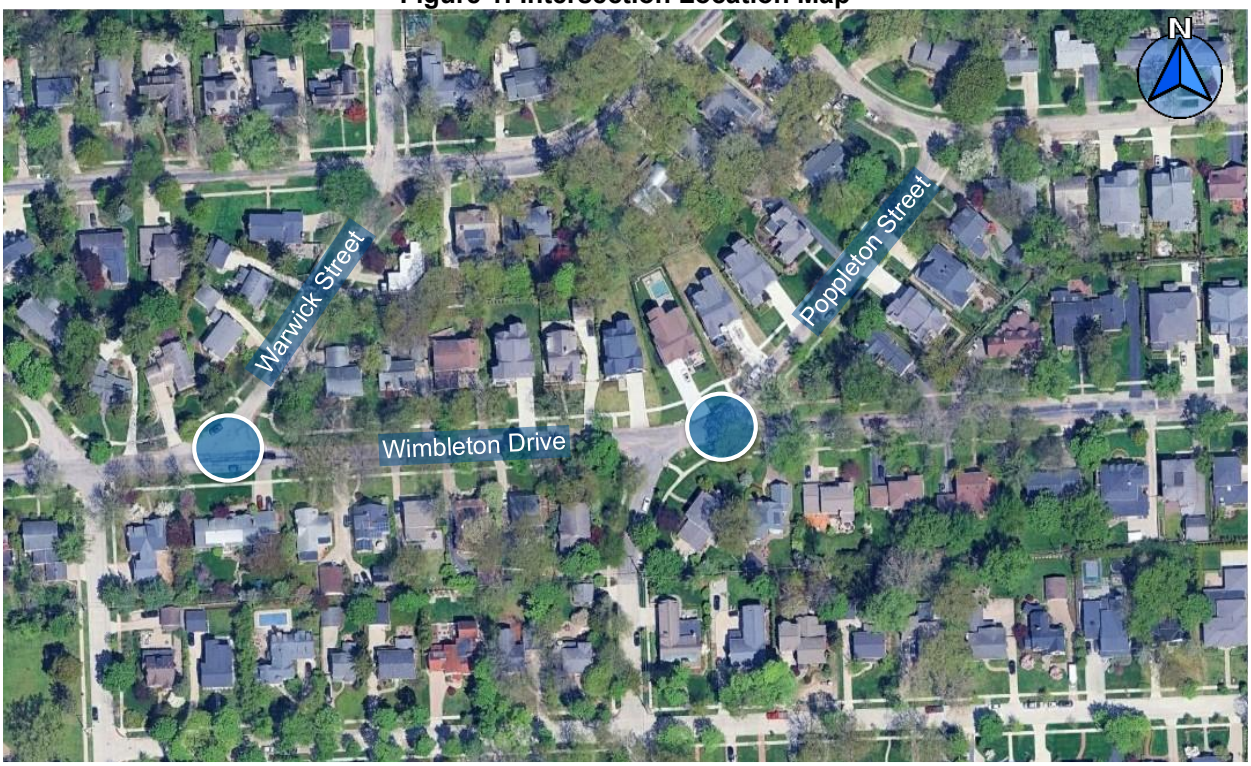
MEMO

VIA EMAIL: cityengineer@bhamgov.org

To:	**Melissa Coatta, PE** **Birmingham City Engineer**
From:	**Julie M. Kroll, PE, PTOE** **Aaron Wildrick, EIT** **Fleis & VandenBrink Engineering**
Date:	**May 14, 2026**
Re:	**Wimbleton Drive – Warwick Street and Poppleton Street Intersection Evaluation**

Fleis & VandenBrink (F&V) staff is pleased to present this memorandum to the City of Birmingham for your use in determining the recommended traffic control signing for the Wimbleton Drive & Warwick Street and Wimbleton Drive & Poppleton Street intersections, shown in **Figure 1**. The City has a programmed improvements on Wimbleton Drive and has requested an evaluation of the proposed intersection geometry to determine the recommended traffic control at these intersections.

Figure 1: Intersection Location Map



The guidance regarding regulatory traffic measures is provided in the *Michigan Manual on Uniform Traffic Control Devices (MMUTCD)* Sections 2B.10-18. Additional information is provided in the American Association

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of State Highway and Transportation Officials (AASHTO) *Geometric Design of Highways and Streets (Green Book)*. F&V referenced the *MMUTCD* and additional documents to evaluate existing intersection conditions and develop recommendations. Results of the analysis and recommendations are included herein.

1 ALL-WAY STOP CONTROL ANALYSIS

The Warwick Street & Wimbleton Drive intersection is a three-leg intersection with no traffic control, while the Poppleton Street & Wimbleton Drive intersection is a four-leg intersection with all-way stop control. The City of Birmingham has requested an evaluation of these intersections under the proposed roadway geometry modifications to determine appropriate traffic control. Section 2B.12-17 of the *MMUTCD* provides a set of criteria to evaluate in order to determine when the installation of all-way stop should be considered at an intersection. The applicable criterion includes the evaluation of the *Crash History*, *Traffic Volumes*, and *Sight Distance* at the intersection.

A. SECTION 2B.13 WARRANT A: CRASH EXPERIENCE

All-way stop control may be installed at an intersection where an engineering study indicates that:

a) For a four-leg intersection, there are five or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.

b) For a three-leg intersection, there are four or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control

The crash data utilized in the analysis was obtained by F&V from the Michigan Traffic Crash Facts (MTCF) website. The historical crash data was obtained for the most recent available **five years** (January 1, 2020 – December 31, 2024).

B. SECTION 2B.14 WARRANT B: SIGHT DISTANCE

All-way stop control may be installed at an intersection where an engineering study indicates that sight distance on the minor-road approaches controlled by a STOP sign is not adequate for a vehicle to turn onto or cross the major (uncontrolled) road.

At such a location, a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.

C. SECTION 2B.16 WARRANT D: 8-HOUR VOLUME (VEHICLES, PEDESTRIANS, BICYCLES)

a) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour, for any 8 hours of a typical day; and.

b) The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the minor-street approaches is at least 200 units per hour for each of any of the same 8 hours.

c) If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items A and B.

D. SECTION 2B.17 WARRANT E: OTHER FACTORS

a) All-way stop control may be installed at an intersection where an engineering study indicates that all-way stop control is needed due to other factors not addressed in the other all-way stop control warrants. Such other factors may include, but are not limited to, the following:

b) The need to control left-turn conflicts,

c) An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where all-way stop control would improve traffic operational characteristics of the intersection, or

d) Where pedestrian and/or bicyclist movements support the installation of all-way stop control.

WIMBLETON DRIVE & WARWICK STREET

A. Crash History: The most recent five (5) years of crash data for the intersection of Wimbleton Drive & Warwick Street was evaluated and indicated that only one (1) crash occurred that could be corrected by changes in traffic control devices.

B. **Sight Distance:** The intersection of Wimbleton Drive & Warwick Street provides adequate sight distance for approaching vehicles. Available visibility allows drivers to observe conflicting traffic and make appropriate decisions without the need for a full stop under typical conditions.

C. **Traffic Volumes:** The traffic volumes at the Wimbleton Drive & Warwick Street intersection do not meet the volume thresholds.

D. **Other Factors:** The Warwick Street intersection approaches at an angle with Wimbleton Drive, and with less than 100 feet separation from the adjacent Oxford Street intersection. Providing an all-way STOP at the Warwick Street intersection would impact the operations and safety at the adjacent Oxford Street intersection.

The results of the all-way stop control evaluation indicate that all-way stop control is not warranted at the Wimbleton Drive & Warwick Street intersection.

Wimbleton Drive & Poppleton Street

A. **Crash History:** The most recent five (5) years of crash data for the intersection of Wimbleton Drive & Poppleton Street was evaluated and indicated that zero (0) crashes occurred at the study intersection.

B. **Sight Distance:** Sight distance at the intersection of Wimbleton Drive & Poppleton Street is generally adequate. However, trees within the sight triangle restrict visibility in certain directions, requiring the minor-street drivers to stop to safely assess approaching traffic.

C. **Traffic Volumes:** The traffic volumes at the Wimbleton Drive & Poppleton Street intersection do not meet the volume thresholds.

D. **Other Factors:** The Poppleton Street intersection approaches are offset, with less than 50 between intersections. Providing an all-way STOP at the Poppleton Street intersection with the proposed design is not feasible with the intersection offset.

The results of the all-way stop control evaluation indicate that all-way stop control is not warranted at the Wimbleton Drive & Poppleton Street intersection.

2 Minor Street Control Analysis

Section 2B.11 of the MMUTCD outlines criteria to be considered when evaluating the potential installation of stop control at an intersection. Section 2B.10 of the MMUTCD was also reviewed, which provides guidance as to when a YIELD sign may be used instead of a STOP sign. The guidance includes the evaluation of the following conditions:

The applicable criterion includes the evaluation of the *Crash History*, *Traffic Volumes*, and *Sight Distance* at the intersection.

The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:

A. Sight Distance
A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway.

If intersection sight distance is adequate on the approaches, it may be controlled by YIELD signs.

B. Crash History
For a four-leg intersection, there are three or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.

For a three-leg intersection, there are three or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.

C. Functional Classification
The intersection is of a lower functional classification road with a higher functional classification road.

D. All-Way STOP
Conditions that previously supported the installation of all-way stop control no longer exist.

WIMBLETON DRIVE & WARWICK STREET

A. **Sight Distance:** There is not adequate sight distance for vehicles on the Warwick Street approach to make a decision without traffic control. The intersection does not meet the criteria for a Yield sign; therefore, a STOP sign is recommended on this approach.
B. **Crash History:** The most recent five (5) years of crash data for the intersection of Wimbleton Drive & Warwick Street was evaluated and indicated that only one (1) crash occurred that could be corrected by changes in traffic control devices.
C. **Functional Classification:** *N/A*
D. **All-Way STOP:** *N/A*

The results of the analysis indicate that stop control is recommend on the Warwick Street approach at Wimbleton Drive.

WIMBLETON DRIVE & POPPLETON STREET

A. **Sight Distance:** There is not adequate sight distance for vehicles on the Warwick Street approach to make a decision without traffic control. The intersection does not meet the criteria for a Yield sign; therefore, a STOP sign is recommended on this approach.
B. **Crash History:** The most recent five (5) years of crash data for the intersection of Wimbleton Drive & Warwick Street was evaluated and indicated that only one (1) crash occurred that could be corrected by changes in traffic control devices.
C. **Functional Classification:** *N/A*
D. **All-Way STOP:** This intersection previously operated with all-way STOP, with the changes to the intersection geometry, and the off-set intersections, all-way STOP control is no longer appropriate at this intersection.

The results of the analysis indicate that stop control is recommended on the Poppleton Street approaches at Wimbleton Drive.

3 SUMMARY

The results of the analysis indicate that minor-street stop control is warranted and recommend on both the Warwick Street and Poppleton Street approaches at the Wimbleton Drive. The results of the analysis are summarized in the table below.

Traffic Control Evaluation	Warwick Street	Poppleton Street
	Met?	
All-Way Stop Control (MMUTCD 2B.12)	No	No
Minor Street Stop Control (MMUTCD 2B.11)	**Yes**	**Yes**
Yield Control (MMUTCD 2B.10)	No	No

4 RECOMMENDATIONS

The recommendations are summarized below and shown on the attached exhibits.

- Provide a STOP sign on the Warwick Street approach at the Wimbleton Drive intersection.
  - The STOP sign should be located at the closest possible location to the intersection approach, considering the adjacent driveway impacts within the intersection.
  - The crosswalk north of the intersection should be signed as a mid-block crossing with pedestrian crossing signage (W11-2, W16-7P) signage added at this location.
- Provide a STOP signs on the Poppleton Drive approaches at the Wimbleton Drive intersection.
  - The STOP sign on the north leg of the intersection should be located at the closest possible location to the intersection approach, considering the adjacent driveway impacts within the intersection.

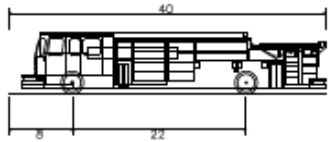
- The STOP sign on the south leg should be located a minimum of 4 ft behind the pedestrian crossing in accordance with MMUTCD requirements.
- The crosswalk north of the intersection should be signed as a mid-block crossing with pedestrian crossing signage (W11-2, W16-7P) signage added at this location.

If you have any questions or concerns regarding this engineering analysis, please do not hesitate to contact our office.

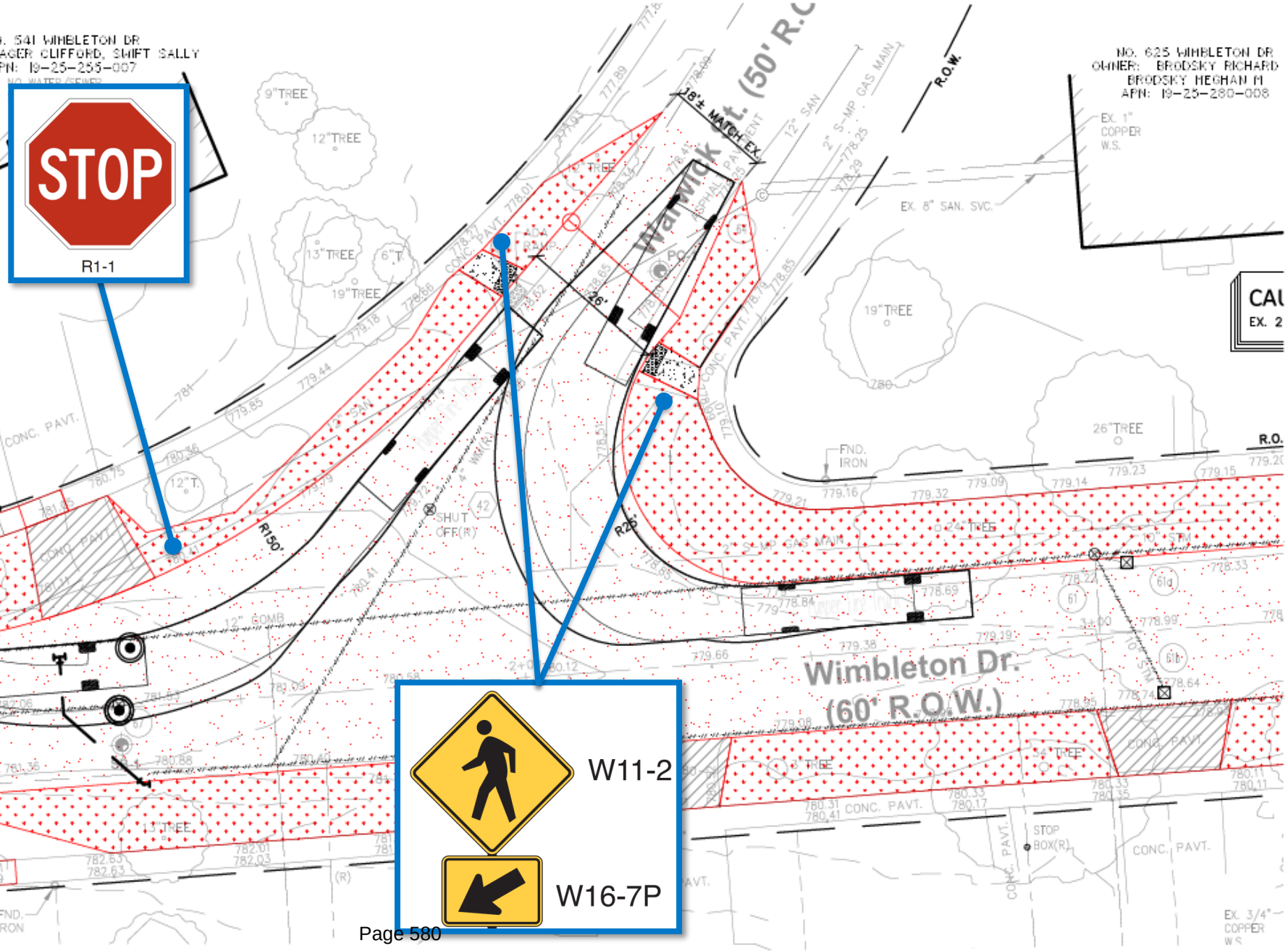
Attachments: Recommended Signing-Wimbleton Drive & Warwick Street
Recommended Signing-Wimbleton Drive & Poppleton Street

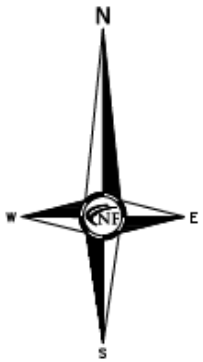
WIMBLETON PHASE 2

FIRE TRUCK TURNING ANALYSIS



Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°

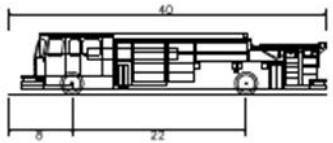




NF ENGINEERS
NOWAK & FRAUS ENGINEERS

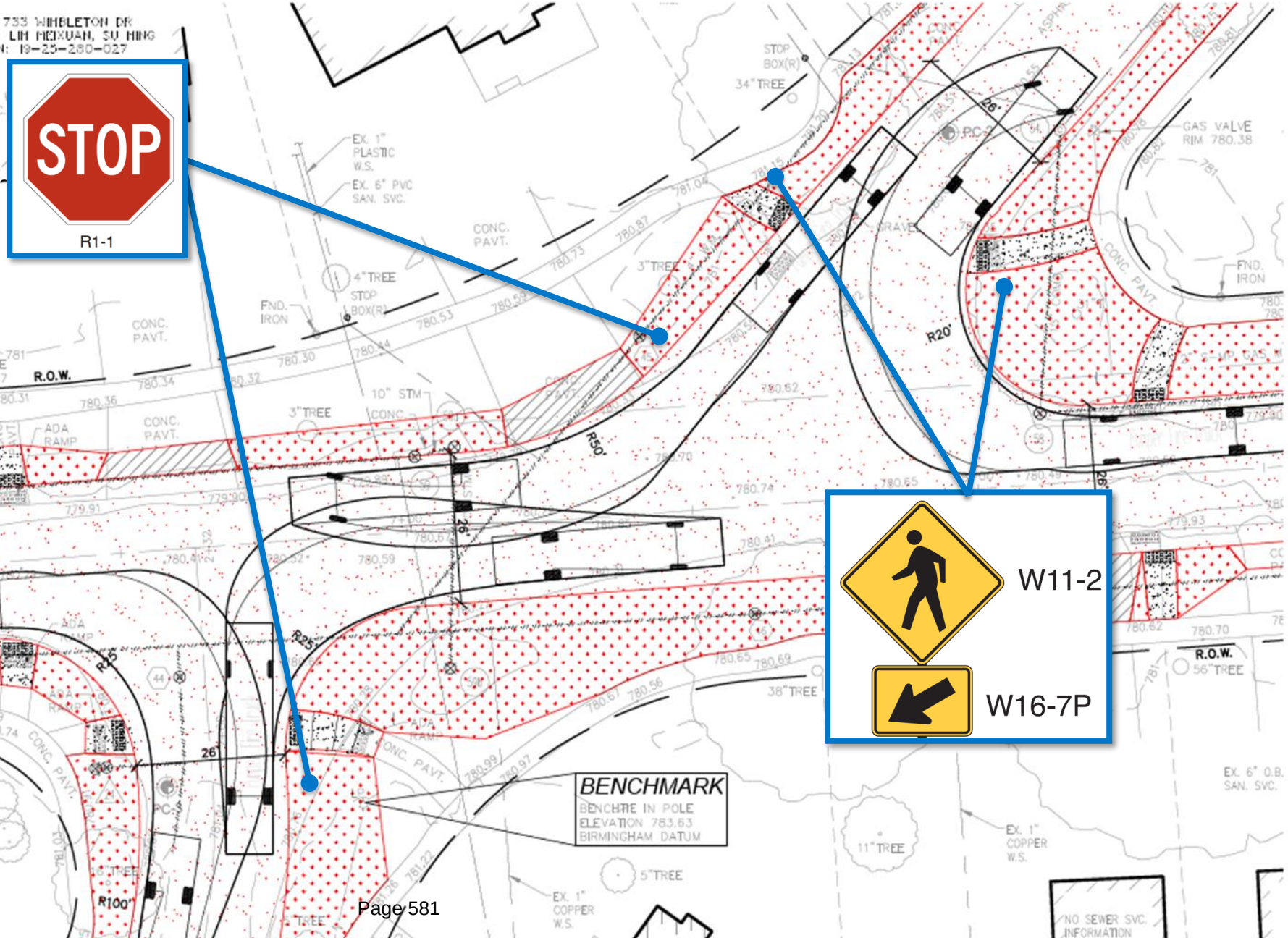
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Max Wheel Angle	45.00°





NF ENGINEERS

MEMORANDUM

City Manager's Office

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Rebecca L. Grove - Varnum
Kathleen A. Martone - Varnum
Mary Kucharek, City Attorney

SUBJECT: City of Birmingham Community House Foundation

INTRODUCTION:

The proposed City of Birmingham Community House Foundation (the "Foundation") is proposed to be a Michigan nonprofit 501(c)(3) public charity organized to own, maintain, and improve the Community House and to carry on the social, philanthropic, and civic activities for the residents of Birmingham. The City of Birmingham would serve as the Foundation's sole member.

BACKGROUND:

If the City's purchase of the Community House is successful, the Foundation will be established in accordance with the property's deed restrictions and its long history as a center for civic, social, and philanthropic life in Birmingham. The Foundation would be organized pursuant to the Michigan Nonprofit Corporation Act and would operate exclusively for charitable, educational, and scientific purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code.

The Foundation's primary purpose would be to acquire, maintain, and improve the Community House and to support the social, philanthropic, and civic activities it has historically hosted for Birmingham residents. The Articles of Incorporation would authorize the Foundation to acquire, lease, purchase, improve, and maintain real and personal property to provide and maintain a center for these activities. The Foundation would support a range of activities centered on the Community House, including community gatherings and events, civic programming and forums, philanthropic activities and fundraising, educational programs and workshops, and cultural and social events. These activities would continue the Community House's historical role as a gathering place for Birmingham residents.

The Foundation would be a nonstock, membership-based corporation financed primarily through charitable gifts, grants, and contributions. The Foundation's assets would stay dedicated to the Community House and its civic purposes. The Articles would expressly prohibit

activities inconsistent with tax-exempt status under Section 501(c)(3).

LEGAL STRUCTURE AND ORGANIZATIONAL FORM

The Foundation would be a Michigan nonprofit, nonstock, member-managed corporation with anticipated Section 501(c)(3) public charity status. This classification provides the broadest fundraising reach (open to gifts from residents, businesses, and community foundations) while avoiding the more restrictive private-foundation rules.

The City of Birmingham would serve as the Foundation's sole member. As sole member, the City would designate the initial Board of Directors and retain authority to amend the Articles and Bylaws, remove directors, and require annual financial reports from the Board.

FORMATION STEPS

Implementation would proceed in phases: Commission approval and authorization of formation. Once formed, next steps would include the Foundation's adoption of Bylaws and identification of initial directors and officers. Then, the Foundation would register with the Michigan Attorney General Charitable Trust Division and file IRS Form 1023 to obtain 501(c)(3) recognition. Finally, the Foundation would launch first-year priorities aligned with City cultural, preservation, and place-making plans.

GOVERNANCE STRUCTURE

The Foundation's business and affairs would be managed by a Board of Directors consisting of 9 initial directors designated by the City: 2 City Commissioners chosen by the City Commission, plus 7 at-large community stakeholders with specialized expertise insofar as possible in finance, fundraising, philanthropy, business and/or the legal profession. The City Manager and City Attorney would serve as ex-officio, non-voting members. Directors would serve staggered terms to ensure continuity.

A majority of directors constitute a quorum, and Board action requires a majority vote of directors present. The Board may create standing or ad-hoc committees and appoint advisory boards to provide civic and community guidance.

Officers would include a President, Vice President, Secretary, and Treasurer, with an optional Chairperson as authorized by the Board.

MEMBERSHIP AND CITY OVERSIGHT

As sole member, the City of Birmingham would retain high-level governance authority, including designation and removal of directors, amendment of Articles and Bylaws (member-only actions), and the right to receive annual financial reports.

FINANCIAL AND OPERATIONAL PROVISIONS

The Foundation would be financed primarily through charitable gifts, grants, and contributions. Board authorization would be required for contracts, loans, checks, deposits, and legal actions.

TAX-EXEMPT AND CHARITABLE SAFEGUARDS

The Foundation would be subject to standard 501(c)(3) restrictions: no private inurement, no

substantial lobbying, and no campaign intervention. Financial transparency would be ensured through annual reporting to the member, registration with the Michigan Attorney General Charitable Trust Division, and IRS Form 990 filings.

Upon dissolution, the Foundation's assets would revert to the City of Birmingham—or to a foundation created by the City—for public purposes, consistent with the Community House deed restrictions.

LIABILITY PROTECTION AND INDEMNIFICATION

Directors and volunteer officers would receive statutory liability protection under Michigan law and would be indemnified to the fullest extent permitted. The Foundation would be authorized to purchase liability insurance.

LEGAL REVIEW:

The founding documents will be prepared by retained legal counsel and follow a standard nonprofit formation framework with appropriate charitable safeguards.

FISCAL IMPACT:

The Foundation would be financed through charitable gifts, grants, and contributions.

SUSTAINABILITY:
None.

DESIGN CONSIDERATIONS:
None.

PUBLIC COMMUNICATIONS:

Public communications should explain that the Foundation is a mission-driven 501(c)(3) public charity organized to acquire, maintain, and improve the Community House and to carry on the social, philanthropic, and civic activities it has long hosted for Birmingham residents. The Foundation is funded primarily through charitable contributions and subject to nonprofit safeguards including financial transparency, state oversight, and federal reporting requirements.

SUMMARY:

The City of Birmingham Community House Foundation would provide the City with a dedicated nonprofit vehicle to own, maintain, and improve the Community House and to support the civic, philanthropic, and community activities it has long hosted for Birmingham residents. The City of Birmingham would serve as sole member, preserving high-level City control while allowing the Board of Directors to manage day-to-day operations.

Implementation would proceed in phases: first with Commission approval for formation filings, followed by designation of directors and officers, charitable trust registration, IRS Form 1023 filing, and launch of first-year priorities aligned with City cultural, preservation, and place-making plans.

ATTACHMENTS:

1. City of Birmingham Community House Foundation - Briefing Powerpoint

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to authorize the formation of the City of Birmingham Community House Foundation, designating the City as the sole member, and authorizing organizational filings, including adoption of the Articles of Incorporation, Bylaws, charitable trust registration with the Michigan Attorney General, and filing of IRS Form 1023.

CITY OF BIRMINGHAM, MICHIGAN

City of Birmingham Community House Foundation

Proposed Formation & Request for Approval

Briefing to the
Birmingham City Commission

Prepared by Varnum LLP• May 2026

AT A GLANCE

501(c)(3) Public Charity

Michigan nonprofit, nonstock, member-managed

City as Sole Member

Board designated by the City

9-Member Board

2 City Commissioners + 7 at-large; plus 2 ex-officio (City Manager & City Attorney)

Decision Today

Approve consent resolutions to authorize formation

VARNUM

What we are asking the Commission to approve

DECISION REQUESTED

Approve the consent resolutions authorizing formation of the City of Birmingham Community House Foundation as a Michigan nonprofit, 501(c)(3) public charity, with the City of Birmingham as sole member.

01

Why now

If the purchase of the Community House is successful, the Foundation will be established in accordance with the property's deed restrictions and its long history as a center for civic, social, and philanthropic life in Birmingham.

02

What it does

Owns, maintains, and improves the Community House and funds the social, philanthropic, and civic activities it has long supported for Birmingham residents.

03

How it is governed

City as sole member; Board of 9 directors designated by the City — 2 City Commissioners and 7 at-large community stakeholders — with the City Manager and City Attorney as ex-officio, non-voting members.

A foundation built around the Community House

DEFINITION

A mission-driven 501(c)(3) public charity organized to acquire, maintain, and improve the Community House and to carry on the social, philanthropic, and civic activities it has long hosted for Birmingham residents.

A center for the community — the Articles authorize acquiring, leasing, purchasing, improving, and maintaining real and personal property to provide and maintain that center.

Mission-locked — the Foundation's assets stay dedicated to the Community House and its civic purposes.

KEY FEATURES

Tied to the Community House

Formed in connection with a successful purchase of the Community House and consistent with the property's deed restrictions and historical use.

Charitable purpose

Social, philanthropic, and civic activities for Birmingham residents under § 501(c)(3).

Funded by gifts & grants

Financed primarily through charitable gifts, grants, and contributions

Public accountability

Annual financial report; charitable trust registration; IRS Form 990 filings.

Why a public charity is the right fit for Birmingham

RECOMMENDED • PUBLIC CHARITY

Broadest fundraising reach with strong public trust

- **Broader donor base**

  Open to gifts from residents, businesses, and community foundations.

- **Eligible for most grants**

  Recognized vehicle for charitable contributions and grants supporting the Community House.

- **Strong public trust**

  Public-support test and public reporting reinforce accountability to the community.

- **Less restrictive regime**

  Avoids private-foundation excise rules absent IRS reclassification — the right fit for a community-facing center.

Carrying forward the purposes of the Community House

01

Community Gathering & Events

A welcoming center for weddings, receptions, reunions, and civic gatherings that have long defined the Community House for Birmingham residents.

02

Civic Programming

Forums, lectures, and civic events that bring residents together and support engagement in the life of the City.

03

Philanthropic Activities

Fundraising, grants, donor-advised gifts, and matching campaigns directed to community priorities at the Community House.

04

Educational Programs

Classes, workshops, and youth and adult learning opportunities consistent with § 501(c)(3) charitable and educational purposes.

05

Cultural & Social Activities

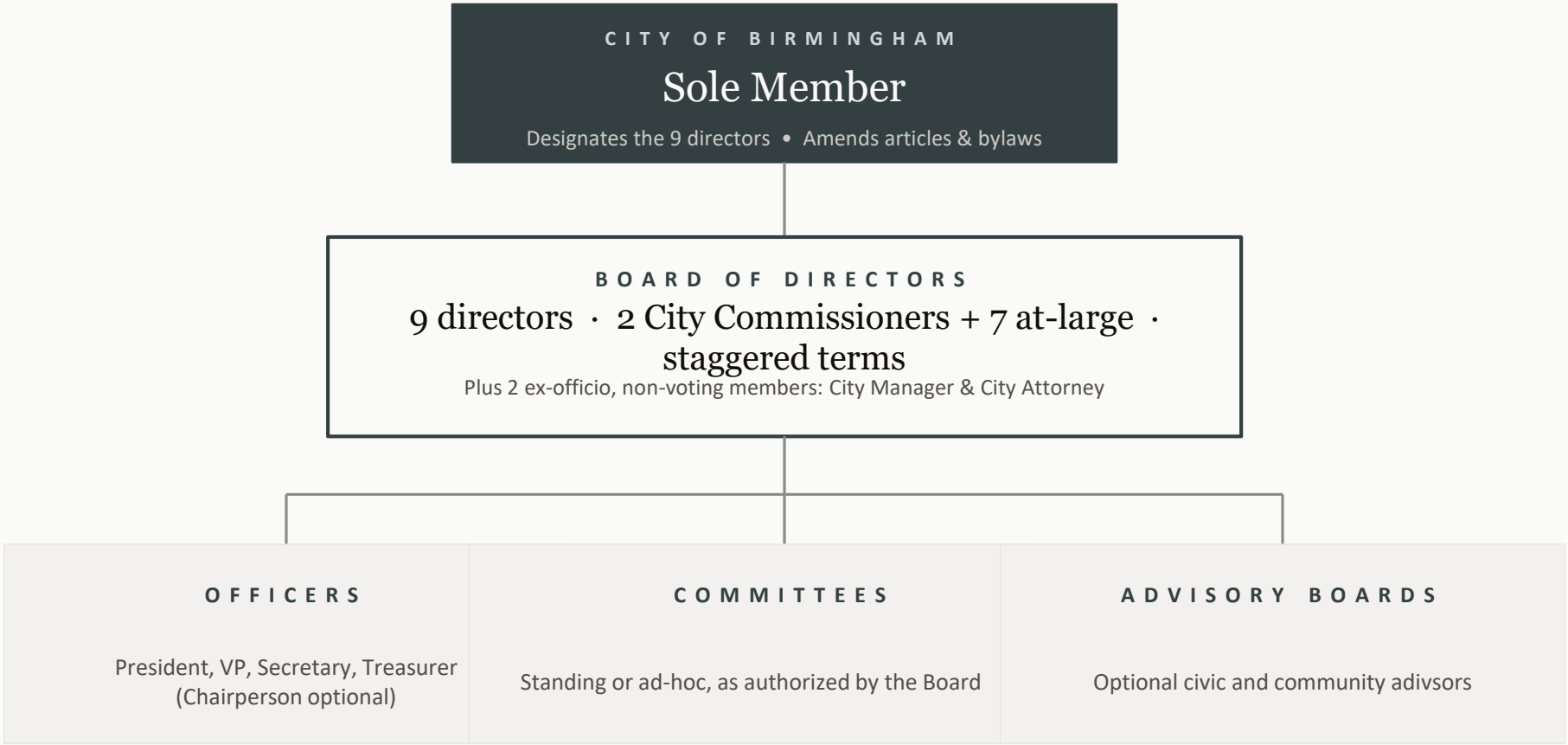
Concerts, exhibits, performances, and social events that animate the Community House and serve Birmingham residents.

06

Maintain & Improve the Property

Acquiring, maintaining, and improving the Community House — fulfilling the Articles' purpose of providing and maintaining a center for these activities.

Member-managed nonprofit, City as sole member



Board size, terms, and member controls

9

initial directors

Designated by the City

2 + 7

Commissioners + at-large

Plus 2 ex-officio non-voting

Staggered Terms

For continuity of the Board

Staggered term expirations

Representative of Residents

of Birmingham

Goal: a board that reflects the community

CITY OF BIRMINGHAM RETAINS

- Sole-member status
- Designation and removal of directors
- Amendment of Articles and Bylaws (member-only)
- Annual financial report from the Board within 4 months

INITIAL DIRECTORS

- 2 City Commissioners, chosen by the City Commission
- 7 at-large community stakeholders with specialized expertise insofar as possible in finance, fundraising, philanthropy, business and/or the legal profession
- 2 ex-officio, non-voting members: City Manager and City Attorney
- Staggered terms; goal of a board representative of the Birmingham community

Built-in legal and financial guardrails

1

501(c)(3) restrictions

No private inurement; no substantial lobbying; no campaign intervention.

2

Financial transparency

Annual financial reporting to the member

3

State oversight

Registration with the Michigan Attorney General Charitable Trust Division.

4

Federal recognition

IRS Form 1023 application for recognition of exempt status.

5

Board authorization

Required for contracts, loans, checks, deposits, and legal actions.

6

Asset lock

On dissolution, assets revert to the City of Birmingham — or to a foundation created by the City — for public purposes, consistent with the Community House deed restrictions.

From approval to operational foundation



Approval

Commission approves consent resolutions and authorizes formation.

Formation

Finalize Articles & Bylaws; identify initial directors and officers; ratify formation.

Registration

Register with Michigan AG Charitable Trust Division; open bank accounts.

Tax Exemption

File IRS Form 1023; obtain 501(c)(3) determination letter.

Launch

Adopt first-year priorities aligned with City cultural, preservation, and placemaking plans; coordinate with existing partners; begin fundraising.

CALL TO ACTION

Recommended next steps

MOTION

Approve a resolution authorizing formation of the City of Birmingham Community House Foundation, designating the City as sole member, and authorizing organizational filings.

SEEKING ACTION THAT ALLOWS:

1. Adoption the Articles of Incorporation/Action of Incorporator
2. Authorizes the filing of the Articles of Incorporation
3. Authorize the preparation of Bylaws
4. Authorize charitable trust registration with the Michigan Attorney General and filing of IRS Form 1023

DISCUSSION

Questions & Discussion

Thank you to the Commission for considering the formation of the City of Birmingham Community House Foundation — a public-charity vehicle dedicated to the civic, philanthropic, and community priorities of our residents.

Nancy Byers
29210 Grandview St.
Harrison Township, MI 48045

City of Birmingham
Attn: City Commission
151 Martin Street, P.O. Box 3001
Birmingham, Michigan 48012-3001

Mayor Clinton Baller
Temporary Mayor Pro Tem Therese Longe
Commissioner Andrew Haig
Commissioner Brad Host
Commissioner Bill Kolb
Commissioner Kevin Kozlowski

Dear Commission Members, May 9, 2026

I read the May 5, article by Noelle Friel, Reporter for Click-on-Detroit and while I congratulate your actions on Short-Term Rentals all I can say is WOW.

"Police and code enforcement will do all they can, ***but residents, you're the ones that live right next door to these rental properties and we're going to rely on you, to some extent, to be our eyes and ears,"*** Baller said.

So, the neighboring residents who do not derive any benefit from these commercial enterprises are forced into conscription to be your eyes and ears? How do you protect these neighbors from retribution to their family and property once they report criminal activity? Drug dealers and Sex-traffickers use STRs to avoid police detection. AirBNB now informs their hosts how to identify "Pop-up" brothels. Are you going to tell the neighbor how to identify a Pop-up brothel and to call the police when they see young girls being led into the STR? These criminals now know where you live.

Birmingham is a beautiful city which explains your higher-than-average property taxes. However, why should the residents pay for all the regulation mentioned in the article; updated inspections, holding monthly meetings, investigating complaints, involving the police, building department, and code enforcement, etc. when there is no benefit to them? Is that fair?

St. Clair Shores has effectively banned short-term rentals through its zoning ordinance, prohibiting them in residential areas by defining "residence" **as requiring permanence**, making STRs similar to illegal commercial uses. In Sept 2025, the Michigan Supreme Court further affirmed that residential restrictions can be used to prohibit short-term rentals,

You may want to join Saint Clair Shores and other cities because STRs have become a **FAILED** experiment in Residential neighborhoods.

Sincerely,

Nancy Byers

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Fwd: STR Safety Letter from Residents

1 message

Clinton Baller <cmballer@avidpays.com> Thu, Apr 30, 2026 at 8:12 AM
To: Jana Ecker <Jecker@bhamgov.org>, Tracy Gaudenzi <tgaudenzi@bhlaw.us.com>, Alex Bingham <abingham@bhamgov.org>

---------- Forwarded message ---------
From: **Narlu Castellano McLaughlin** <narlu.castellano@gmail.com>
Date: Thu, Apr 30, 2026 at 12:01 AM
Subject: STR Safety Letter from Residents
To: <cballer@bhamgov.org>, <along@bhamgov.org>, <ahaig@bhamgov.org>, <bhost@bhamgov.org>, <bkolb@bhamgov.org>, <kkozlowski@bhamgov.org>, <tlonge@bhamgov.org>
CC: <mkucharek@bhlaw.us.com>

Dear Members of the Birmingham City Commission,

Please find attached a letter submitted on behalf of Narlu Castellano of 1553 E. Lincoln Street and endorsed by 19 Birmingham residents, local organizations, and local businesses.

The letter requests that the following two questions be placed on the agenda for a public response at the next commission meeting:

1. What is the enforceable legal basis for regulating short-term rentals in Birmingham, and what steps are being taken to ensure any adopted ordinance is legally operative?

2. Has the City of Birmingham revoked the city-issued STR license for the East Lincoln Street property involved in the April 11th shooting, and if not, what is the basis for that decision?

The City Attorney, Mary M. Kucharek is copied on this correspondence given the legal questions raised regarding enforcement authority and litigation risk.

We respectfully request confirmation that this letter has been received and that the two questions will be addressed publicly at the next regular commission meeting.

Thank you for your service to our community.

Narlu Castellano
1553 E. Lincoln Street, Birmingham, MI 48009
412-498-2836
narlu.castellano@gmail.com

On behalf of the undersigned residents, organizations, and businesses listed in the attached letter.

STR Letter to City Commission from Residents 042926.pdf
108K

Letter to the Birmingham City Commission

TO: Members of the Birmingham City Commission

CC: City Attorney, Mary Kucharek

FROM: Narlu Castellano, Birmingham Resident, 1553 E. Lincoln Street

Endorsed by the undersigned residents, local organizations and local businesses

DATE: April 29, 2026

RE: Short-Term Rental (STR) Safety — Questions Requiring a Public Response

We are requesting public responses to the following two questions at the next commission meeting scheduled for May 4, 2026:

Question 1: Legal Basis and Enforceability of STR Regulation

What is the enforceable legal basis for regulating short-term rentals in Birmingham, and what steps are being taken to ensure any adopted ordinance is legally operative?

For context: Michigan has no state preemption law preventing Birmingham from banning or revoking STR licenses. The city attorney raised enforceability concerns as early as 2021. At the most recent commission meeting, a motion to eliminate non-owner-occupied STRs was amended after the city attorney indicated it lacked the language necessary for enforcement.

Residents request that the commission address:

- What specific ordinance language is currently being drafted?
- What is the anticipated timeline for adoption?
- Who bears authority and responsibility for implementation?

Question 2: Status of the City-Issued STR License for the East Lincoln Street Property

Has the City of Birmingham revoked the STR license for the East Lincoln Street property involved in the April 11th shooting, and if not, what is the basis for that decision?

For context: The Police Chief confirmed the property was fully licensed at the time of the shooting, which involved at least four shooters, 35 shell casings, and damage to two neighboring homes. Airbnb has since removed the host and listing from its platform. The city-issued license and the Airbnb listing are separate instruments governed by separate authorities.

Residents request that the commission address:

- What is the current status of the city-issued STR license for this property?
- What conduct standard governs license revocation, and does a shooting of this magnitude meet it?
- On what basis, if any, are STRs operating as event or party houses treated differently from other commercial venues subject to license revocation when violence occurs?

The first time I was woken up by gunshots was on February 4, 1992, when Hugo Chavez attempted a coup d'état on the democratic government of my native Venezuela. I was 9 years old. The country was under martial law. The second time I woke up to gunshots was on April 11, 2026, at my home in Birmingham, Michigan.

I share this not for dramatic effect, but because it speaks directly to what is at stake in this conversation. I have lived through what it means for a neighborhood to become unsafe overnight. I moved to Birmingham because I believed my future family would not have to. The commission's response to the April 11th shooting; a 6-month moratorium on new STR licenses, tells me the city does not yet fully understand the weight of what happened on East Lincoln Street that morning, or what its residents are now carrying.

Before I raise my concerns, I want to acknowledge the Birmingham Police Department. Their response to the April 11th shooting was prompt, professional, and deeply humane. When my daughter approached the officers on the scene to ask if her neighborhood was safe from bad guys, they took the time to personally reassure her. That moment of care for a frightened child did not go unnoticed, and I am grateful for it. The Birmingham Police Department showed up for our community that morning in every sense of the word.

The undersigned residents, neighbors, and local organizations share two serious concerns about the commission's response. First, the proposed moratorium does not address immediate safety issues at hand. Second, the commission's reluctance to act more decisively is causing ongoing harm to our community.

On the Adequacy of the Proposed Moratorium

Authority to Regulate and Revoke. The commission has not publicly addressed whether it has the authority to revoke existing licenses or ban STRs in residential areas altogether. Michigan has no state preemption law blocking Birmingham from doing either. In 2021, the Legislature considered House Bill 4722, which would have prohibited local governments from banning STRs. That bill failed, leaving local governments with full authority to regulate or prohibit short-term rentals[1]. Birmingham's own City Attorney acknowledged this at a 2021 workshop, warning that the proposed legislation "would severely limit local control and authority over short-term rentals" [2]confirming that the authority currently exists. Residents should not have to wait six months to learn what tools their government already has at its disposal.

The East Lincoln Property. The Police Chief confirmed at Monday's meeting that the East Lincoln Street property, involving at least four shooters, 35 shell casings, and damage to two neighboring homes, was licensed and had up-to-date paperwork at the time of the shooting. Airbnb has since removed the host and listing from its platform for violating its policies. The city has not publicly stated whether the city-issued license has been revoked. If a shooting of this magnitude does not constitute a code violation warranting revocation, residents are owed a clear explanation of what does.

Safety Standards Applied to Other Venues. Birmingham has mechanisms to revoke business licenses from commercial venues where violence occurs. STRs operating as event or party houses are functioning as commercial venues in residential neighborhoods. The commission should direct the City Manager to identify what safety and conduct standards

[1] Source: Dalton & Tomich, PLC: https://daltontomich.com/understanding-michigans-patchwork-of-short-term-rental-regulations/
[2] Source: Downtown Publications: https://www.downtownpublications.com/single-post/birmingham-talks-short-term-rental-properties

apply to STR licenses and enforce them immediately and consistently, as they would be applied to any other licensed venue in this city.

On the Ongoing Harm Caused by the Commission's Reluctance to Act

The Full Scope of Harm to Residents. The damage from April 11th extends well beyond bullet holes in neighboring homes. Residents, including families with children, woke up to gunfire that morning and continue to carry that trauma. Our sense of safety and quality of life have been materially harmed. That harm did not end when the shell casings were collected, and it is not addressed by a pause on new license applications.

The Cost of Inaction. The commission has expressed concern about potential litigation from STR license holders. That is a legitimate legal consideration. It cannot, however, be the only consideration. Every day without a clear enforcement standard is a day the city is choosing the interests of STR operators over the safety and wellbeing of residents. Inaction is a policy choice, and policy choices have consequences. The neighbors of East Lincoln Street are living with those consequences right now. I'm personally better equipped to defend against a subpoena than a bullet.

I did not expect to find myself writing this letter from Birmingham, Michigan. I left Venezuela so that my future family would grow up in a place where the sound of gunfire at their home was unthinkable. On April 11th, a little girl in our neighborhood had to ask a police officer if her home was still safe. She deserved better than that question. Every child on our street did. The residents of East Lincoln Street, and every resident of this city, deserve a commission that treats their safety as its highest obligation, not as a liability to be managed. The tools to act exist. The legal authority exists. What is missing is the will to use them.

We respectfully request that the two questions at the top of this letter be placed on the agenda for a public response at the next commission meeting. The City Attorney is copied on this correspondence given the legal questions regarding the division of authority between the Commission and the City Manager, and given the commission's stated concern about litigation risk, a risk that must be weighed against the city's obligations to its residents.

Thank you for your service to our community.

Best regards,

Narlu

Narlu Castellano
1553 E Lincoln Street
Birmingham, MI 48009
412-498-2836
narlu.castellano@gmail.com

Endorsing Residents, Organizations, and Businesses

Residents

Erica Mueller 1927 E Lincoln St, Birmingham MI
Kelsey Hogan 1351 E Lincoln St, Birmingham MI
Kelsey Kozlowski + Erik Koehler 1376 E Lincoln St, Birmingham MI
Margaret Kamenec 612 Brookside Ave, Birmingham MI
Tara Stover 1856 Cole, Birmingham MI
Danielle Petty 1387 Webster St, Birmingham MI
Marette Zaki 763 Pilgrim Ave, Birmingham MI
Shawn Scott 1350 Chapin Ave, Birmingham MI
Tarana Ginnebaugh 1256 Puritan Ave, Birmingham MI
Anvita Bawa 1616 Croft Rd, Birmingham MI
Kelsey Ferrans Birmingham MI
Lauren Van Dam 2379 Yorkshire Rd, Birmingham MI
Erin Ongena 1893 Humphrey Ave, Birmingham MI
Anie Slanga 887 Wimbleton Dr, Birmingham MI
Myra Perez 930 Wimbleton Dr, Birmingham MI
Renee Yaldo 657 Greenwood St, Birmingham MI
Lindsay Lawrie 790 S. Glenhurst Dr, Birmingham MI
Molly Borman 920 Gordon Ln, Birmingham MI

Local Organizations

Lauren Giacco Birmingham Bloomfield Hills Moms Local Network, 3653 W Bradford Dr

Local Businesses

Lacey Foon Owner and Founder, Fascination Factory, 2295 E Lincoln St. #150

May 13 2026 PB agenda item K: Study Session 1. Short Term Rentals – City Commission Directive

1 message

Kathleen Devereaux <kcdevereaux@yahoo.com> Sat, May 9, 2026 at 9:05 AM
To: "ndupuis@bhamgov.org" <ndupuis@bhamgov.org>
Cc: "city-commission@bhamgov.org" <city-commission@bhamgov.org>, "jecker@bhamgov.org" <jecker@bhamgov.org>, Mary Kucharek <mkucharek@bhlaw.us.com>, Alex Bingham <abingham@bhamgov.org>

Dear Mr. Dupuis and members of the Planning Board

The current Zoning Ordinance does not allow Short Term Rentals in residential zones.

The City Commission recently passed a resolution declaring a six-month moratorium on all new permit/licenses for short term rentals. After which, upon the expiration of existing rental licenses granted to STRs, such licenses will not be renewed. However, the City Attorney stated they could not revoke existing licenses for premises being leased short-term that are in good standing. All rental licenses expire yearly on April 15. This matter has been referred to the Planning Board to parse the zoning issues.

The Landlord Application filled out by current STR owners did not ask them to disclose whether they were renting long or short term, (i.e. under 30 days.) The application did not differentiate because, no doubt, the existing rental ordinance (Chapter 22 sec. 22-331 et seq.) did not contemplate short-term rentals. At the time this police powers ordinance was enacted, in 2011, the Commission did not distinguish between STRs and long-term rentals, because they were probably unaware of such a distinction. As lately as two years ago, a Commissioner could not get this on the agenda because it was not deemed a problem in Birmingham.

After automatic gunfire broke out at a short-term rental on East Lincoln in the early hours of April 11, 2026, the City has now been made aware that short term rentals are, indeed, a problem.

In 2011, the common meaning of rental was still traditional rental—long term. Long-term rentals are a residential use.

But STRs are clearly, and have been so defined world-wide, as a commercial use. A police powers ordinance can't confer rights not contemplated by the Zoning Ordinance, cannot confer rights to put private property to commercial use in a residential zone.

Did the City intend, on issuing rental licenses without differentiating, to effect a stealth rezoning of residential zones to allow commercial uses similar to motels and hotels? I don't think so.

Existing licensees should be notified that the zoning code, in effect long before their license was granted, prohibits short-term rentals, and to cease and desist this use, effective immediately.

The zoning ordinance does not need to be amended to prohibit short term rentals in residential zones. If the use is not specified as a permitted use, that use is presumed to be prohibited.

However, I understand the City intends to incorporate a ban into the zoning code.

A fear of a lawsuit should not deter the City from banning short term rentals. Enforcement could be deferred, say for 60 days, to give existing licensed STR rental operators time to wind down their current bookings, but only those rental operators who have received *zero* complaints or code violation reports.

I'm attaching a copy of the ordinance that was passed in Park Township, Ottawa County, Michigan, which bans short term rentals in all but commercial zones. The preamble explains the rationale for this ban, including difficulty of enforcing nuisance and other police powers in this context, the deleterious impact on property values in residential zones, and the fact that as commercial operations in residential zones, STRs are unlawful non-conforming uses.

Litigation did result, however to date it has not been successful, and in the meantime the inroads of Short Term Rentals on Park Township residential neighborhoods have been curtailed.

For years, Park Township attempted to pass ordinances regulating STRS, but ultimately the Township Board decided it would be simpler, and cheaper for the municipality to ban the practice.

In Park Township, STR operators relied on City officials' statements to the effect that the zoning did not prohibit it. Such ill-advised guidance was not found to bind the Township in the absence of code provisions permitting the use. Similarly, the fact that the existing Landlord Application did not require disclosure of STRs does not bind the City of Birmingham to continue to allow this.

Kathleen Devereaux

Birmingham Resident since 1979.



2024-01 STR Zoning Ordinance Amendment.pdf
193K

PARK TOWNSHIP
OTTAWA COUNTY, MICHIGAN

(Short-Term Rentals)

ZONING ORDINANCE AMENDMENT

(Ordinance No. 2024-01)

At a regular meeting of the Township Board for Park Township held at the Township offices on March 14, 2024, beginning at 6:30 p.m., this Ordinance/ordinance amendment was offered for adoption by Township Board Member Spoelhof and was seconded by Township Board Member Steggerda:

AN ORDINANCE/ORDINANCE AMENDMENT TO AMEND THE PARK TOWNSHIP ZONING ORDINANCE, AS AMENDED, REGARDING ALLOWED USES, SHORT-TERM RENTALS AND SIMILAR MATTERS.

THE TOWNSHIP OF PARK (the "TOWNSHIP") ORDAINS:

Article 1 – Intent and Legislative History.

The current Park Township Zoning Ordinance (the "Zoning Ordinance"), and the past zoning ordinances for Park Township going back to 1946, have not used the now commonly used term short-term rentals phrase ("STRs," as defined below), but rather have used terms such as "transient lodging," "lodging house," "hotels," "motels," "tourist cabins," and "tourist homes" to address and regulate such transient uses. The Zoning Ordinance adopted in 1946 allowed hotels and tourist cabins in the residential zoning district when approved by the Board of Appeals, and transient lodging and boarding as an accessory use like a home occupation. The Zoning Ordinance adopted in 1963 similarly allowed hotels and motels in each of the residential zoning districts when approved by the Board of Appeals, and allowed tourist rooms in only one of the two residential zoning districts. However, the current Zoning Ordinance adopted in 1974 removed these as

permitted uses within the residential zoning districts, and only allows hotels, motels, and tourist homes (e.g., lodging for transient guests) in the commercial/business zoning districts dedicated to accommodate the needs of tourists and associated recreational purposes (which is the C-2 Resort Service zoning district in the current Zoning Ordinance). Accordingly, STRs have not been lawfully allowed within the Township (except in the C-2 commercial/business zoning district) since the current zoning regulations were enacted by the Township in 1974, with the exception of nonconforming uses that were lawfully established prior to 1974 and lawful licensed Bed and Breakfast Establishments. Absent an STR located in a commercial or business zoning district or a lawful Bed and Breakfast Establishment, the only way that an existing STR could be lawful today is if it is a lawful nonconforming use (i.e. it lawfully existed before February 7, 1974, and perhaps even earlier, has been in constant operation or use ever since and has not been expanded, abandoned, etc.). To the best of the knowledge of current Township officials and after a careful review of Township records, the Township cannot locate any records, documents, minutes or evidence that an STR has ever been approved by the Township within the AG Agricultural and Permanent Open Space zoning district, the R-1 Rural Estate zoning district, the R-2 Lakeshore Residence zoning district the R-3 Low Density Single-Family Residence zoning district, the R-4 Medium Density Single- and Two-Family Residence zoning district, or the R-5 Low Density Multifamily Residence zoning district by the then-Park Township Zoning Administrator, code official or any other Township official with such approval authority. It is also likely that some or all of the STRs that may currently exist within the Township do not meet all of the applicable building codes, fire codes and/or similar codes or laws. Accordingly, the Township Board finds that any STR that currently exists in Park Township (except for any lawful STRs within the C-2 Resort Service zoning districts, lawful and licensed Bed and Breakfast Establishments, or any

lawful nonconforming use) are unlawful under the Zoning Ordinance (and potentially, the building code and/or fire code as well) and that the STR use of such unlawful operations must cease. That should not constitute a hardship for any property owner, because the dwelling involved presumably can still be used for non-commercial non-transient residential use and would likely remain a valuable property.

Article 2 – Findings.

The Township Board hereby finds that there are potentially many problems and negative consequences associated with STRs that are not located within the C-2 Resort Service zoning district. Such negative and adverse impacts can include, but are not necessarily limited to, the following:

(a) The Township Board expressly finds that STRs are a commercial or business activity which is generally incompatible (and often in conflict) with non-commercial nearby single-family residential uses, neighborhoods and areas. That is particularly true regarding dwellings that are rented or leased out to transient guests entirely or for most of the calendar year or the majority of days during the summer season.

(b) Although the ability to utilize a dwelling as an STR may enhance the value of the specific property being rented or leased out, the same may not be true regarding adjoining and nearby properties. An STR can devalue other single-family residential dwelling lots adjoining the STR and for some distance away from the STR due to the real or perceived negative impacts caused by the STR. It is not a reasonable policy or trade off to enhance the value of one property (which is utilized

for STR use) while causing the devaluation of other more adjoining or nearby residential lots or parcels in the area.

(c) Even though most STRs in residential or agricultural zoning districts are supposed to be used for occupancy by only one family at a time, that often is not the case for STRs. STRs are frequently rented, used, or occupied by two or more families at the same time, which constitutes a multi-family use that is inconsistent with the zoning districts allowing only single-family residential use.

(d) The transient nature of STRs and the constant "coming and going" of new renters (and their invitees) is akin to a hotel, motel or boarding house, potentially causes many problems, and is inconsistent with adjoining and nearby conventional noncommercial single-family residential uses. In many cases, new tenants or renters check into the STR dwelling (and vacate the same) within only two or three days. Such constant "turnover" is a characteristic of a commercial facility and is not consistent with single-family residential use.

(e) In many cases, people who rent or lease a residential property for short time periods do not take the same level of care of that property as the owner of a property who resides thereon. Further, these transient occupants do not reside in the STR but merely occupy it on a short-term basis, and have no on-going relationship with the adjoining property owners akin to a residential neighborhood.

(f) Park Township simply does not have the staff or resources to fully police STR properties and situations.

(g) Although many advocates for STRs assert that problems with STRs can be minimized by the enactment and enforcement of local noise ordinances, blight

ordinances, barking dog ordinances, parking ordinances, etc., the enactment or full enforcement of such ordinances is frequently not feasible or practical for a municipality such as Park Township. Furthermore, to the degree that such ordinances can be enforced and might help in some situations, it is an "after-the-fact" solution reacting to a problem once it has already arisen.

(h) In general, STR uses are more intensive, transitory, and problematic than conventional single-family and other residential uses.

(i) Persons renting or leasing an STR property are often not familiar with the area involved, do not know local customs, and rarely know about local government ordinance requirements.

(j) A significant number of STRs in a community can decrease the number of long-term residents.

(k) STRs can decrease the availability of long-term housing stock, drive up dwelling prices and make long-term residency less affordable.

(l) STRs can significantly increase the number of vacant homes and dwellings during the winter months or off-season times.

(m) The presence of STRs in a neighborhood can increase levels of noise, traffic, and parking issues during the summer months.

(n) Many of the problems associated with STRs can also occur in duplex and multi-family residential areas and neighborhoods.

Article 3 – Enforcement

Although Township officials believe that there are few if any lawful STR uses anywhere within the Township (apart from licensed Bed and Breakfast Establishments and potentially within

the C-2 Resort Service zoning district), the Township also recognizes that property owners who have been conducting unlawful STR uses within houses, cottages and cabins may need some time to cease such STR operations, particularly if third-parties have made arrangements for reservations ahead of time or entered into contracts to rent or lease those premises. Accordingly, absent a health or emergency situation for a specific property, the Township will generally not enforce these new Zoning Ordinance amendments regarding STRs or existing regulations or prohibitions in the Zoning Ordinance prohibiting STRs (except for Article 9 of this document) prior to October 1, 2024. It is anticipated that Township officials will attempt to find and ascertain the properties within the Township on which unlawful STRs are occurring and to notify the owners of those properties about these Zoning Ordinance amendments and the October 1, 2024 deadline. The Township Board expressly finds that such "wind down" period regarding enforcement is reasonable and still protects the health, safety and welfare of residents, property owners and visitors in and to the Township.

Article 4 – The following definition of a "Short-Term Rental" is hereby added to Section 38-6 of the Park Township Zoning Ordinance, as amended:

Short-Term Rental ("STR"): A dwelling unit, cabin, home, cottage or house (or part or portion thereof) that is available for rental, leasing, or use for habitation, accommodation or lodging of guests, renters, third-parties, or others paying a fee, money, charge or other compensation, for a period of 28 or fewer consecutive days and nights at a time. A "tourist home" is a type of STR.

Article 5 – The following new Section 38-521 is hereby added to Article iV (entitled "Supplemental Regulations") of the Park Township Zoning Ordinance, as amended:

Section 20.31 - Short-Term Rentals.

Short-Term Rentals are prohibited in all zoning districts except for the C-2 Resort Service zoning district.

Article 6 – The following Subsection 38-452(27) is hereby added to the Park Township Zoning Ordinance, as amended, for the C-2 Resort Service zoning district:

(27) Short-term rentals and tourist homes.

Article 7 – The following Subsection 38-2(9) is hereby added to the Park Township Zoning Ordinance, as amended:

If a use, building, structure, fixture or activity is not expressly allowed by this Ordinance, it is unlawful and prohibited. In addition, if a specific use, building, structure, fixture or activity is not expressly listed as a permitted use or use with special land use approval for a specific zoning district, it is prohibited and unlawful in that zoning district.

Article 8 – Severability.

If any section, clause, or provision of this Ordinance/ordinance amendment is declared to be unconstitutional or otherwise invalid by a court of competent jurisdiction, that declaration shall not affect the remainder of the Ordinance/ordinance amendment. The Township Board hereby declares that it would have passed this Ordinance/ordinance amendment and each part, section, subsection, phrase, sentence and clause irrespective of the fact that any one or more parts, sections,

subsections, phrases, sentences or clauses be declared invalid.

Article 9 – The Balance of the Park Township Zoning Ordinance (as amended) Remains Unchanged and in Effect.

Except as expressly amended by this Ordinance/ordinance amendment, the balance of the Park Township Zoning Ordinance, as amended, remains unchanged and in full force and effect.

Article 10 – Effective Date.

This Ordinance/ordinance amendment shall become effective upon the expiration of seven (7) days after this Ordinance/ordinance amendment (or a summary thereof) appears in the newspaper as provided by law.

The vote to adopt this Ordinance/ordinance amendment was as follows:

YEAS: _Spoelhof, Serne, Steggerda and Keeter_____

_____

NAYS: _none_____

ABSTAIN/ABSENT: _Gerard, DeHaan, and Jones_____

THIS ORDINANCE/ORDINANCE AMENDMENT IS HEREBY DECLARED ADOPTED.

CERTIFICATION

I hereby certify that the above is a true copy of an Ordinance/Ordinance amendment adopted by the Township Board for Park Township at the time, date, and place specified above pursuant to the required statutory procedures.

Respectfully submitted,

By: _____
Skip Keeter
Park Township Clerk

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Re: Commission Meeting Public comment

1 message

Clinton Baller <cmballer@avidpays.com> Tue, May 5, 2026 at 8:41 AM
To: "Danielle (Rapp) Grauer" <grauerdanielle@gmail.com>, City Commission <city-commission@bhamgov.org>

Hi, Danielle,

Thanks for writing. I'd urge you to view our meeting on YouTube. Our goal is to ban most short-term rentals by April 2027. In the meantime, we can revoke existing licenses only for cause, and we intend to be aggressive in that, and in shutting down any unlicensed STRs. We must act lawfully, and we are pursuing the quickest, most lawful path to accomplishing that goal.

Sincerely,

Clinton Baller
Mayor

On Tue, May 5, 2026 at 8:28 AM Danielle (Rapp) Grauer <grauerdanielle@gmail.com> wrote:

> Hello,
>
> I was unable to attend last night's commission meeting, and I'd like to voice my concerns here as a homeowner and resident on East Lincoln St.
> I'm afraid the new proposal does not go far enough to proactively protect our community from unsafe conditions enabled by STRs. If you represent the residents of this community, protect the residents of this community. Safety should always come before individual profitability.
>
> Please ban STRs. They financially benefit the few at the extreme danger of the many.
> Please put forth new zoning and new ordinances to prevent situations like the dangerous shooting on my street.
>
> Thank you,
>
> Danielle Grauer

--
You received this message because you are subscribed to the Google Groups "City Commission" group.
To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAG8Vh9HnzbfJtZqVmPfacLp5qOVb_M%2BZON7wM7MF-jJEoHDVEg%40mail.gmail.com.

Fwd: In Support of Debra Horner for City Commissioner

1 message

Clinton Baller <cmballer@avidpays.com> Thu, Apr 30, 2026 at 9:12 PM
To: Alex Bingham <abingham@bhamgov.org>, Jana Ecker <Jecker@bhamgov.org>, "Kucharek, Mary" <mkucharek@bhlaw.us.com>

---------- Forwarded message ---------
From: **Danielle Mallon** <dbmallon70@gmail.com>
Date: Thu, Apr 30, 2026 at 3:54 PM
Subject: In Support of Debra Horner for City Commissioner
To: <cballer@bhamgov.org>, <ahaig@bhamgov.org>, <bhost@bhamgov.org>, <bkolb@bhamgov.org>, <kkozlowski@bhamgov.org>, <tlonge@bhamgov.org>

Mayor Baller and City Commissioners,

I am writing in support of Debra Horner for the vacant seat on the Commission as a result of Anthony Long's resignation.

I believe Debra Horner's work with the University of Michigan's Center for Local, State and Urban Policy would be an asset to the Commission. Her professional experience working with dozens of municipalities, along with her experience with budgeting, zoning, sustainability and engagement would be a great benefit. Ms Horner has 18 years of government experience, having co-written over 100 municipal policy reports. And finally, her years of working with the Michigan Municipal League would be a tremendous asset.

I plan to attend the next City Commission Meeting on May 4th to show my support.

Thank you,
Danielle Mallon
811 Tottenham Rd

Fwd: Debra Horner best choice for City Commission seat

1 message

Clinton Baller <cmballer@avidpays.com> Thu, Apr 30, 2026 at 12:35 PM
To: Alex Bingham <abingham@bhamgov.org>
Cc: "Kucharek, Mary" <mkucharek@bhlaw.us.com>, Jana Ecker <Jecker@bhamgov.org>

---------- Forwarded message ---------
From: **Maureen Field** <maureen.b.field@gmail.com>
Date: Thu, Apr 30, 2026 at 11:53 AM
Subject: Debra Horner best choice for City Commission seat
To: <cballer@bhamgov.org>, Therese Longe <tlonge@bhamgov.org>, Brad Host <bhost@bhamgov.org>, Kevin Kozlowski <kkozlowski@bhamgov.org>, Andrew Haig <ahaig@bhamgov.org>, <bkolb@bhamgov.org>

Dear Birmingham Mayor Ballerf and City Commissioners Longe, Host, Kozlowski, Haig and Kolb ,

Please break the log jam and appoint Debra Horner to the empty City commission seat. Debra is the best candidate for this position.

Debra Horner is extremely well educated and has spent her career working with and studying municipalities throughout Michigan and beyond. She conducts research on local government policy making and would present a fact-based and data-driven approach to the running of the city of Birmingham. Ms. Horner has co-written over 100 municipal policy reports and has spent years with the Michigan Municipal League to which Birmingham belongs. Because of her background and her experience she is a perfect candidate for the position.

While the other candidate has an impressive career it is in the private sector which is much different than the public sector. We need a person with public sector knowledge and experience who would base her decisions on best practices.

Please appoint Debra Horner to the vacant City Commission seat.

Sincerely,

Maureen Bell Field
David A. Field
1732 Norfolk St.
Birmingham, MI 48009

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Wimbleton Phase 1 - Asking for Immediate Action/Assistance

4 messages

'Elisa Roovers' via City Commission <city-commission@bhamgov.org> Wed, May 6, 2026 at 7:19 AM
Reply-To: Elisa Roovers <eroovers@comcast.net>
To: city-commission@bhamgov.org
Cc: Dan Roovers <dan.roovers@orbiscorporation.com>

Dear City Commissioners,

I am writing to express my growing frustration and disappointment regarding Wimbleton Phase 1.

For the past eight months, residents have dealt with roads that are muddy, messy, difficult to navigate, and at times completely unusable. While we understood this project would involve inconvenience, the lack of visible progress and ongoing delays have become unacceptable.

Throughout this process, residents have repeatedly received assurances and projected timelines from the City Engineer and Project Manager that have not been followed through on. Communication has consistently suggested that work would resume or milestones would be completed, only for little or no progress to occur. Additionally, when commitments are not met, there is little to no follow-up communication from the City.

Most concerning is the repeated absence of any active work on site, both these past several days and at various points throughout the project. There have been numerous stretches of several consecutive days where no workers are present at all, despite the severe disruption residents continue to endure daily. During most of these delays, residents have received no communication from the City whatsoever to explain what is going on or can be expected.

In addition, it appears the City's focus has already begun shifting toward Wimbleton Phase 2 while Phase 1 remains incomplete, and residents continue living with unacceptable conditions. Before attention and resources are directed toward future phases, Phase 1 requires significantly more focus, oversight, accountability, and communication with residents immediately.

At this point, residents deserve:
- A realistic and transparent timeline for completion of Phase 1
- Clear and consistent communication regarding delays and accountability
- Daily visible progress toward completion
- An explanation for the repeated periods of inactivity
- Greater oversight to ensure Phase 1 is completed properly before additional phases proceed

Given the continued delays, lack of visible progress, and repeated failures in communication and execution, I also urge the City Commission to take a more active role in overseeing this project on a day-to-day basis until Phase 1 is completed. At this point, it is not sufficient to simply defer to the City Engineer, Project Manager, or contractors when residents are experiencing ongoing disruption with little evidence of accountability or urgency. Residents need to see stronger leadership, closer oversight, and more direct involvement from the Commission to ensure this project is brought to completion in a timely and responsible manner.

We appreciate the City's efforts to improve and rebuild Wimbleton, but the current situation has placed an unreasonable burden on the residents affected by this project. I respectfully ask the Commission to address these concerns urgently and provide meaningful oversight to ensure the project moves forward promptly and efficiently.

Thank you for your attention to this matter.

Sincerely,

Elisa Roovers

205 Wimbleton

248.885.0994

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To unsubscribe from this group and stop receiving emails from it, send an email to city-commission+unsubscribe@bhamgov.org.
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/7BB5C17C-73EC-46AB-9E92-D20B75AC63B5%40comcast.net.

Clinton Baller <cmballer@avidpays.com> Wed, May 6, 2026 at 8:34 AM
To: Elisa Roovers <eroovers@comcast.net>
Cc: city-commission@bhamgov.org, Dan Roovers <dan.roovers@orbiscorporation.com>, Melissa Fairbairn <mfairbairn@bhamgov.org>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>, Mark Clemence <mclemence@bhamgov.org>

Elisa,

Thanks for writing to express your concerns. The commission is aware of them and shares them. The following actions have been taken:
- We have requested and are getting project updates at each of our meetings.
- A new inspector has been assigned to the job, and he is on-site daily.
- The administration recently created a new position within the Engineering department. Among the responsibilities is more effective communication with residents. The position is filled by Melissa Fairbairn. She is copied here.

The commission is aware that this project has not gone according to plan, that it has caused a lot disruption for you, that it needs to be wrapped up quickly, and that lessons need to be learned. And though it brings little relief, we apologize. Some of us have lived through these kinds of projects; all of us genuinely feel for you.

Sincerely,

Clinton Baller
Mayor
[Quoted text hidden]
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAG8Vh9FfMdrGQrntO5ZAO5zBokk9_97tzNtREfWCrNERvc34Sw%40mail.gmail.com.

'Elisa Roovers' via City Commission <city-commission@bhamgov.org> Wed, May 6, 2026 at 8:50 AM
Reply-To: Elisa Roovers <eroovers@comcast.net>
To: Clinton Baller <cmballer@avidpays.com>
Cc: city-commission@bhamgov.org, Dan Roovers <dan.roovers@orbiscorporation.com>, Melissa Fairbairn <mfairbairn@bhamgov.org>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>, Mark Clemence <mclemence@bhamgov.org>

Mayor Baller,

Thank you for your prompt response and for acknowledging the disruption we have experienced.

However, I do not feel my primary request was fully addressed. My concern is not whether updates are being provided at Commission meetings, but whether the Commission is willing to take a more active and ongoing role in overseeing this project on a day-to-day basis until Phase 1 is completed.

At this stage of the project, I would think it would be appropriate for the Commission to receive more frequent updates regarding progress, delays, and on-site activity — particularly given the continued missed timelines and periods where little or no visible work is occurring. I also believe stronger oversight and accountability are needed to ensure deadlines are met, communication with residents improves, and commitments made to residents are consistently followed through on.

As you know, we are beyond frustrated with no communication from the City regarding progress, next steps or anticipated timelines for completion. And there has been no active work completed onsite since Saturday May 2nd when concrete was poured to driveway approaches and sidewalks (road crews were not actively working).

Thank you again for your response and attention to these concerns.

Sincerely,

[Your Name]

[Quoted text hidden]
[Quoted text hidden]
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/4EB72FE7-CC4E-496A-BB88-A22C58B45249%40comcast.net.

'Elisa Roovers' via City Commission <city-commission@bhamgov.org> Wed, May 6, 2026 at 8:51 AM
Reply-To: Elisa Roovers <eroovers@comcast.net>
To: Clinton Baller <cmballer@avidpays.com>
Cc: city-commission@bhamgov.org, Dan Roovers <dan.roovers@orbiscorporation.com>, Melissa Fairbairn <mfairbairn@bhamgov.org>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>, Mark Clemence <mclemence@bhamgov.org>

From: Elisa Roovers <eroovers@comcast.net>
Date: Wednesday, May 6, 2026 at 8:50 AM
To: Clinton Baller <cmballer@avidpays.com>
Cc: <city-commission@bhamgov.org>, Dan Roovers <dan.roovers@orbiscorporation.com>, Melissa Fairbairn <mfairbairn@bhamgov.org>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>, Mark Clemence <mclemence@bhamgov.org>
Subject: Re: Wimbleton Phase 1 - Asking for Immediate Action/Assistance

Mayor Baller,

Thank you for your prompt response and for acknowledging the disruption we have experienced.

However, I do not feel my primary request was fully addressed. My concern is not whether updates are being provided at Commission meetings, but whether the Commission is willing to take a more active and ongoing role in overseeing this project on a day-to-day basis until Phase 1 is completed.

At this stage of the project, I would think it would be appropriate for the Commission to receive more frequent updates regarding progress, delays, and on-site activity — particularly given the continued missed timelines and periods where little or no visible work is occurring. I also believe stronger oversight and accountability are needed to ensure deadlines are met, communication with residents improves, and commitments made to residents are consistently followed through on.

As you know, we are beyond frustrated with no communication from the City regarding progress, next steps or anticipated timelines for completion. And there has been no active work completed onsite since Saturday May 2nd when concrete was poured to driveway approaches and sidewalks (road crews were not actively working).

Thank you again for your response and attention to these concerns.

Sincerely,

Elisa Roovers

205 Wimbleton

248.885.0994

From: Clinton Baller <cmballer1@gmail.com> on behalf of Clinton Baller <cmballer@avidpays.com>
Date: Wednesday, May 6, 2026 at 8:34 AM
To: Elisa Roovers <eroovers@comcast.net>
Cc: <city-commission@bhamgov.org>, Dan Roovers <dan.roovers@orbiscorporation.com>, Melissa Fairbairn <mfairbairn@bhamgov.org>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>, Mark Clemence <mclemence@bhamgov.org>
Subject: Re: Wimbleton Phase 1 - Asking for Immediate Action/Assistance

Elisa,

[Quoted text hidden]
[Quoted text hidden]
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/4C55FD6C-7A6D-46CB-9116-13FA9FC2BAE5%40comcast.net.

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Alex Bingham <abingham@bhamgov.org>

FromClerksOffice- Formal Protest and Request for Reconsideration – Wimbleton Phase 2 Paving Special Assessment (928 Poppleton Ave)

1 message

Joel Woznicki <joelwoznicki@gmail.com> Tue, May 5, 2026 at 3:14 PM
To: clerksoffice@bhamgov.org
Cc: mfairbairn@bhamgov.org, jecker@bhamgov.org, mcoatta@bhamgov.org, city-commission@bhamgov.org, cballer@bhamgov.org, along@bhamgov.org, ahaig@bhamgov.org, bhost@bhamgov.org, bkolb@bhamgov.org, kkozlowski@bhamgov.org, tlonge@bhamgov.org

To Whom It May Concern,

Please accept this correspondence as my formal written protest and objection to the proposed special assessment associated with the Wimbleton Phase 2 Paving Special Assessment District affecting my property at 928 Poppleton Avenue, Birmingham, MI.

I respectfully request that this protest be accepted notwithstanding my absence from the May 4, 2026 Hearing of Necessity, that it be treated as my written protest for purposes of the May 18, 2026 Hearing for Confirmation of the Roll, and that it be included in the official record for all proceedings related to the proposed special assessment and confirmation of the assessment roll.

My objections are as follows:

1. Defective Notice Prevented Timely Participation

I purchased the property on December 19, 2025, and filed my Michigan Property Transfer Affidavit on January 27, 2026. Despite this, notice of the hearing was mailed to the prior owner rather than to me.

As a result, I did not receive mailed notice of the hearing and was unaware of the proceeding until learning of it informally via Facebook less than 24 hours before the May 4 hearing. That was insufficient time to meaningfully review the assessment materials, prepare objections, consult counsel, or attend.

Because my failure to appear was the direct result of lack of mailed notice to me as the current owner, I respectfully request that the City accept this protest as timely, include it in the record, and preserve all protest and appeal rights.

2. Disproportionate Assessment Methodology as Applied to My Parcel

My property is an irregular triangular corner parcel, and the frontage-based assessment methodology appears to produce a disproportionately high assessment relative to the special benefit conferred.

The proposed assessment of approximately $19,949, based on approximately 162.09 assessable feet, imposes a materially greater burden than many neighboring parcels despite comparable practical benefit.

While I acknowledge that my property receives some benefit from the roadway improvement, the City's methodology appears to overstate that benefit by mechanically applying frontage calculations to a uniquely shaped parcel.

3. Limited Scope of Improvement Relative to Assessment

The improvement at issue consists of a cape seal roadway treatment rather than full roadway reconstruction with curb, gutter, sidewalk, or other major streetscape improvements, which further underscores the disproportionate nature of the proposed assessment.

4. Apparent Inconsistent Cost Allocation Relative to Prior Wimbleton Improvements

My understanding is that property owners involved in the Wimbleton Phase 1 paving project received a more favorable cost-sharing arrangement between the City and residents for substantially similar roadway improvements.

To the extent Phase 1 involved comparable improvements within the same corridor, I request an explanation for the differing cost allocation methodology applied to Phase 2.

Accordingly, I respectfully request that the City:

1. Accept this correspondence as a timely formal protest notwithstanding my absence from the May 4 Hearing of Necessity;
2. Treat this correspondence as my written protest for purposes of the May 18 Hearing for Confirmation of the Roll;
3. Preserve all protest and appeal rights associated with this assessment;
4. Reevaluate the assessment methodology as applied to my parcel and reduce the proposed assessment accordingly;
5. Explain the basis for the differing cost-sharing treatment between Phase 1 and Phase 2; and
6. Confirm in writing that this protest will be included in the official record.

Please also provide in writing:

1. The ownership, tax, or assessment roll relied upon for mailing notice;
2. The date such roll was certified or finalized for this project;
3. The methodology used to calculate my parcel's assessable frontage;
4. The factual and policy basis for the differing cost allocation between Phase 1 and Phase 2; and
5. Confirmation that this written protest has been received and included in the record for the May 18, 2026 Confirmation of the Roll proceedings.

Sincerely,

Joel Woznicki
(586) 854-5867
928 Poppleton Avenue
Birmingham, MI

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Alex Bingham <abingham@bhamgov.org>

Your communication re: Northlawn

5 messages

Clinton Baller <cmballer@avidpays.com> Sun, May 3, 2026 at 8:38 PM
To: Nick and Gail Herdzik <nickherdzik@hotmail.com>, City Commission <city-commission@bhamgov.org>, "Kucharek, Mary" <mkucharek@bhlaw.us.com>, Jana Ecker <Jecker@bhamgov.org>

Dear Mr. Herdzik,

Thank you for taking the time to write to the commission about your concerns regarding the special assessment for cape sealing of Northlawn. Typically, if someone appears before the commission regarding a communication they have sent, we would allow them a couple of minutes to amplify or explain further their position, if warranted. We would not allow them to make a Powerpoint presentation.

Your case is somewhat challenged, however, in that we already approved the special assessment at a Public Hearing of Necessity on Feb. 23, 2026, and at a second public hearing, called the Confirmation of the Roll, on March 9, 2026. Those agenda item are attached.

I am quite certain that City Attorney Mary Kucharek would agree with me in saying, colloquially but most definitely legally, that your ship has sailed, at least at the commission level. She has opined on several other special assessments, notably one to which I personally was subject for the improvements to Shirley and Arlington, and has cited the city charter and ordinances stating that once the commission has determined necessity and confirmed the tax roll, the case is essentially closed. If you objected to the assessment back when we considered it, you may have the right to appeal to the Michigan Tax Tribunal if you are within the statutory time limit. That's the appropriate appellate process at this point, rather than an appeal to the commission.

Best regards,

Clinton Baller
Mayor

--
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To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAG8Vh9EC6kH5M0to31-q%2BtP_vr58RXhcqQDEN-cYjm5MLEyWrg%40mail.gmail.com.

2 attachments

Confirmation of SAD Roll 917 2026 Cape Seal.pdf
147K

2026 Cape Seal PH SAD.pdf
138K

Nick Herdzik <NickHerdzik@hotmail.com> Tue, May 5, 2026 at 4:59 PM
To: Clinton Baller <cmballer@avidpays.com>
Cc: City Commission <city-commission@bhamgov.org>, Mary Kucharek <mkucharek@bhlaw.us.com>, Jana Ecker <Jecker@bhamgov.org>

Dear Mayor Baller,

Thank you for taking the time to hear my comments at last night's city commission meeting regarding the Northlawn Cape Seal assessment, and for indicating that you would discuss these concerns with the City Manager. I appreciate your willingness to look into this further.

I wanted to follow up to better understand the next steps.

Specifically, could you clarify:

1. The expected timeline for that discussion with the City Manager
2. Whether the discussion will include consideration of a formal engineering review or study of Northlawn's roadway composition
3. How and when the outcome of that discussion will be communicated to residents

As noted during the meeting, this issue will likely arise again in the future, and a clear, consistent basis for how Northlawn is classified would be helpful for both residents and the City moving forward.

Since this matter was discussed in a public meeting, I would also appreciate if any follow-up or conclusions could be shared publicly so residents have visibility into how this is being addressed.

Thank you again for your time and consideration.
I look forward to your response.

Sincerely,
Nick Herdzik
1076 Northlawn Blvd

> On May 3, 2026, at 8:39 PM, Clinton Baller <cmballer@avidpays.com> wrote:

Dear Mr. Herdzik,

Thank you for taking the time to write to the commission about your concerns regarding the special assessment for cape sealing of Northlawn. Typically, if someone appears before the commission regarding a communication they have sent, we would allow them a couple of minutes to amplify or explain further their position, if warranted. We would not allow them to make a Powerpoint presentation.

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Best regards,

Clinton Baller
Mayor

--
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To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/MN0P221MB1334BF1DC0ED87ADC301350AA33E2%40MN0P221MB1334.NAMP221.PROD.OUTLOOK.COM.

2 attachments

Confirmation of SAD Roll 917 2026 Cape Seal.pdf
147K

2026 Cape Seal PH SAD.pdf
138K

Clinton Baller <cmballer@avidpays.com> Wed, May 6, 2026 at 3:15 PM
To: Nick Herdzik <nickherdzik@hotmail.com>
Cc: City Commission <city-commission@bhamgov.org>, Mary Kucharek <mkucharek@bhlaw.us.com>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>

Nick,

My comment to the assistant city manager at the meeting, "We can discuss that offline," was not meant to suggest that the city would do a formal engineering review, nor that we would undertake any formal discussion of the matter that would necessitate follow-up with you. All I can add to the email sent Sunday night is that we are confident from physical examination, as well as historical records, that the street is unimproved.

Sincerely,
Mayor Baller
[Quoted text hidden]
[Quoted text hidden]
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAG8Vh9Eou8EH6NLQpOR4o4xSL1JY%2BVNSKHGpcVMrN9X042wXWg%40mail.gmail.com.

Nick Herdzik <NickHerdzik@hotmail.com> Thu, May 7, 2026 at 9:39 AM
To: Clinton Baller <cmballer@avidpays.com>
Cc: City Commission <city-commission@bhamgov.org>, Mary Kucharek <mkucharek@bhlaw.us.com>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>

Dear Mayor Baller,

Thank you for your response and for discussing these concerns with the City Manager.

Since the City's conclusion appears to rely on both "physical examination" and "historical records," I would appreciate a better understanding of the specific information supporting the determination that Northlawn is "Unimproved."

Attached are photographs showing actual conditions observed in multiple locations on Northlawn, along with the "Improved" versus "Unimproved" road cross-sections presented by Engineering's Melissa Coatta during the May 4, 2026 meeting.

These photos appear to show portions of Northlawn having an asphalt composition more consistent with the City's "Improved" example than the "Unimproved" example.

These are the same photos included in the presentation I recently shared with the Commission.
That presentation also contains information obtained through a FOIA request to Oakland County that appears consistent with an asphalt roadway composition rather than the gravel base shown in the "Unimproved" example presented by Engineering.

Could the appropriate City employee please share the physical examination findings and historical records referenced in support of the City's conclusion?

For example, was the determination based on engineering drawings, roadway core samples, construction records, visual inspection, or other documentation?

My concern is that if the “historical record” primarily reflects the absence of documentation formally designating Northlawn as “Improved,” that alone may not necessarily be sufficient to conclude the roadway is structurally “Unimproved” today.

Given the technical nature of this issue, I believe it may be more productive to discuss this directly with the appropriate City staff rather than continuing through Commission email correspondence.

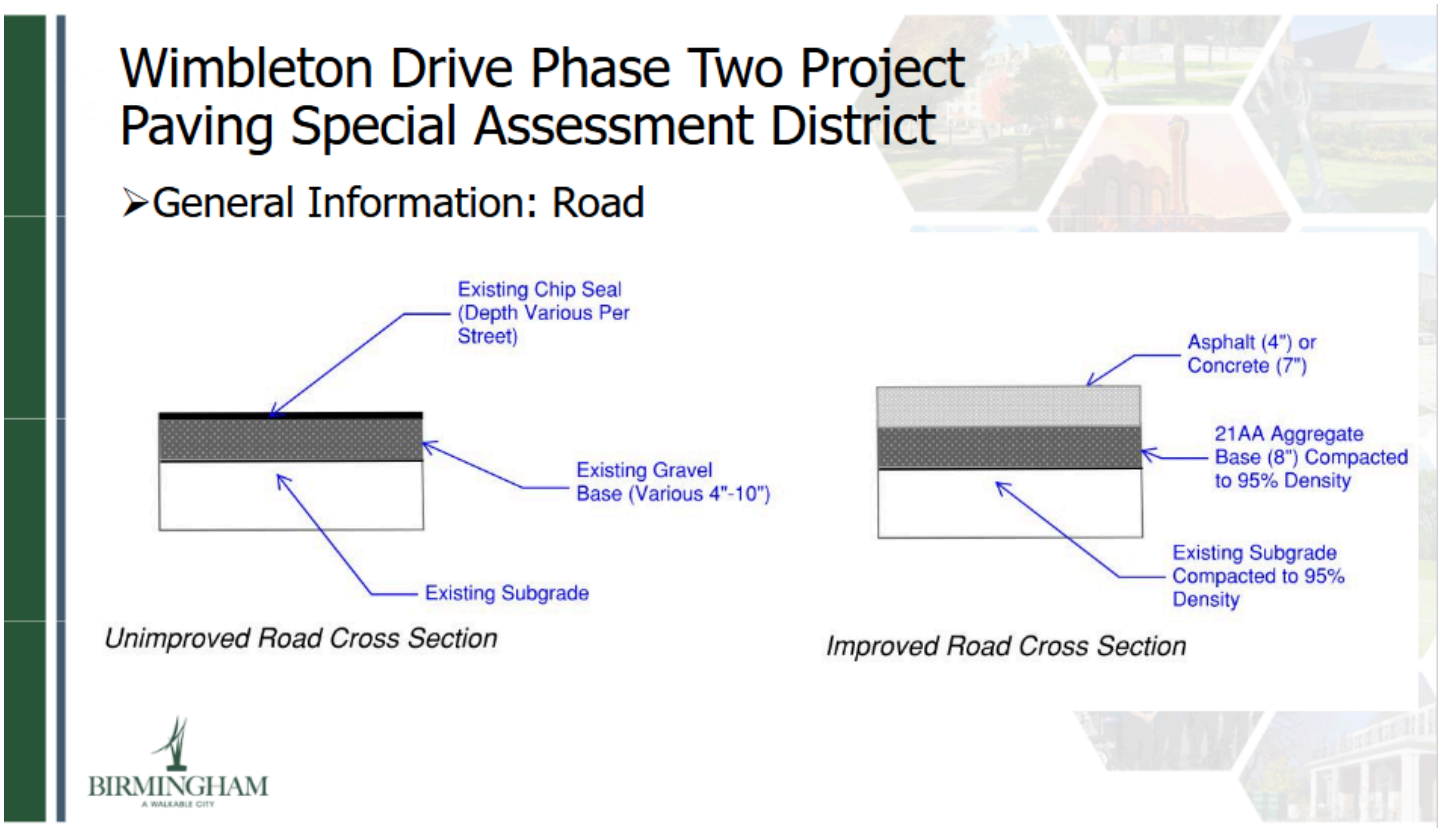
Would it be possible to arrange a meeting with the appropriate individuals from Engineering or the City Manager’s office to review the information referenced above and better understand the basis for the City’s conclusion? I’d be willing to meet in-person at their office, or virtually.

I understand the Commission may not wish to revisit the current assessment decision itself.
However, my hope is to better understand the technical basis for the roadway’s current classification.

If possible, I would appreciate your assistance in helping coordinate or support such a meeting.

Thank you again for your time and consideration.

Sincerely,
Nick Herdzik
1076 Northlawn Blvd



Page 300





Sent from my mobile phone.

> On May 6, 2026, at 3:16 PM, Clinton Baller <cmballer@avidpays.com> wrote:
>
> [Quoted text hidden]

[Quoted text hidden]
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/MN0P221MB133497E009AA4452A3978940A33C2%40MN0P221MB1334.NAMP221.PROD.OUTLOOK.COM.

Clinton Baller <cmballer@avidpays.com> Mon, May 11, 2026 at 4:05 PM
To: Nick Herdzik <NickHerdzik@hotmail.com>
Cc: City Commission <city-commission@bhamgov.org>, Mary Kucharek <mkucharek@bhlaw.us.com>, Jana Ecker <Jecker@bhamgov.org>, Melissa Coatta <mcoatta@bhamgov.org>

Nick,

I appreciate your focus on this issue. The documentation you seek, if it exists, may be obtained through a Freedom of Information request. Be aware, however, that there are fees associated with research and fulfillment. As I indicated earlier, you can also file an appeal with the Michigan Tax Tribunal, assuming you registered an objection when we held the two public hearings previously noted.

Sincerely,

Clinton Baller

[Quoted text hidden]
To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CAG8Vh9FcWevxdSTPOVr%2BXsfwnqH1KQy4CGeaTLZxUpWAq9Gaig%40mail.gmail.com.

South Well Park - Immediate Safety and Neighborhood impact concerns

1 message

Caroline Main <caroline.main10@gmail.com> Fri, May 1, 2026 at 2:27 PM
To: city-commission@bhamgov.org, cballer@bhamgov.org

Dear Mayor Baller and Members of the City Commission,

I am writing as a resident who lives just down the street from South Well Park to express deep concern and frustration regarding the park's current use as a staging and storage area for construction vehicles, gravel, and materials.

I regularly walk this area with my baby and our dog. The presence of large dump trucks, gravel piles, fencing, and ongoing construction activity in what is normally a neighborhood park introduces serious and unacceptable safety risks. This is a space families rely on daily, and the conditions now in place have materially changed the safety of our neighborhood.

Beyond the immediate child, pedestrian, and pet safety issues, I am also very concerned about the impact this use will have on surrounding residential streets. Frequent heavy truck traffic and staging in close proximity to homes raises valid concerns about damage to road surfaces, curbs, and underground infrastructure—costs that residents ultimately bear.

I understand the need for infrastructure improvements and temporary logistics. However, the decision to use an active neighborhood park for this purpose raises critical questions that deserve clear answers:

- What specific safety measures are being actively enforced to protect children, pedestrians, and pets?
- Why was a public recreational space selected instead of a non-residential or non-recreational location?
- How is the City evaluating and mitigating potential damage to adjacent neighborhood streets?
- What is the firm and enforceable timeline for removing equipment and fully restoring the park?

This situation goes well beyond inconvenience. It presents real safety hazards, creates avoidable liability exposure for the City, and undermines confidence that public spaces, and the families who rely on them, are being appropriately protected.

I strongly urge the City to immediately reevaluate this decision, provide a clear and transparent timeline for removal and restoration, and identify alternative staging locations that do not compromise neighborhood safety or public green space.

Many nearby residents share these concerns, and we expect a prompt and substantive response outlining how this issue will be addressed.

Thank you,

Caroline and Carter Main

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BIRMINGHAM

NOTICE OF INTENTION TO APPOINT TO THE CITY OF BIRMINGHAM COMMUNITY HOUSE FOUNDATION - BOARD OF DIRECTORS

At the regular meeting of Monday, June 22, 2026, the Birmingham City Commission intends to appoint the following positions to the City of Birmingham Community House Foundation:

- Three regular members to serve four year terms to expire June 17, 2030
- Three regular members to serve three year terms to expire June 18, 2029
- Three regular members to serve two year terms to expire June 19, 2028

Interested persons may submit an application available at the City Clerk's office or online at www.bhamgov.org/boardopportunities. Applications must be submitted to the City Clerk's office on or before noon on Wednesday, June 17, 2026. These documents will appear in the public agenda for the regular meeting at which time the City Commission may make nominations and vote on appointments.

Duties

The purpose of the City of Birmingham Community House Foundation Board of Directors is to govern and oversee the ownership, maintenance, and improvement of the Community House and to provide social, philanthropic, and civic activities for the residents of Birmingham. The Board of Directors is responsible for mission stewardship, strategic planning and leadership, financial oversight, fundraising and resource development, and act as ambassadors in the community building connections with stakeholders, funders and other potential allies.

Criteria/Qualifications	**Date Applications Due (by noon)**	**Date of Interview**
Members shall include two City Commissioners, and seven at large members who are stakeholders in Birmingham and, insofar as possible, represent a broad cross section of the community with specific education or experience in finance, fundraising, philanthropy, business and/or the legal profession.	6/17/26	6/22/26

NOTE: All members of boards and commissions are subject to the provisions of City of Birmingham City Code Chapter 2, Article IX, Ethics and the filing of the Affidavit and Disclosure Statement.

MEMORANDUM

FINANCE

DATE: May 5, 2026
TO: Jana L. Ecker, City Manager
FROM: Mary J. Chavez, Finance Director, Treasurer
SUBJECT: 3rd Quarter Budget Report

Background

Chapter 7, Section 3(b) of the City Charter requires the Director of Finance to report on the financial condition of the City quarterly. Quarterly reports are prepared for the first 3 quarters of the year with the annual audit serving as the 4th quarter report. Only the following funds are reported quarterly because by State law they require a budget: General Fund, Greenwood Cemetery Perpetual Care Fund, Major and Local Street Funds, Solid Waste Fund, Senior Services Fund, Community Development Block Grant Fund, Law and Drug Enforcement Fund, Opioid Settlement Fund, Baldwin Public Library Fund, Principal Shopping District Fund, Brownfield Redevelopment Authority Fund, Triangle District Corridor Improvement Authority Fund, and the Debt Service Fund.

Below are the third quarter 2025-2026 fiscal year financial reports. The reports compare budget to actual for the current year and the prior fiscal year for the same quarter. This allows meaningful comparisons between fiscal years as well as percentage of budget received/spent for the year. Budget discussions will follow each fund's financial information.

Through March 31st, 75% of the fiscal year is over. However, some revenues and expenditures are not received/spent on a prorated amount every quarter. To the extent that the percentage of budget is materially different than the 75%, this will be noted in the discussion.

General Fund

Revenues are approximately $6.3 million higher than the previous year as a result of an increase in tax revenue of approximately $5.0M, an increase of $.3M in special assessments, an increase of $.3M in licenses and permits, an increase of $.3M in charges for services, an increase of $.1M in fines and forfeitures, and an increase of .3M in interest earnings. Taxes increased as a result of increase in taxable values. Special assessment revenue increased approximately $0.3 million due to the timing of collections. Licenses and permits revenue increased approximately $0.3 million as a result of large-scale building permits issued during the fiscal year. Charges for services increased approximately $0.3 million compared to the prior year, while fines and forfeitures revenue increased approximately $0.1 million due to higher parking fine collections and increased revenue from the 48th District Court. Interest and rent revenue increased approximately $0.3 million as a result of higher interest earnings on invested cash balances.

Federal, State, and Local Grant funds and Special Assessments are below expected budget due to timing of when the revenues are received.

Total current year-to-date expenditures for the General Fund are higher than the prior year by approximately $2.3M, or 6.7%. Most of the increase is related to higher expenditures in Transfers Out and Other Financing Uses of approximately $3.4M, General Government of approximately $0.1M, and Recreation and Culture of approximately $0.1M. These increases were partially offset by decreases in Public Safety of approximately $0.4M, Public Works of approximately $0.2M, Health and Welfare of approximately $0.3M, and Judicial of approximately $.4M compared to the prior year. The increase in Transfers Out and Other Financing Uses is mainly the result of higher transfer amounts to Major and Local Street Funds. The increase in General Government is the result of higher personnel-related costs. The increase in Recreation and Culture is the result of public improvements to Crestview and Barnum parks. The decrease in Public Safety and Public Works is the result of lower personnel-related costs. The decrease in Health and Welfare is the reduction in costs associated with consulting services for design work and site plans for the Birmingham Community and Senior Center. The decrease in Judicial expenditures is due primarily to the timing of the second quarter payment to the Court.

GENERAL FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$38,853,740	$38,810,964	100%	$33,767,930	$33,786,506	100%
SPECIAL ASSESSMENTS	$731,890	$412,507	56%	$606,290	$121,985	20%
LICENSES & PERMITS	$2,721,350	$3,080,065	113%	$2,787,530	$2,803,217	101%
FEDERAL GRANTS	$356,500	$37,892	11%	$139,000	$100,032	72%
STATE GRANTS	$2,881,500	$1,622,515	56%	$3,100,300	$1,547,221	50%
LOCAL CONTRIBUTIONS	$139,000	$78,262	56%	$143,790	$146,194	102%

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
CHARGES FOR SERVICES	$4,117,890	$3,139,416	76%	$3,587,440	$2,790,119	78%
INTEREST & RENT	$1,825,300	$1,765,633	97%	$1,366,500	$1,512,006	111%
FINES & FORFEITURES	$2,075,020	$1,258,802	61%	$1,765,000	$1,144,945	65%
OTHER REVENUE	$59,250	$42,811	72%	$50,600	$34,076	67%
OTHER FINANCING SOURCES	$100,000	$75,000	75%	$100,000	$75,000	75%
USE OF FUND BALANCE	$1,863,787	–	0%	$2,999,520	–	0%
REVENUES TOTAL	**$55,725,227**	**$50,323,869**	**90%**	**$50,413,900**	**$44,061,302**	**87%**
EXPENDITURES						
GENERAL GOVERNMENT	$7,375,819	$4,714,385	64%	$6,974,379	$4,573,031	66%
JUDICIAL	$2,113,940	$1,492,382	71%	$1,901,460	$1,901,460	100%
PUBLIC SAFETY	$22,336,264	$14,727,506	66%	$21,760,443	$15,167,700	70%
PUBLIC WORKS	$6,724,617	$3,789,399	56%	$6,656,882	$4,029,788	61%
HEALTH AND WELFARE	$615,570	$228,844	37%	$1,298,840	$485,949	37%
COMMUNITY AND ECONOMIC DEVELOPMENT	$1,363,180	$503,145	37%	$937,762	$482,014	51%
RECREATION AND CULTURE	$4,023,847	$2,339,153	58%	$4,202,214	$2,267,327	54%
TRANSFERS OUT AND OTHER FINANCING USES	$11,171,990	$8,388,993	75%	$6,681,920	$5,003,940	75%
EXPENDITURES TOTAL	**$55,725,227**	**$36,183,806**	**65%**	**$50,413,900**	**$33,911,209**	**67%**

Greenwood Cemetery Perpetual Care Fund

Cemetery perpetual care revenue has increased significantly from the prior year due to an increase in lot sales. No expenditures have been budgeted for this fiscal year.

GREENWOOD CEMETERY PERPETUAL CARE FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
CHARGES FOR SERVICES	$40,000	$102,000	255%	$40,000	$82,000	205%
INTEREST & RENT	$43,000	$40,380	94%	$35,500	$34,200	96%
OTHER FINANCING SOURCES	$0	–	–	$0	–	–
USE OF FUND BALANCE	-$83,000	–	0%	-$75,500	–	0%
REVENUES TOTAL	**$0**	**$142,380**	**–**	**$0**	**$116,200**	**–**
EXPENDITURES						
PUBLIC WORKS	$0	–	–	$0	–	–
EXPENDITURES TOTAL	**$0**	**–**	**–**	**$0**	**–**	**–**

Major Street Fund

Total revenues are higher than the previous year by approximately $3M as a result of higher transfers from the General Fund. State funding is at 35% of budget as a result of February and March road funding being received after the quarter ended.

Overall expenditures are approximately $1.8 million higher than the previous year, primarily due to increased construction activity and the timing of street maintenance and capital improvement projects, including construction work on Adams, Willits, and Bates Roads.

MAJOR STREET FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
SPECIAL ASSESSMENTS	$241,800	–	0%	$0	–	–
FEDERAL GRANTS	$0	–	–	$0	–	–
STATE GRANTS	$3,174,940	$1,096,452	35%	$2,567,880	$1,181,295	46%
LOCAL CONTRIBUTIONS	$73,358	$73,358	100%	$72,250	$147,664	204%
CHARGES FOR SERVICES	$0	$41,779	–	$0	$37,263	–
INTEREST & RENT	$56,300	$216,239	384%	$72,000	$185,783	258%
OTHER REVENUE	$0	$5,028	–	$0	$5,000	–
OTHER FINANCING SOURCES	$6,000,000	$4,500,000	75%	$1,750,000	$1,312,500	75%
USE OF FUND BALANCE	$3,017,951	–	0%	$5,937,386	–	0%
REVENUES TOTAL	**$12,564,349**	**$5,932,856**	**47%**	**$10,399,516**	**$2,869,504**	**28%**
EXPENDITURES						
PUBLIC WORKS						
FINANCE DEPARTMENT	$23,070	$18,050	78%	$21,410	$16,520	77%
TRAFFIC CONTROLS	$1,988,882	$1,154,418	58%	$1,967,852	$727,149	37%
TRAFFIC ENGINEERING	$45,580	$30,883	68%	$44,630	$30,470	68%
CONSTRUCTION	$8,941,460	$2,691,612	30%	$6,947,180	$1,359,971	20%
BRIDGE MAINTENANCE	$100,000	$0	0%	$110,000	$15,108	14%
STREET MAINTENANCE	$340,262	$194,266	57%	$400,035	$167,474	42%
STREET CLEANING	$245,710	$93,792	38%	$210,180	$60,134	29%
STREET TREES	$613,805	$423,995	69%	$462,130	$358,420	78%
SNOW AND ICE CONTROL	$183,580	$155,560	85%	$156,100	$109,466	70%
HIGHWAYS & STREETS	$82,000	$21,345	26%	$80,000	$56,136	70%
PUBLIC WORKS TOTAL	**$12,564,349**	**$4,783,920**	**38%**	**$10,399,516**	**$2,900,849**	**28%**
TRANSFERS OUT AND OTHER FINANCING USES	$0	–	–	$0	–	–
EXPENDITURES TOTAL	**$12,564,349**	**$4,783,920**	**38%**	**$10,399,516**	**$2,900,849**	**28%**

Local Street Fund

Total revenues for the year are approximately $.5M lower than the prior year, largely attributable to timing differences associated with special assessment billings and collections. In addition, State grant revenues are generally received two months in arrears, similar to the Major Street Fund, which contributes to the current variance between budget and actual revenues.

Expenditures are approximately $1.6 million lower than the previous year, due primarily to project timing differences, as a larger share of construction activity and contractor billings is expected later in the fiscal year.

LOCAL STREET FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
SPECIAL ASSESSMENTS	$883,950	$162,579	18%	$537,160	$156,351	29%
FEDERAL GRANTS	$0	–	–	$0	–	–
STATE GRANTS	$813,400	$440,133	54%	$780,300	$475,628	61%
LOCAL CONTRIBUTIONS	$0	–	–	$0	–	–
CHARGES FOR SERVICES	$0	$125,336	–	$0	$111,788	–
INTEREST & RENT	$20,880	$158,789	760%	$114,100	$135,998	119%
OTHER REVENUE	$5,000	$27,044	541%	$5,000	$8,604	172%
OTHER FINANCING SOURCES	$4,013,000	$3,009,750	75%	$4,750,000	$3,562,500	75%
USE OF FUND BALANCE	$2,342,565	–	0%	$3,870,741	–	0%
REVENUES TOTAL	**$8,078,795**	**$3,923,631**	**49%**	**$10,057,301**	**$4,450,869**	**44%**
EXPENDITURES						
PUBLIC WORKS						
FINANCE DEPARTMENT	$32,610	$25,135	77%	$29,350	$22,197	76%
TRAFFIC CONTROLS	$34,580	$23,045	67%	$34,550	$22,986	67%
TRAFFIC ENGINEERING	$47,180	$31,915	68%	$46,230	$28,067	61%
CONSTRUCTION	$5,643,440	$1,122,266	20%	$7,813,742	$2,884,213	37%
BRIDGE MAINTENANCE	$67,000	–	0%	$80,000	$5,131	6%
STREET MAINTENANCE	$498,410	$360,068	72%	$534,979	$306,415	57%
STREET CLEANING	$367,160	$244,897	67%	$324,140	$262,330	81%
STREET TREES	$1,210,215	$976,044	81%	$1,038,969	$890,223	86%
SNOW AND ICE CONTROL	$146,200	$131,006	90%	$125,340	$128,753	103%
HIGHWAYS & STREETS	$32,000	$7,115	22%	$30,000	$18,712	62%
PUBLIC WORKS TOTAL	**$8,078,795**	**$2,921,491**	**36%**	**$10,057,301**	**$4,569,028**	**45%**
EXPENDITURES TOTAL	**$8,078,795**	**$2,921,491**	**36%**	**$10,057,301**	**$4,569,028**	**45%**

Solid Waste Fund

Revenue and expenditures are approximately the same as the prior fiscal year.

SOLID WASTE FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$2,418,990	$2,423,743	100%	$2,338,490	$2,341,264	100%
STATE GRANTS	$5,000	$3,718	74%	$5,000	$3,939	79%
CHARGES FOR SERVICES	$0	$1,440	–	$0	$1,440	–
INTEREST & RENT	$64,700	$66,388	103%	$60,000	$59,646	99%
OTHER REVENUE	$0	–	–	$0	$241	–
USE OF FUND BALANCE	$4	–	0%	$3	–	0%
REVENUES TOTAL	**$2,488,694**	**$2,495,289**	**100%**	**$2,403,493**	**$2,406,530**	**100%**
EXPENDITURES						
PUBLIC WORKS	$2,488,694	$1,796,961	72%	$2,403,493	$1,735,008	72%

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
EXPENDITURES TOTAL	$2,488,694	$1,796,961	72%	$2,403,493	$1,735,008	72%

Senior Services Fund

On November 7, 2023, the City of Birmingham voters approved a .33 millage for a three-year term, ending July 1, 2027 for a Senior Services Fund. This fund was established to provide for improvements to the newly purchased senior center building and/or other senior services. Renovations are expected to be underway this fall.

Currently there is $1.2M in revenue generated for this fiscal year.

SENIOR SERVICES FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$1,188,560	$1,187,912	100%	$1,136,250	$1,127,787	99%
STATE GRANTS	$0	$1,790	–	$0	–	–
INTEREST & RENT	$70,000	$67,294	96%	$28,000	$28,481	102%
USE OF FUND BALANCE	-$1,258,560	–	0%	-$1,164,250	–	0%
REVENUES TOTAL	**$0**	**$1,256,996**	**–**	**$0**	**$1,156,268**	**–**
EXPENDITURES						
HEALTH AND WELFARE	$0	–	–	$0	–	–
EXPENDITURES TOTAL	**$0**	**–**	**–**	**$0**	**–**	**–**

Brownfield Redevelopment Authority Fund

Revenues are approximately $.3M lower than the prior year. This is the result of the final reimbursement to 2400 Lincoln brownfield site.

Reimbursements to developers for site contamination are paid every October and April.

BROWNFIELD REDEVELOPMENT AUTHORITY FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$284,760	$276,627	97%	$580,670	$562,855	97%
STATE GRANTS	$0	–	–	$0	–	–
CHARGES FOR SERVICES	$0	–	–	$0	–	–
INTEREST & RENT	$4,000	$12,523	313%	$4,000	$4,870	122%
OTHER REVENUE	$10,000	–	0%	$10,000	–	0%
OTHER FINANCING SOURCES	$0	–	–	$0	–	–
USE OF FUND BALANCE	-$4,000	–	0%	-$4,000	–	0%
REVENUES TOTAL	**$294,760**	**$289,151**	**98%**	**$590,670**	**$567,725**	**96%**
EXPENDITURES						
COMMUNITY AND ECONOMIC DEVELOPMENT	$294,760	$227,727	77%	$590,670	$566,973	96%
EXPENDITURES TOTAL	**$294,760**	**$227,727**	**77%**	**$590,670**	**$566,973**	**96%**

Triangle District Corridor Improvement Authority Fund

The City is attempting to re-engage with the County regarding tax capture for the district. To-date no property taxes have been captured and no funds spent on this activity.

TRIANGLE DISTRICT CORRIDOR IMPROVEMENT AUTHORITY FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$0	–	–	$0	–	–
INTEREST & RENT	$600	$658	110%	$600	$610	102%
OTHER REVENUE	$0	–	–	$0	–	–
OTHER FINANCING SOURCES	$0	–	–	$0	–	–
USE OF FUND BALANCE	-$600	–	0%	-$600	–	0%
REVENUES TOTAL	**$0**	**$658**	**–**	**$0**	**$610**	**–**
EXPENDITURES						
COMMUNITY AND ECONOMIC DEVELOPMENT	$0	–	–	$0	–	–
EXPENDITURES TOTAL	**$0**	**–**	**–**	**$0**	**–**	**–**

Indigent Defense Fund

Revenues are lower than the prior year primarily due to the timing of grant receipts. Expenditures are approximately the same as the prior fiscal year.

INDIGENT DEFENSE FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
STATE GRANTS	$489,500	$270,237	55%	$489,500	$364,921	75%
LOCAL CONTRIBUTIONS	$17,600	$11,681	66%	$17,600	–	0%
INTEREST & RENT	$7,600	$9,626	127%	$7,600	$10,660	140%
USE OF FUND BALANCE	$0	–	–	$0	–	–
REVENUES TOTAL	**$514,700**	**$291,544**	**57%**	**$514,700**	**$375,581**	**73%**
EXPENDITURES						
HEALTH AND WELFARE	$514,700	$336,570	65%	$514,700	$318,469	62%
EXPENDITURES TOTAL	**$514,700**	**$336,570**	**65%**	**$514,700**	**$318,469**	**62%**

Law and Drug Enforcement Fund

Revenues are dependent on receipt of forfeited property proceeds as a result of prosecution of drug cases.

LAW AND DRUG ENFORCEMENT FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
FEDERAL GRANTS	$0	–	–	$0	–	–
INTEREST & RENT	$6,000	$10,583	176%	$6,000	$9,440	157%
FINES & FORFEITURES	$25,000	$48,452	194%	$25,000	$18,491	74%
OTHER REVENUE	$0	–	–	$0	–	–
USE OF FUND BALANCE	-$18,500	–	0%	$1,900	–	0%
REVENUES TOTAL	**$12,500**	**$59,035**	**472%**	**$32,900**	**$27,931**	**85%**

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
EXPENDITURES						
PUBLIC SAFETY	$12,500	$4,911	39%	$32,900	$31,827	97%
EXPENDITURES TOTAL	**$12,500**	**$4,911**	**39%**	**$32,900**	**$31,827**	**97%**

Principal Shopping District

Revenues and expenditures are approximately the same as the prior fiscal year. Special assessments are normally billed in January.

PRINCIPAL SHOPPING DISTRICT

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
SPECIAL ASSESSMENTS	$1,254,070	$1,083,722	86%	$1,202,710	$1,022,461	85%
FEDERAL GRANTS	$0	–	–	$0	–	–
LOCAL CONTRIBUTIONS	$0	–	–	$0	$2,500	–
CHARGES FOR SERVICES	$25,000	$25,000	100%	$25,000	$25,000	100%
INTEREST & RENT	$46,900	$50,853	108%	$36,000	$41,696	116%
OTHER REVENUE	$230,000	$186,519	81%	$230,000	$194,496	85%
OTHER FINANCING SOURCES	$0	–	–	$0	–	–
USE OF FUND BALANCE	$123,770	–	0%	$62,619	–	0%
REVENUES TOTAL	**$1,679,740**	**$1,346,094**	**80%**	**$1,556,329**	**$1,286,153**	**83%**
EXPENDITURES						
COMMUNITY AND ECONOMIC DEVELOPMENT	$1,679,740	$988,584	59%	$1,556,329	$983,543	63%
EXPENDITURES TOTAL	**$1,679,740**	**$988,584**	**59%**	**$1,556,329**	**$983,543**	**63%**

Baldwin Public Library Fund

Revenues are approximately $.2M higher than the previous year as a result of an increase in property tax revenue.

Expenditures are approximately $.4M higher than last year due to building construction related activities.

BALDWIN PUBLIC LIBRARY FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$4,667,550	$4,680,258	100%	$4,482,490	$4,491,448	100%
FEDERAL GRANTS	$0	$1,800	–	$0	$1,050	–
STATE GRANTS	$45,000	$27,494	61%	$45,000	$7,011	16%
LOCAL CONTRIBUTIONS	$1,167,400	$765,554	66%	$1,134,860	$759,912	67%
CHARGES FOR SERVICES	$28,950	$25,112	87%	$27,500	$26,237	95%
INTEREST & RENT	$15,000	$119,940	800%	$5,000	$83,631	1,673%
FINES & FORFEITURES	$7,000	$5,249	75%	$5,000	$5,987	120%
OTHER REVENUE	$500	$49	10%	$0	$118	–
OTHER FINANCING SOURCES	$0	–	–	$0	–	–
USE OF FUND BALANCE	-$654,890	–	0%	-$655,210	–	0%
REVENUES TOTAL	**$5,276,510**	**$5,625,457**	**107%**	**$5,044,640**	**$5,375,395**	**107%**
EXPENDITURES						

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
RECREATION AND CULTURE	$5,276,510	$3,863,767	73%	$5,044,640	$3,476,235	69%
EXPENDITURES TOTAL	**$5,276,510**	**$3,863,767**	**73%**	**$5,044,640**	**$3,476,235**	**69%**

Community Development Block Grant Fund

Revenue and expenditures are lower than the prior year, as they are determined by reimbursement requests.

CDBG expenditures for this fiscal year represent work for yard services and minor home repair.

COMMUNITY DEVELOPMENT BLOCK GRANT FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
FEDERAL GRANTS	$35,950	$7,220	20%	$84,970	$25,958	31%
USE OF FUND BALANCE	$0	–	–	$0	–	–
REVENUES TOTAL	**$35,950**	**$7,220**	**20%**	**$84,970**	**$25,958**	**31%**
EXPENDITURES						
HEALTH AND WELFARE	$35,950	$7,220	20%	$84,970	$25,958	31%
EXPENDITURES TOTAL	**$35,950**	**$7,220**	**20%**	**$84,970**	**$25,958**	**31%**

Opioid Settlement Fund

This fund accounts for the distribution of the national opioid settlement with pharmaceutical companies. Funds from this settlement are restricted to prevention and treatment programs and recovery services.

Revenues are dependent on periodic receipts from settlements throughout the fiscal year.

Expenditures have decreased compared to the previous year due to lower costs associated with mental health co-responders.

OPIOID SETTLEMENT FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
INTEREST & RENT	$1,000	$3,017	302%	$1,000	$2,630	263%
OTHER REVENUE	$50,000	$21,025	42%	$50,000	$33,173	66%
USE OF FUND BALANCE	-$1,000	–	0%	-$1,000	–	0%
REVENUES TOTAL	**$50,000**	**$24,042**	**48%**	**$50,000**	**$35,804**	**72%**
EXPENDITURES						
HEALTH AND WELFARE	$50,000	$14,293	29%	$50,000	$20,778	42%
EXPENDITURES TOTAL	**$50,000**	**$14,293**	**29%**	**$50,000**	**$20,778**	**42%**

Debt Service Fund

Budgeted revenues and expenditures are based on scheduled debt service payments. Expenditures are at 100% spent for the year as a result of making all debt payments for the year by March.

DEBT SERVICE FUND

	BUDGET	YTD ACTUAL		BUDGET - PRIOR YR	YTD ACTUAL - PRIOR YR	
	FY2026	FY2026	% OF BUDGET	FY2025	FY2025	% OF BUDGET - PRIOR YR
REVENUES						
TAXES	$823,280	$832,482	101%	$788,860	$790,844	100%
STATE GRANTS	$3,000	$1,249	42%	$1,670	$2,741	164%
INTEREST & RENT	$8,300	$9,362	113%	$3,300	$8,532	259%
OTHER REVENUE	$0	–	–	$0	–	–
OTHER FINANCING SOURCES	$0	–	–	$0	–	–
USE OF FUND BALANCE	$0	–	–	$0	–	–
REVENUES TOTAL	**$834,580**	**$843,093**	**101%**	**$793,830**	**$802,116**	**101%**
EXPENDITURES						
DEBT SERVICE	$834,580	$834,573	100%	$793,830	$785,822	99%
EXPENDITURES TOTAL	**$834,580**	**$834,573**	**100%**	**$793,830**	**$785,822**	**99%**

LOGOTYPE

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MEMORANDUM

Finance Department

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Mary Chavez, Finance Director

SUBJECT: 3rd Quarter Investment Report

Public Act 213 of 2007 requires investment reporting on the City's general investments to be provided to the City Commission on a quarterly basis. This information is also required to be provided annually, which the City has and will continue to include within the audited financial statements.

General investments of the City are governed by state law and the City's General Investment Policy approved by the City Commission. The services of an outside investment advisor are utilized to assist the treasurer in determining which types of investments are most appropriate and permitted under the investment policy, maximize the return on the City's investments within investment policy constraints and provide for cash flow needs.

The two primary objectives for investment of City funds are the preservation of principal and liquidity to protect against losses and provide sufficient funds to enable the City to meet all operating requirements that might be reasonably anticipated. Investment activities include all City funds except the retirement and retiree health-care funds as follows:

- General Fund
- Permanent Funds
- Special Revenue Funds
- Capital Projects Fund
- Enterprise Funds
- Debt Service Funds
- Component Unit Funds
- Internal Service Funds

Overall, the City has $155.4 million invested in various securities according to its general investment policy as of March 31, 2026.

The City has two pooled funds (CLASS Pool and J-Fund), which are used to meet payroll,

contractor and other accounts payable needs. As indicated on the attached schedule, there is approximately $24.2 million invested in pooled funds at the end of December. A maximum of 50% of the portfolio may be invested in pooled funds that meet state guidelines. The amount currently invested in pooled funds is 16%.

The City also holds approximately $86 million, or 55%, of its investments in treasury notes and bills, which are obligations of the United States. The maximum amount of investments that may be held in government securities is 100%.

Investments in federal agencies total approximately $45.1 million, or 29%, of the City's investments. The maximum amount of the portfolio that may be invested in federal agencies is 75%.

The Investment Policy requires that the average maturity of the portfolio may not exceed two and one-half years. The current average maturity of the portfolio is 2.0 years.

ATTACHMENTS:

1. Investment Portfolio Summary

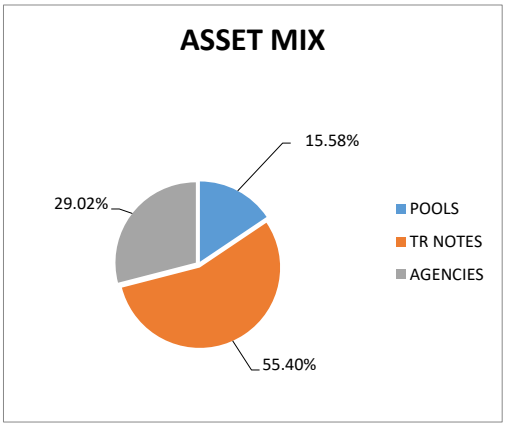
CITY OF BIRMINGHAM
GENERAL INVESTMENT PORTFOLIO SUMMARY

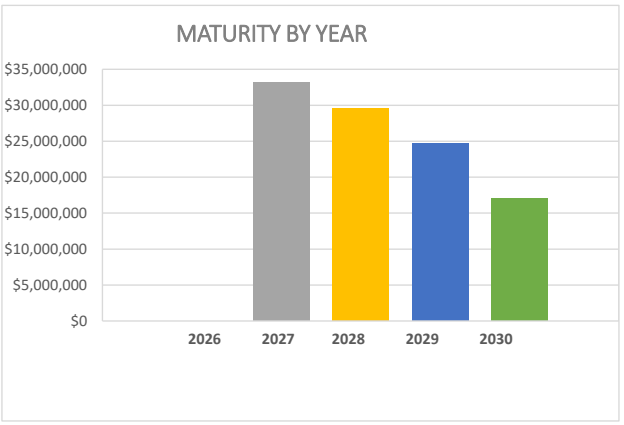
3/31/2026

YEAR	MATURITY DATE	DESCRIPTION	% YIELD	CURRENT MARKET VALUE	PAR VALUE	COST	YEARLY TOTAL
	3/31/2026	CLASS POOL	3.744%	2,569,566.08	2,569,566.08	2,519,664.06	
	3/31/2026	J FUND	3.470%	21,636,773.48	18,253,819.94	21,636,773.48	
							24,206,339.56
2026	4/15/2026	TR NOTE	3.750%	1,999,980.00	2,000,000.00	1,963,131.70	
	4/30/2026	TR NOTE	3.939%	1,995,280.00	2,000,000.00	1,959,147.33	
	5/26/2026	AGENCY	5.015%	1,958,161.80	1,965,000.00	1,797,385.50	
	6/15/2026	TR NOTE	3.907%	2,001,600.00	2,000,000.00	2,003,209.83	
	6/16/2026	AGENCY	4.203%	2,998,080.00	3,000,000.00	2,928,240.00	
	7/15/2026	TR NOTE	4.500%	2,004,200.00	2,000,000.00	2,032,116.08	
	7/27/2026	AGENCY	4.412%	1,503,525.00	1,500,000.00	1,504,590.00	
	8/14/2026	AGENCY	4.731%	1,503,240.00	1,500,000.00	1,490,415.00	
	9/11/2026	AGENCY	4.963%	2,009,980.00	2,000,000.00	1,995,156.00	
	10/15/2026	TR NOTE	4.847%	3,013,560.00	3,000,000.00	2,981,611.61	
	11/15/2026	TR NOTE	4.852%	1,978,360.00	2,000,000.00	1,838,131.70	
	11/19/2026	AGENCY	3.710%	1,997,880.00	2,000,000.00	1,998,340.00	
	12/18/2026	AGENCY	4.790%	1,847,092.65	1,885,000.00	1,675,380.46	
							26,810,939.45
2027	1/15/2027	TR NOTE	4.082%	4,007,880.00	4,000,000.00	4,016,888.40	
	2/15/2027	TR NOTE	4.267%	1,504,665.00	1,500,000.00	1,495,669.09	
	3/15/2027	TR NOTE	3.463%	2,009,660.00	2,000,000.00	2,036,959.83	
	3/31/2027	TR NOTE	4.071%	1,482,375.00	1,500,000.00	1,406,430.81	
	4/15/2027	TR NOTE	3.682%	2,015,220.00	2,000,000.00	2,025,319.20	
	4/30/2027	TR NOTE	4.867%	1,483,755.00	1,500,000.00	1,398,930.81	
	5/5/2027	TR NOTE	4.265%	1,511,010.00	1,500,000.00	1,508,266.74	
	6/30/2027	TR NOTE	3.701%	2,979,150.00	3,000,000.00	2,943,867.19	
	7/15/2027	TR NOTE	4.111%	1,510,200.00	1,500,000.00	1,509,965.96	
	8/15/2027	TR NOTE	4.510%	1,908,874.50	1,950,000.00	1,799,643.25	
	9/30/2027	TR NOTE	4.005%	1,506,150.00	1,500,000.00	1,507,851.56	
	10/13/2027	AGENCY	4.885%	3,041,640.00	3,000,000.00	2,985,456.00	
	10/15/2027	TR NOTE	3.608%	2,001,260.00	2,000,000.00	2,010,709.83	
	11/15/2027	TR NOTE	2.250%	1,950,240.00	2,000,000.00	1,927,819.20	
	11/30/2027	TR NOTE	4.513%	1,701,003.00	1,700,000.00	1,658,701.01	
	12/1/2027	AGENCY	3.803%	1,506,690.00	1,500,000.00	1,520,295.00	
	12/10/2027	AGENCY	4.140%	1,004,310.00	1,000,000.00	999,570.00	
							33,124,082.50
2028	1/31/2028	TR NOTE	3.470%	2,982,900.00	3,000,000.00	3,002,705.36	
	2/29/2028	TR NOTE	4.736%	2,006,560.00	2,000,000.00	1,942,272.32	
	3/10/2028	AGENCY	3.539%	1,594,104.75	1,575,000.00	1,641,386.25	
	3/15/2028	TR NOTE	3.570%	2,002,260.00	2,000,000.00	2,014,616.08	
	5/15/2028	TR NOTE	3.490%	2,942,940.00	3,000,000.00	2,937,431.92	
	6/15/2028	TR NOTE	3.572%	2,002,660.00	2,000,000.00	2,015,787.95	
	6/30/2028	AGENCY	4.433%	1,508,280.00	1,500,000.00	1,471,840.50	
	7/31/2028	TR NOTE	4.825%	1,510,320.00	1,500,000.00	1,455,825.34	
	8/28/2028	AGENCY	4.454%	1,824,120.00	1,800,000.00	1,803,792.60	
	9/22/2028	AGENCY	4.779%	2,031,040.00	2,000,000.00	1,975,600.00	
	10/31/2028	TR NOTE	4.875%	3,076,530.00	3,000,000.00	3,157,744.43	
	11/24/2028	AGENCY	4.350%	1,515,975.00	1,500,000.00	1,490,700.00	
	11/30/2028	AGENCY	1.500%	1,520,745.00	1,500,000.00	1,487,758.93	
	12/8/2028	AGENCY	3.541%	3,014,490.00	3,000,000.00	3,039,390.00	
							29,532,924.75
2029	1/31/2029	TR NOTE	4.375%	1,004,530.00	1,000,000.00	984,378.35	
	2/15/2029	TR NOTE	3.603%	1,935,000.00	2,000,000.00	1,937,116.08	
	2/28/2029	TR NOTE	0.350%	1,011,480.00	1,000,000.00	983,011.16	
	4/10/2029	AGENCY	4.000%	1,522,515.00	1,500,000.00	1,485,489.00	
	4/30/2029	TR NOTE	3.564%	2,045,320.00	2,000,000.00	2,066,725.45	
	5/31/2029	TR NOTE	4.500%	1,019,380.00	1,000,000.00	1,003,128.35	

	6/8/2029	AGENCY	3.789%	2,045,460.00	2,000,000.00	2,072,500.00	
	7/31/2029	TR NOTE	4.000%	3,013,350.00	3,000,000.00	3,067,744.42	
	8/31/2029	TR NOTE	3.125%	2,929,350.00	3,000,000.00	2,948,095.99	
	9/30/2029	AGENCY	3.521%	1,727,705.00	1,750,000.00	1,748,295.50	
	10/31/2029	TR NOTE	4.114%	2,520,500.00	2,500,000.00	2,501,180.25	
	11/30/2029	TR NOTE	3.644%	2,016,560.00	2,000,000.00	2,037,350.45	
	12/14/2029	AGENCY	3.725%	1,892,132.00	2,000,000.00	1,894,244.00	
							24,683,282.00
2030	1/31/2030	TR NOTE	4.028%	1,518,990.00	1,500,000.00	1,513,657.37	
	2/28/2030	TR NOTE	3.651%	2,007,580.00	2,000,000.00	2,028,678.58	
	4/30/2030	TR NOTE	4.039%	1,498,365.00	1,500,000.00	1,489,340.97	
	5/31/2030	TR NOTE	3.667%	2,006,800.00	2,000,000.00	2,028,600.45	
	6/14/2030	AGENCY	3.698%	3,052,290.00	3,000,000.00	3,084,720.00	
	7/31/2030	TR NOTE	3.762%	2,507,900.00	2,500,000.00	2,571,530.96	
	8/31/2030	TR NOTE	3.623%	1,975,460.00	2,000,000.00	2,000,084.83	
	10/8/2030	AGENCY	4.012%	2,480,725.00	2,500,000.00	2,498,547.50	
							17,048,110.00
			3.901%	155,405,678.26	151,948,386.02	154,456,907.97	155,405,678.26

AVERAGE MATURITY (YEARS): 1.76





POOLS	$24,206,339.56	15.58%
TR NOTES	$86,099,157.50	55.40%
AGENCIES	$45,100,181.20	29.02%
TOTAL	$155,405,678.26	100.00%

* INSIGHT:	$131,199,338.70
*ASSIGNED TO CITY:	$24,206,339.56
	$155,405,678.26

COMPARATIVE RETURNS		
	City Portfolio	1-Yr TR
Current Quarter	3.74%	3.69%
Prior Quarter	3.72%	3.70%
1 Year Ago	3.94%	4.06%

QUARTERLY REPORT
April 2026

BOARD OF TRUSTEES	
Municipality	**Representative**
City of Berkley	Shawn Young
Village of Beverly Hills	Neil Johnston
Village of Bingham Farms	Jamie Moore
City of Birmingham	Melissa Coatta
City of Clawson	Trever Zablocki
City of Huntington Woods	Kevin Wayne
City of Lathrup Village	Mike Greene
City of Pleasant Ridge	Jim Breuckman
City of Royal Oak	Kevin Yee
City of Southfield	Abdul Siddiqui
Township of Southfield	Neil Johnston

OFFICERS	
Chair:	J. Breuckman
Vice Chairman:	T. Zablocki
Secretary:	S. Young
Advisory Committee:	Breuckman, Zablocki, Young, Coatta
Audit Committee:	Breuckman, Zablocki, Young, Coatta

SOCWA MANAGEMENT	
General Manager	Eric Griffin
Operations Manager	Bob Jackovich
Accounting & Finance Manager	Colleen Wayland

April 2026

Board of Trustees
Southeastern Oakland County Water Authority

Subject: Quarterly Report – April 2026

Board Members:

Attached is a copy of the Southeastern Oakland County Water Authority's Quarterly Report covering the first nine months of operation of the fiscal year 2026. The report contains a financial statement of the Authority's operation and an outline of projects in progress or completed during the quarter. The report also contains statistical information and other information of general interest to the members of this Authority.

FINANCIAL STATEMENT

The total net income before depreciation for the first nine months of fiscal year 2026 was -$11,229. This was $249,896 lower than budgeted but is higher than the net income of -$504,421 for the first nine months of last fiscal year .

	Actual	Compared to Budget
Revenue	$23,623,375	$502,275
Expenses	$23,634,604	$752,171
Net Income (before depreciation)	$(11,229)	$(249,896)

Net income at this time of year decreases as GLWA collects 60% of their revenue through a fixed monthly charge and volumes are lower. This results in a high fixed monthly charge but a low cost per thousand cubic feet purchased. In the first quarter of the year, our GLWA water bills were significantly less than our water sales revenue. Our GLWA water bills are higher than our water sales revenue in the colder months. We will be using some of the net income for the first quarter to pay these higher water bills later in the fiscal year. This contributed to SOCWA changing their rate structure to 25% fixed charge in fiscal year 2025. This fiscal year SOCWA is moving to a 60% fixed charge model.

The increase in revenue was almost completely due to higher than planned water sales +$469,362. Expenses were higher than budgeted due to higher expenses for water purchases +$301,533.

The increase in revenue was primarily due to higher than planned water sales to the member communities +$294,544 and to Bloomfield Hills and Bloomfield Twp. +$174,818. This was driven by summer usage but also the difficult winter conditions led to more water main breaks and customer consumption.

The decrease in operating expenses was due largely to lower costs for power, pumping and ground (-$103,072), and meters and mains (-$28,216). Capital expenditures for the first nine months of the fiscal year totaled $270,399 as the roof replacement CIP project got underway.

WATER SALES

This table is the record of SOCWA water sales volumes for the period July 1 through March 31. The nine-month record shows a 2.5% increase in water sales volume during the current fiscal year compared with the same period of the previous fiscal year. FY23 was historically low. Precipitation was much higher than normal for July and August. Water sales were lower than the previous year for all six months of the period.

WATER SALES – DAILY AVERAGE (MGD)

Month	FY22	FY23	FY24	FY25	FY26	Over/Under Previous Year
July	30.75	39.81	33.77	31.50	34.41	2.92
August	33.02	37.13	31.19	30.21	34.65	4.45
September	29.77	34.10	28.27	31.51	32.84	1.33
October	22.51	24.52	21.26	23.45	24.59	1.13
November	20.68	21.00	18.69	19.13	19.13	(0.01)
December	20.74	21.02	18.46	19.72	20.18	0.45
January	22.36	20.76	19.76	20.88	20.45	(0.42)
February	22.24	20.78	19.16	20.40	21.53	1.14
March	20.63	20.37	18.58	19.57	20.31	0.74
Daily Avg (MGD)	24.77	26.67	23.27	24.07	25.38	1.31
Variance		7.7%	-12.8%	3.5%	5.4%	

PRECIPITATION - INCHES

Month	FY20	FY21	FY22	FY23	FY24	FY25	FY26
July	7.15	2.46	7.15	3.06	4.25	7.45	6.50
August	3.04	7.31	5.64	4.93	5.47	6.47	0.78
September	4.84	2.72	6.00	1.89	1.42	0.66	1.05
October	4.97	3.27	6.20	0.53	3.14	1.89	1.36
November	1.52	2.49	2.39	1.28	1.19	1.82	0.59
December	2.60	5.30	4.30	2.60	3.40	2.50	2.22
January	4.21	0.89	2.43	1.48	6.34	0.32	5.41
February	1.21	0.42	1.69	1.76	1.63	0.26	1.60
March	3.41	2.34	2.52	1.63	1.74	1.39	2.63
Total:	32.95	27.2	38.32	19.16	28.58	22.76	22.14

MAJOR PROJECTS

GLWA WATER RATES

In late February, the GLWA Board approved a rate increase of 5.64% for SOCWA for fiscal year 2027. The primary reasons for the rate increase are an increase in GLWA's operations and maintenance expenses and a decrease in projected water sales volumes, which were partially offset by increased investment earnings. At the beginning of 2026, SOCWA had recommended that the member communities prepare their budgets with a 8.5% SOCWA rate increase. The projected SOCWA rate increase is due to the GLWA rate increase and a large reduction in projected SOCWA water sales for FY27. GLWA did reduce their increase so SOCWA rates for fiscal year 2027 will be proposed at 7.5%. Those rates will be finalized at the May Board meeting.

LUTZ ROOF PROJECT

SOCWA has contracted with Lutz Roofing for the replacement of roofs at four pump stations. Gare, Buchanan, Lamb and 14 Mile will be completed this spring. The bidding was completed in November and the material purchased in December to receive 2025 pricing.

GREAT LAKES WATER AUTHORITY (GLWA) ISSUES

GLWA became operational on January 1, 2016. The GLWA website, www.glwater.org, is a great source of information regarding GLWA. The agendas and minutes for all Board and Board Committee meetings are posted along with procurement information about all projects being performed by GLWA.

GLWA Customer Outreach Program

GLWA is continuing to utilize the same Customer Outreach Program that DWSD has used for many years. SOCWA staff is continuing to participate in the GLWA Customer Outreach Process. I serve as the water Analytical Workgroup (AWG) member partner representative and am a co-chair of the One Water Partnership. Significant progress has been made in improving the level of communication and understanding between GLWA and its customers through this process, which will be a continuing effort. SOCWA continues to be a strong proponent of GLWA's customer partnering process. The Customer Outreach Program continues to be very important in maintaining the good relationship between GLWA and its customers.

GLWA Board of Directors

Mr. John Zech, the GLWA Director representing Wayne County, was elected Board Chair for 2026. Mr. Zech replaces Mr. Mark Miller, the GLWA Director representing State of Michigan who was Board Chair for 2025. GLWA is using an annual rotation for Board Officers.

WATER SERVICE REPLACEMENT CONTRACT

SOCWA has contracts in place that can be used by the member communities for the replacement of lead water services and for verifying the material type for service lines of unknown material type. The member communities with lead water services will need to replace 5% to 7% of those services each year under the new State of Michigan lead and copper rules. Having a contractor available for all the member communities could help to reduce the cost of performing this required work.

Respectfully submitted,

Eric Griffin
General Manager

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
INCOME STATEMENT
07/01/25 - 03/31/26

	Period Actual	Period Budget	Variance
REVENUES			
SALE OF WATER MEMBERS	15,044,839	14,750,295	294,544
SALE OF WATER OTHERS	8,222,645	8,047,827	174,818
TOTAL SALE OF WATER REVENUES	**23,267,484**	**22,798,122**	**469,362**
RENTALS	88,988	97,077	(8,089)
WATER ANALYSIS	1,440	900	540
INTEREST ON INVESTMENTS	246,558	225,000	21,558
MISCELLANEOUS REVENUES	18,905	0	18,905
TOTAL OTHER REVENUES	**355,891**	**322,977**	**32,914**
TOTAL REVENUES	**23,623,375**	**23,121,099**	**502,275**
LEAD SERVICE REPLACEMENT	1,069,124	1,800,000	(730,876)
EXPENSES			
PURCHASE OF WATER FOR RESALE	15,110,348	14,808,815	301,533
WEBSTER POWER, PUMPING & GROUNDS WEBSTER	418,519	415,425	3,093
POWER, PUMPING & GROUNDS	157,478	260,550	(103,072)
COMPUTER OPERATIONS	110,370	98,325	12,045
PURIFICATION/LAB	127,200	139,350	(12,150)
METERS & MAINS	196,334	224,550	(28,216)
ADMINISTRATION & GENERAL	813,994	663,450	150,544
WATER IN TRANSIT	6,700,360	6,271,968	428,392
TOTAL EXPENSES	**23,634,604**	**22,882,433**	**752,171**
LEAD SERVICE LINE REPLACEMENT	1,059,570	1,800,000	(740,430)
NET INCOME BEFORE DEPRECIATION	**(11,229)**	**238,666**	**(249,896)**
DEPRECIATION	473,378		
NET INCOME	**(484,607)**		

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
STATEMENT OF REVENUES AND EXPENDITURES COMPARED WITH TOTAL BUDGET
07/01/25 - 03/31/26

	Period Actual	Total Budget 2026	Remaining Budget	% Received or Expended
REVENUES				
SALE OF WATER MEMBERS	15,044,839	19,850,525	(4,805,686)	76%
SALE OF WATER OTHERS	8,222,645	10,993,011	(2,770,366)	75%
TOTAL SALE OF WATER REVENUES	**23,267,484**	**30,843,536**	**(7,576,052)**	**75%**
RENTALS	88,988	131,526	(42,538)	68%
WATER ANALYSIS	1,440	1,200	240	120%
INTEREST ON INVESTMENTS	246,558	300,000	(53,442)	82%
MISCELLANEOUS REVENUES	18,905	0	18,905	0%
TOTAL OTHER REVENUES	**355,891**	**432,726**	**(76,835)**	
TOTAL REVENUES	**23,623,375**	**31,276,262**	**(7,652,888)**	**76%**
LEAD SERVICE REPLACEMENT	1,069,124	2,500,000	(1,430,876)	43%
EXPENSES				
PURCHASE OF WATER FOR RESALE	15,110,348	29,036,892	(13,926,544)	52%
WEBSTER POWER, PUMPING & GROUNDS	418,519	553,900	(135,382)	76%
POWER, PUMPING & GROUNDS	157,478	347,400	(189,922)	45%
COMPUTER OPERATIONS	110,370	131,100	(20,730)	84%
PURIFICATION/LAB	127,200	185,800	(58,600)	68%
METERS & MAINS	196,334	299,400	(103,066)	66%
ADMINISTRATION & GENERAL	813,994	884,600	(70,606)	92%
WATER IN TRANSIT	6,700,360	0	6,700,360	0%
TOTAL EXPENSES	**23,634,604**	**31,439,092**	**(7,804,488)**	**75%**
LEAD SERVICE LINE REPLACEMENT	1,059,570	2,500,000	(1,440,430)	42%
NET INCOME BEFORE DEPRECIATION	**(11,229)**	**(162,830)**	**151,600**	**7%**

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
COMPARATIVE STATEMENT
07/01/25 - 03/31/26

	Period Actual 2026	Period Actual 2025	Over/(Under)
REVENUES			
SALE OF WATER	15,044,839	13,765,326	1,279,513
SALE OF WATER OTHERS	8,222,645	7,271,501	951,144
TOTAL SALE OF WATER REVENUES	**23,267,484**	**21,036,827**	**2,230,657**
RENTALS	88,988	96,810	(7,822)
WATER ANALYSIS-LAB	1,440	0	1,440
INTEREST ON INVESTMENTS	246,558	305,593	(59,035)
MISCELLANEOUS REVENUES	18,905	25,264	(6,358)
TOTAL OTHER REVENUES	**355,891**	**427,666**	**(71,776)**
TOTAL REVENUES	**23,623,375**	**21,464,494**	**2,158,881**
LEAD SERVICE LINE REPLACEMENT	1,069,124	1,586,350	(517,226)
EXPENSES			
WATER PURCHASED FOR RESALE	15,110,348	13,924,269	1,186,080
WATER PURCHASE IN TRANSIT	6,700,360	6,299,244	401,116
OPERATING EXPENSES	1,823,895	1,689,443	134,452
TOTAL EXPENSES	**23,634,604**	**21,912,956**	**1,721,648**
LEAD SERVICE LINE REPLACEMENT	1,059,570	1,586,350	(526,780)
NET INCOME BEFORE DEPRECIATION	**(11,229)**	**(448,462)**	**437,233**
DEPRECIATION	473,378	463,887	9,491
NET INCOME	**(484,607)**	**(912,349)**	**427,742**

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
TOTAL CHARGES
07/01/25 - 03/31/26

MUNICIPALITY	WATER CONSUMPTION CUBIC FEET	TOTAL WATER CHARGES
MEMBERS		
BERKLEY	35,882	759,722
BEVERLY HILLS	29,212	622,733
BINGHAM FARMS	8,043	169,884
BIRMINGHAM	91,266	1,915,287
CLAWSON	27,105	572,985
HUNTINGTON WOODS	16,703	354,182
LATHRUP VILLAGE	10,667	223,826
PLEASANT RIDGE	8,096	171,827
ROYAL OAK	169,610	3,604,960
SOUTHFIELD	302,783	6,411,700
DETROIT ZOO & RACKHAM	11,249	237,734
MEMBERS TOTAL	**710,616**	**15,044,839**
NON MEMBERS		
BLOOMFIELD HILLS	40,845	1,542,588
BLOOMFIELD TOWNSHIP	178,200	6,680,056
NON MEMBERS TOTAL	**219,045**	**8,222,645**
GRAND TOTAL	**929,660**	**23,267,484**

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
INCOME STATEMENT WITH AVERAGE PER CUBIC FOOT
07/01/25 - 03/31/26

	Period Actual	2026 Average Per 1,000 cubic feet	2025 Average Per 1,000 cubic feet
REVENUES			
SALE OF WATER	15,044,839	21.1716	20.2465
SALE OF WATER OTHERS	8,222,645	37.5387	36.0393
TOTAL SALE OF WATER REVENUES	**23,267,484**	**25.0279**	**23.8607**
RENTALS	88,988	0.0957	0.0942
WATER ANALYSIS-LAB	1,440	0.0015	0.0000
INTEREST ON INVESTMENTS	246,558	0.2652	0.3455
MISCELLANEOUS REVENUES	18,905	0.0203	0.0287
TOTAL OTHER REVENUES	**355,891**	**0.3828**	**0.4683**
TOTAL REVENUES	**23,623,375**	**25.4108**	**24.3290**
EXPENSES			
WATER PURCHASED FOR RESALE	15,110,348	16.2536	15.7934
WEBSTER POWER, PUMPING & GROUNDS	418,519	0.4502	0.4884
POWER , PUMPING & GROUNDS	157,478	0.1694	0.2173
COMPUTER OPERATIONS	110,370	0.1187	0.0912
PURIFICATION/LAB	127,200	0.1368	0.1065
METERS & MAINS	196,334	0.2112	0.1968
ADMINISTRATIVE & GENERAL	813,994	0.8756	0.8628
WATER IN TRANSIT	6,700,360	7.2073	7.1448
TOTAL EXPENSES	**23,634,604**	**25.4228**	**24.9011**
NET INCOME BEFORE DEPRECIATION	**(11,229)**		

SOUTHEASTERN OAKLAND COUNTY WATER AUTHORITY
CAPITAL EXPENSES
07/01/25 - 03/31/26

Fixed Asset Expenditures	
Webster Tank Separation - Engineering	6,587
14 Mile Roof Replacement	62,526
Buchanan Roof Replacement	58,577
Gare Roof Replacement	84,131
Lamb Roof Replacement	58,577
Total Expenditures	**270,399**

MEMORANDUM

Engineering Department

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer
Mary Chavez, Finance Director

SUBJECT: Water and Sewer Rate and Connection Fee Study

Background:
In June 2025, Hubbell, Roth & Clark, Inc. (HRC) was awarded a contract to complete a Water and Sewer Rate and Connection Fee Study. Throughout Fall 2025 and Winter 2026, City staff met with James Burton and Karyn Stickel of HRC to review the City's current rate and fee structure, evaluate future capital needs for the water and sewer systems, and discuss potential updates to the rate methodology. At the May 4, 2026, City Commission meeting, HRC presented a proposed rate structure that includes a readiness-to-serve charge for both water and sewer services.

The City's water and sewer costs are largely determined by external agencies, including the Oakland County Water Resources Commissioner's Office (OCWRC) and the Southeastern Oakland County Water Authority (SOCWA). OCWRC approved sewer rates for the Evergreen-Farmington Sewer District and George W. Kuhn Drainage District on April 28, 2026. In addition, SOCWA finalized its water rates at the May 13, 2026, Board meeting. The proposed updates to the City's water and sewer rates and fees reflect the increased costs the City will incur from these regional providers.

Ordinance Amendment:
Water and sewer rates and connection fees are established in Chapter 114 – Utilities and the City's fee schedule. To implement the proposed rate methodology, amendments to Chapter 114 are required. A redline version of the proposed ordinance changes is enclosed for review with the sections of Chapter 114 pertaining to water and sewer connection fees highlighted.

Water and Sewer Bills:
Also enclosed are examples of the current water and sewer bill format and a sample bill reflecting the proposed rate structure to illustrate the anticipated billing and cost changes.

Next Steps:

The Finance Department plans to present the proposed water and sewer rates to the City Commission for consideration at the June 8, 2026, Commission meeting. In addition, the proposed fee schedule updates are expected to be presented to the City Commission in June 2026 for approval.

ATTACHMENTS:

1. Redline of Chapter 114: Utilities
2. Sample Bill EFSDS Stormwater Existing Rates
3. Sample Bill EFSDS Stormwater Proposed Rates
4. Sample Bill GWK Stormwater Existing Rates
5. Sample Bill GWK Stormwater Proposed Rates

Chapter 114 UTILITIES[1]

ARTICLE I. IN GENERAL

Secs. 114-1—114-25. Reserved.

ARTICLE II. WATER SUPPLY SYSTEM

DIVISION 1. GENERALLY

Sec. 114-26. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Department means the department of water supply of the city.

Main means any pipes, other than service pipes, used for conveying or distributing water.

Owner means any person owning any premises supplied or to be supplied with city water, or his duly authorized agent.

Premises means a single dwelling or apartment occupied by one family only, together with the land connected therewith and such outbuildings as are used exclusively in connection therewith, or a single room or number of rooms or building occupied for business or other purposes by one person.

Superintendent means the superintendent of the department, as designated in section 2-128.

Water service pipe means the pipe tapped into the water main and extending thence to the meter, including appurtenances connected thereto.

(Code 1963, § 2.20)

Cross reference(s)—Definitions generally, § 1-2.

Sec. 114-27. Main extensions.

Extension of, or changes in, the water mains shall be made only by direction of the city commission. Petitions for the extensions of old or construction of new mains shall be addressed to the commission. If the petition is granted, the commission shall determine the proportions of the cost to be borne by the petitioners and by the department.

[1]Cross reference(s)—Buildings and building regulations, ch. 22; planning, ch. 82; streets, sidewalks and other public places, ch. 98; subdivisions, ch. 102; zoning, ch. 126.

(Code 1963, § 2.21)

Sec. 114-28. Installation of mains.

Any person installing water mains at his own expense shall first submit plans and specifications for such work to the city engineer for approval. After such plans and specifications have been approved, the work shall be done under the supervision of the superintendent who shall require such tests made as he considers necessary and shall accept the installation for the city before the water is admitted to such mains. All inspection costs for such installation shall be paid by the party installing the water main. The provisions of this section shall also apply to any installations of water mains outside the corporate limits of the city where permission has been granted by the city commission to connect to the department mains.

(Code 1963, § 2.22)

Sec. 114-29. Trenching.

All water service pipe on either public or private property shall be laid on a solid bottom not less than four feet, six inches, below the established grade. Water service pipe laid in the same trench with a sewer shall be above and at least 18 inches distant from the sewer and shall be shelved into the bank. In no case shall water service pipe be laid on a fill.

(Code 1963, § 2.25)

Sec. 114-30. Pipe specifications.

All water service pipe from the main to the meter shall be copper pipe (Type K) or pipe of equal quality approved by the water department and not less than one inch inside diameter. Notwithstanding the foregoing, in cases where special and unusual circumstances indicate that substantially equivalent service can be provided by smaller pipe, the superintendent may authorize the installation of service pipe of not less than three-fourths inch inside diameter. All stop or service cocks shall be the same size as the service pipe and shall be extra heavy, round way stops. The stop cock and stop box shall, when practical, be placed on the property line. The stop cocks and stop boxes shall be placed 18 inches inside the face of the curb when, in the opinion of the water department, it is impractical to locate these boxes on the property line.

(Code 1963, § 2.26)

Sec. 114-31. Service pipe, stop cock and stop box; installation and maintenance.

The water service pipe from the main to the stop cock, also the stop cock and the stop box, will be furnished, installed and maintained by the department except as provided in this article. In those cases where the extension of service to the building is not installed prior to the installation by the city of the service from the street to the property line, it shall be the responsibility of the plumber to install and maintain such stop box until the final inspection by the building official. The owner shall see that the box is kept free of dirt, stones or other substances at all times.

(Code 1963, § 2.27)

Sec. 114-32. Installation permit.

Upon the securing of a permit therefor, the water service pipe shall be installed in the owner's property by a licensed plumber registered in the city. All water service pipe on private property shall be maintained by the owner of the premises.

(Code 1963, § 2.28)

Sec. 114-33. Inspection.

The water service from the property line to the building shall be inspected and approved by the plumbing inspector. In all cases where services are not properly installed, thereby necessitating an additional inspection, there shall be an additional charge for each inspection, in accordance with section 114-40.

(Code 1963, § 2.29)

Sec. 114-34. Testing work.

Licensed plumbers shall not interfere in any way with water service pipes installed by the department, and are not permitted to turn water on or off at the stop cock except for the purpose of testing their work, in which case the stop cock shall be left in the same condition and position as they found it. Any plumber called upon to shut off water and drain pipes in any premises shall do so inside the building only. The license of any plumber violating the provisions of this section may be revoked.

(Code 1963, § 2.30)

Sec. 114-35. Gate valves.

Separate gate valves the same size as the service pipe must be placed on the water service pipe on both sides of the meter. Such valves shall be equal in quality to the service cock.

(Code 1963, § 2.31)

Sec. 114-36. Repair existing pipe.

All iron water service pipe requiring repairs shall be replaced by copper under the same regulations as required for new services. Under no conditions shall iron water service pipe be repaired. Upon the appearance of a leak in any such water service pipe, the owner of the premises shall immediately pay the department for the installation of pipe from the main to the stop cock and the department will install same. The owner shall also cause the balance of the iron pipe to be replaced with copper before the water will be turned on.

(Code 1963, § 2.32)

Sec. 114-37. Alternate material and construction.

The regulations contained in this article specifying certain materials and methods of construction shall not act to eliminate other materials or methods of construction which are equivalent to or better than the materials and methods of construction specified. The superintendent is hereby authorized to approve other materials and

methods of construction when it is necessary or advisable to use such substitute materials and methods of construction.

(Code 1963, § 2.33)

Sec. 114-38. Meters required.

All premises using department water shall be metered. In no case will water be supplied at fixed rates or in any manner not requiring a meter, except for a temporary supply. Notwithstanding anything to the contrary, for any new construction commencing on or after July 1, 2007, if the building has both residential and nonresidential uses, there must be separate water meter service for the residential and nonresidential users such that the use by nonresidential customers can be separately metered and billed so that industrial waste control charges and/or industrial surcharges may be applied to those nonresidential users. In addition, owners of an existing building with single water meter for both residential and nonresidential users may choose to install separate meters so that the industrial waste control charges may be assessed only to the nonresidential users. Should a building owner, whose buildings do not have separate water service for residential and nonresidential, choose not to install separate meters, the building owner shall be required to pay the industrial waste control charges based upon the total service to the building. For purposes of this section, nonresidential users shall be defined as all users other than single-family houses, apartment buildings, residential condominiums, townhouses, mobile homes, schools, churches and municipal buildings.

(Code 1963, § 2.37; Ord. No. 1930, 5-14-07)

Sec. 114-39. Installation charge.

The property owner shall pay the cost of the water meter furnished by the department, but such meter shall remain the property of the department and will at all times be under its control.

(Code 1963, § 2.38)

Sec. 114-40. Cost of repairs.

The expense of installing and maintaining meters will be borne by the department; but where replacements, repairs or adjustments of the meter are made necessary by the act, neglect or carelessness of the owner or occupant of any premises, the expense to the department caused thereby may be charged against and collected from the owner or occupant of the premises.

(Code 1963, § 2.39)

Sec. 114-41. Size of meters.

~~For ordinary domestic consumption of water a five-eighths-inch meter will be furnished.~~ The minimum water meter to be furnished is one inch diameter. Where application is made for a meter larger than one inch, the superintendent ~~shall determine~~will verify whether a meter of such size is required, and the probable effect upon the water and sewage system as a whole; and he is hereby vested with the sole discretion of approving or disapproving the same. All meters 1½ inches or over must have a bypass as required by the superintendent.

(Code 1963, § 2.40)

Sec. 114-42. Meter location.

(a) Meters shall be set in accessible locations and in a manner satisfactory to the superintendent. Meters shall be set as close as practicable to the point where the water service pipe enters the building. In no case shall a meter be set where it is liable to injury or where it cannot readily be reached by the meter reader. The portion of the water service pipe between its entrance into the building and the meter shall be installed and maintained in a manner to make it accessible for inspection by the city at any time.

(b) A meter shall be placed in a pit rather than in the building being served when the superintendent determines that placement of the meter within a building would work an unusual hardship on the property owner or on the department. The superintendent may require that a meter be placed in a pit:

(1) Where the distance from the water main to the building is more than 200 feet; or

(2) Where the superintendent determines that due to the nature of the installation there is a greater than normal potential for control problems or leaks developing in the service pipe.

(c) Placement of a meter in a pit shall be done in accordance with the requirements of the superintendent and at the sole expense of the owner.

(Code 1963, § 2.41)

Sec. 114-43. Seal, tampering with meter.

Meters will be sealed by the department, and no one except an authorized employee of the department shall break or injure such seals. No person unless authorized by the department shall change the location of, alter or interfere in any way with any meter. After installation, no obstruction shall be placed adjacent to the meter that will prevent its accessibility.

(Code 1963, § 2.42)

Sec. 114-44. Injury to meter.

The owner or occupant of any premises where a meter is installed will be held responsible for its care and protection from freezing, and from injury or interference by any person. In case of injury to the meter, or in case of its stoppage or imperfect working, he shall give immediate notice to the department.

(Code 1963, § 2.43)

Sec. 114-45. Accuracy of meters.

If any meter becomes out of order and fails to register, the consumer will be charged at the quarterly consumption based on the same quarter for the previous year. The accuracy of the meter on any premises will be tested by the department upon written request of the owner. If on such test the meter shall be found to register over three percent more water than actually passes through it, another meter will be substituted therefor and the water bill may be adjusted in such manner as may be fair and just.

(Code 1963, § 2.44)

Sec. 114-46. Fire-line installations.

In a fire-line installation, a detector check meter is required. For the purpose of calculating fire line readiness to serve (RTS) charges, the line diameter shall be used unless the fire line and domestic service lines branch off downstream of the regular meter.

(Code 1963, § 2.45)

Sec. 114-47. Remote register installations.

Remote water meter registers, where installed, shall be considered as part of the water meter required under this article. Remote water meter registers shall be installed in accordance with a policy established by the city commission.

(Code 1963, § 2.46)

Sec. 114-48. Application.

Before any connection shall be made to any water main, application for same shall be made in writing to the department by the owner of the premises or by his authorized agent. Such application shall be made on blank forms provided by the department. In making such application the owner shall agree to abide by all the rules and regulations of the department, including the payment for water furnished.

(Code 1963, § 2.51)

Sec. 114-49. Location of service.

The location of the service at the property line will be as designated by the owner unless there are, in the opinion of the department, reasons for changing the same.

(Code 1963, § 2.52)

Sec. 114-50. Connection fee.

No connection shall be made, nor shall any existing connection to the water system be replaced until the applicant therefor has paid such fee as is established by the city commission. The city commission shall establish a schedule of fees for connections to the water system of the city, and any inspection costs or charges incurred by the city in connection therewith. Connection fees shall be for city incurred costs to install the connection and a Capital Connection Charge.

(Code 1963, § 2.53)

Sec. 114-51. Outside service.

Property owners not within the city corporate limits may connect into the city water mains only upon the approval of the city commission. All connections shall comply with the city's specifications for construction of water mains, services and appurtenances.

(Code 1963, § 2.54)

Sec. 114-52. Service during construction.

At the time application is made for a water service connection to a building under construction, the owner shall pay to the department, in addition to the fee provided in section 114-50 such fees for the water used in construction as are established by the commission. The construction fee shall entitle the applicant to water for construction purposes for a period of not more than three months. The department reserves the right to require the owner to provide a temporary meter connection and to charge for water used for construction purposes at the rates provided for in this chapter. Such meter shall be protected by the owner, and any damage it may sustain shall be repaired at his expense. Where water is provided without a meter, for construction of a building, any wasting of water for landscaping or purpose other than construction may result in discontinuance of the service and the payment of additional charges.

(Code 1963, § 2.55)

Sec. 114-53. Construction service; deposit.

At the time application is made for a service connection to a building under construction, the applicant shall deposit with the city treasurer the sum set forth in the schedule of fees, charges, bonds and insurance to guarantee maintenance during the construction period of the water stop box, which sum shall be retained by the city until final inspection of the premises by the plumbing inspector, and until the plumbing inspector shall determine that the stop box has been properly maintained and set to finish grade. If the plumbing inspector shall determine that the stop box does not pass inspection, the city shall correct the same and apply the full deposit for the services so rendered.

(Code 1963, § 2.56; Ord. No. 1507, § 2.56, 11-25-91; Ord. No. 2010, 2-8-10)

Sec. 114-54. Multiple service.

A single water service shall not serve several premises under separate ownerships unless the owners of such premises, by common agreement or otherwise, make arrangements for installations, metering, billing and discontinuance of service to such premises which are satisfactory to the superintendent of the water department. A building under one ownership consisting of several premises may be served by one or more water services and meters, but in no case shall the number of water services and meters exceed the number of premises. Two or more adjacent buildings under common ownership may have a separate water service and meter for each principal building. When more than one meter is served by one water service, all meters served by the service must operate from a manifold type arrangement. Failure of one unit in the manifold arrangement to pay for water received will result in a discontinuance of water to that meter. In multiple installations, no totalizing meter will be installed or read by the department. In addition to each water service allowed under this section, one separate fire line service is allowed. Where multiple premises are consolidated to result in less premises and more than one water service to a premises, such additional services may continue to be used with the approval of the superintendent. In cases where it is impractical to provide water service in accordance with the requirements of this article, the superintendent may authorize one or more additional water service connections for a premises. Cross connections between water service pipes are prohibited.

(Code 1963, § 2.57)

Sec. 114-55. Converted multiple premises.

Where a building originally built as a single building or premises and fitted with one service pipe shall thereafter be subdivided and such subdivision shall be separately owned, the separate divisions so made must be

connected to the main by separate service pipes, or otherwise modified to meet the requirements of section 114-54, within 30 days after such division.

(Code 1963, § 2.58)

Sec. 114-56. Disconnection of water services.

All water service pipes, which are not to be used as a result of conversion of multiple premises, building changes, service replacement, or for any other reasons shall be disconnected at the main. The owner shall obtain a permit from the city and shall pay for the disconnection charge set forth in the schedule of fees, charges, bonds and insurance for every service pipe disconnected. Application for the permit shall be made within 30 days after the discontinuation of use of the service. A water service pipe which serves a building or portion of a building which is to be removed, and which meets City Code requirements for a new service pipe may be reused for a new building with the approval of the superintendent. No charge will be made by the city for a water service pipe to be reused in a new building. No charge will be made for a meter reused in a new building provided a building permit is applied for no more than one year following the removal of the building or portion of building; and further provided the meter is the same size as the one removed. A disconnection permit will not be required and there will be no disconnection charge in conjunction with a water service replacement, if the service location is unchanged at the property line, or the water department determines it is practical to connect the replacement service to the main at the location where the old service is to be discontinued.

(Code 1963, § 2.59; Ord. No. 2010, 2-8-10)

Sec. 114-57. Meter removal, replacement, special service.

(a) A charge as set forth in the schedule of fees, charges, bonds and insurance shall be made by the department for customer requested removal and replacement of any water meter, except there will be no charge for removing and replacing a water meter that is removed and tested in accordance with section 114-45, where on such test the meter is found to register over three percent more water than actually passes through it.

(b) A charge as set forth in the schedule of fees, charges, bonds and insurance shall be made by this department for customer requested service performed at times other than within the normal seasonal working hours of the department, Monday through Friday, excluding holidays.

(c) Such service work shall include shutting off water, turning on water and repairing or replacing damaged meters.

(Code 1963, § 2.60; Ord. No. 1748, 11-27-00; Ord. No. 2010, 2-8-10)

Sec. 114-58. Backyard water main abandonment.

(a) *Purpose.* The purpose of this section is the protection of health, safety and public welfare by authorizing the city's director of engineering department to develop a written procedure and take the necessary actions to abandon any water mains currently located in the rear yard and require the affected residents to connect to the water main system either currently existing, or that which will be constructed, in the city street. The city has determined that the rear yard water mains should be abandoned and no longer used for several reasons including, but not limited to, that said water mains are nearing or have exceeded the end of their service life; are increasingly in need of repairs as they age; subject to corrosion; pipe failure causing damage to private rear yard improvements such as trees, landscaping and garages that are located over or near the water main; corrective action when repairing/replacing water mains causing damage to same. In addition, existing rear yard water mains are typically smaller than current standards require. Existing mains typically have reduced

flow due to internal sedimentation and tuberculin buildup on the inside pipe walls. Fire hydrants are not accessible or effective if located in the rear yard.

(b) *Procedure to be developed.* The city engineering department shall develop a procedure for the abandonment of the rear yard water mains and set forth the requirements for disconnecting from the rear yard water mains and for connection to the water main located, or to be located, in the city street. Said procedure shall include the procedure, requirements and timing of disconnection and connection.

(c) *Procedure approval.* The procedure developed, or any amendment thereto, shall not become effective until approved by the city commission. The approved procedure and all subsequent amendments approved by the city commission shall be incorporated herein by reference. A copy of the approved procedure and any amendments thereto, shall be sent to all properties currently serviced by a rear yard water main. A copy of the approved procedure shall also be available for review at the city's engineering department during normal business hours.

(d) *Connection and disconnection required.* The owners of all houses, buildings or properties currently serviced by a rear yard water main are hereby required, at the owner's own expense, to arrange for and complete the connection to the water stop box provided by the city at or near the front of the property and disconnect from the rear yard main as required and within the time frames set forth in the approved procedure, including obtaining the necessary permits, paying the appropriate fees and obtaining city inspections and approvals for said work as set forth in the city's ordinances.

(e) *Penalty for non-compliance.*

(1) Any person who fails to disconnect and connect as set forth in this section and the approved procedure shall be considered in violation of this ordinance and shall be subject to a fine of no less than $100.00 per offense.

(2) Each day that a violation is permitted to exist shall constitute a separate offense. The rights and remedies set forth for violations of this section are cumulative and in addition to any other remedies provided by law.

(Ord. No. 1855, 1-10-05)

Secs. 114-59—114-70. Reserved.

DIVISION 2. USE

Sec. 114-71. Initial service.

When new water service pipes are put into any premises, the stop cock shall be left closed and will thereafter be opened by the department only upon request of the owner or his agent. The holder of a permit for temporary use of water shall notify the department upon completion of his work so that the water may be shut off.

(Code 1963, § 2.61)

Sec. 114-72. Furnishing other premises.

(a) No person shall take or use department water from premises other than his own and no person shall sell or give away department water from his own premises for any purpose without written permission from the

department. Where such permission is granted, the collection of amounts due the property owner shall be his responsibility.

(b) Water shall be taken and used only through water service pipes under the supervision of the department and no connection through which water may pass from one property to another shall exist even though the ownership of both properties may be the same.

(Code 1963, § 2.62)

Sec. 114-73. Water waste.

Excessive or unnecessary use or waste of water, whether caused by carelessness or by defective or leaky plumbing or fixtures, is strictly prohibited. For disregard or repeated violation of this requirement, the water may be turned off by the department.

(Code 1963, § 2.63)

Sec. 114-74. Reconnection after termination.

Where the water has been turned off by the department of any reason, no person or persons except authorized employees or agents of the department may turn it on again.

(Code 1963, § 2.64)

Sec. 114-75. Boiler connections.

No steam engine boilers shall be directly connected to the water service pipe. The owner shall provide a tank of sufficient capacity to afford a supply for at least ten hours, into which the service pipe shall discharge.

(Code 1963, § 2.65)

Sec. 114-76. Water use reduction emergency.

No person shall make any outdoor use from the public water supply except in response to a fire emergency in any area designated within the city during a water use reduction emergency. The owner of the property on which the water meter being utilized for such outdoor use is located or any person in control of such property shall be responsible for any violation of this section.

(1) *Definitions.* The following definitions shall apply in the interpretation and enforcement of this section:

a. *SOCWA* means the Southeastern Oakland County Water Authority.

b. *Water use reduction emergency* means a situation where SOCWA determines the water usage from the water distribution system is of such volume that, unless restricted, the public health, safety and general welfare are likely to be endangered.

(2) *Declaration.* Whenever SOCWA determines that the public health, safety and welfare are endangered based on:

a. A prolonged drought or other period of system-wide heavy demand that results in supply facilities, including system pump stations and reservoirs, being operated at their optimum capacity with no apparent means immediately available to adequately maintain flows and residual pressures throughout the system, or

b. Any emergency condition which may adversely affect operating flows and residual pressures in any substantial portion of the system for any appreciable length of time, SOCWA shall put into effect a water use reduction emergency for all or any part or parts of the city by declaring it in a manner prescribed in this section.

(3) *Duration.* A water use reduction emergency, once declared in accordance with this section, shall remain in effect 24 hours per day, seven days per week until SOCWA has declared an end to the water use reduction emergency or SOCWA determines that a limited prohibition will be sufficient to protect the health, safety and general welfare of the community. Upon such determination, SOCWA may establish a water use reduction schedule for all or any part of the city during which outdoor use of water for nonfire emergency uses during a water use reduction emergency shall be allowed. If such a water use reduction schedule is established, outdoor nonfire emergency use of water which does not comply with SOCWA's established schedule shall be a violation of the provisions of this section.

(4) *Notice.* Upon declaration of such water use reduction emergency, SOCWA shall cause public announcement of such emergency by means of broadcasts and/or telecasts from various commercial stations serving the city and/or on the public access channel of any cable franchisee servicing the city, and may cause the ban to be further announced in newspapers of general circulation where feasible.

(5) *Enforcement.*

a. Members of the police department are hereby authorized to issue ordinance violation notices to any person violating any provision of this section or any rule or regulation duly adopted in pursuance of this section.

b. The city manager or his designee shall implement whatever reductions are necessary to meet the water use reduction emergency requirements.

(6) *Exemptions.* The city manager or his designee may exempt a property or properties from the operation of this section where necessary to prevent imminent and disastrous financial loss to a water user.

(7) *Penalties.* In addition to all other penalties available for the violation of this section, any person who violates this section shall be responsible for any cost involved in shutting off the water to the property on which the water meter for the water being used in violation of the emergency is located.

(Ord. No. 1601, 9-12-94)

Sec. 114-77. Air conditioning.

No person shall use any air conditioning or cooling machinery or apparatus which at any period consumes water in excess of ten gallons per minute, unless such air conditioning or cooling machinery or apparatus is equipped with a cooling tower, or other equipment which the superintendent has determined is approximately as effective in conserving water as a cooling tower. All air conditioning or cooling machinery or apparatus shall be designed and maintained to prevent excessive or unnecessary use or waste of water and shall comply with the provisions of section 114-73.

(Code 1963, § 2.67)

Sec. 114-78. Lawn sprinkling systems.

Automatic sprinkling systems for watering grounds must not be installed in such manner as to cause the spray to spread over the sidewalk.

(Code 1963, § 2.75)

Secs. 114-79—114-90. Reserved.

DIVISION 3. FIRE PROTECTION

Sec. 114-91. Connections.

Where hose connections for fire apparatus are provided on any pipe, each connection or opening on such pipes shall have not less than 25 feet of fire hose constantly attached thereto, and no water shall be taken through such openings or hose for any purposes other than for extinguishing fires or testing fire equipment. Any such test must be conducted under a special permit and under the supervision of the department. Fire lines must be metered as provided for in section 114-46.

(Code 1963, § 2.81)

Sec. 114-92. Fire hydrants.

Fire hydrants are to be opened and used only by authorized city personnel. Any person desiring to use any fire hydrant in the city must apply for a permit to use the same specifying what hydrants are to be used and for what purpose, pay the permit fee set forth in the schedule of fees, charges, bonds and insurance, and deposit with the city treasurer the sum set forth in the schedule of fees, charges, bonds and insurance. Such person must report to the fire department when such use is terminated, at which time a hydrant inspection will be made and the cost of reconditioning of such hydrant shall be deducted from the deposit and the difference less a charge established by the superintendent for the water used shall be refunded to the depositor.

(Code 1963, § 2.82; Ord. No. 1507, § 2.82, 11-25-91; Ord. No. 2010, 2-8-10)

Sec. 114-93. Obstructing hydrants/fire lanes.

No person(s) shall in any manner obstruct or prevent free access to any fire hydrant or any fire lane in any place in the city, by placing or storing temporarily, or otherwise parking or obstructing with any vehicle or trailer, or any object, material, snow, debris or structure of any kind, within a distance of 15 feet from a fire hydrant or within any identified fire lane.

A violation of this section will result in a civil infraction with a $500.00 fine.

(Code 1963, § 2.83; Ord. No. 2501, 11-27-23; Ord. No. 2503, 12-18-23)

Editor's note(s)—Ord. No. 2501, adopted November 27, 2023, changed the title of section 114-93 from "Obstructing hydrants" to "Obstructing hydrants/fire lanes." The historical notation has been preserved for reference purposes.

Secs. 114-94—114-105. Reserved.

DIVISION 4. INSPECTION AND REPAIRS

Sec. 114-106. Access to premises.

Any officer, inspector, foreman, or other authorized employee of the department shall have free access at all reasonable hours to any property or premises supplied with department water for the purpose of making an inspection thereof, including the examination of the entire water supply and plumbing system on such premises and for installing, adjusting, repairing, replacing or reading a water meter or a remote water meter register, and for measurement, sampling, or testing of any part of the plumbing connected to the water system.

(Code 1963, § 2.84; Ord. No. 1666, 2-9-98)

Sec. 114-107. Suspension of service.

In case any owner or occupant of any property or premises refuses or fails to arrange for a suitable time for inspection, or an authorized employee be refused admittance to any property or premises, or being admitted shall be hindered or prevented in making such examination, or installing, adjusting, repairing, replacing or reading a water meter, or a remote water meter register, or measuring, sampling or testing any part of the plumbing connected to the water system, the water may be turned off from such premises upon 24 hours' notice to the owner or occupant thereof.

(Code 1963, § 2.84; Ord. No. 1666, 2-9-98)

Sec. 114-108. Shut-off for repairs.

Should it become necessary to shut off the water to any section of the city because of accidents or for the purpose of making repairs or extensions, the department will endeavor to give timely notice to the consumers affected thereby, and will, so far as practical, use its best efforts to prevent inconvenience and damage arising from any such causes, but failure to give such notice shall not render the department responsible or liable for damages that may result therefrom, or for any other cause.

(Code 1963, § 2.85; Ord. No. 1666, 2-9-98)

Secs. 114-109—114-120. Reserved.

DIVISION 5. CROSS CONNECTIONS

Sec. 114-121. Adoption of rules.

The water supply cross connection rules of the state department of public health, being R 325.11401 to R 325.11407 of the Michigan Administrative Code, are hereby adopted by reference by the city.

(Code 1963, § 2.113; Ord. No. 1666, 2-9-98)

Sec. 114-122. Prohibited.

Cross connections with the city water supply system are prohibited. For the purposes of this division, a cross connection is any connection or arrangement of piping or appurtenances through which water of questionable quality, wastes or other contaminants can enter the city water supply system.

(Code 1963, § 2.110; Ord. No. 1666, 2-9-98)

Sec. 114-123. Discontinue water service.

The department may discontinue water service after reasonable notice to any property where any cross connection exists in violation of this division, and the department may take such other precautionary measures deemed necessary to eliminate any danger of contamination of the city water supply system.

(Code 1963, § 2.111; Ord. No. 1666, 2-9-98)

Sec. 114-124. Nonpotable water outlets.

Any water outlet which could be used for potable or domestic purposes and which is not supplied by the potable system must be labeled in a conspicuous manner as "Water unsafe for drinking."

(Code 1963, § 2.112; Ord. No. 1666, 2-9-98)

Sec. 114-125. Fee for cross connections inspection.[JB1] Reserved.

(a) ~~There shall be a fee for an initial cross connections inspection, for any subsequent re-inspections, and for any device test report review conducted by the city or its authorized representative to check for the presence of cross connections. No cross connections inspection fees shall be charged for the inspection or re-inspection of single-family residential premises that would be in addition to any fees or costs charged in connection with permits and/or inspections for single-family residential premises in connection with changes to plumbing, sale of the property, restoration of water service, or installation of a water meter. The fees provided for in this section shall be in the amount set forth in the schedule of fees, charges, bonds and insurance.~~

~~(b) Such fee shall be billed against the owner of the property, and payment due to the city within 30 days of the bill. Such fee shall become a lien against the property immediately upon the completion of any inspection pursuant to this section.~~

~~(c) Payment shall be due to the city within 30 days of the bill being sent to the property owner for the performance of such services. The bill shall notify the property owner of his or her right to dispute all or any part of the bill before a hearing officer, as established by section 1-17 of this Code, prior to the due date of the bill. Except as otherwise determined by the hearing officer, if payment is not received by the city within 30 days after such billing, the city treasurer shall add an additional penalty of one percent per month to the delinquent bill. The city treasurer shall annually, on May 1, certify any delinquent billing, or any part thereof, together with all accrued interest and penalty, to the commission; and, it shall be transferred and reassessed, with an additional 15 percent penalty, on the next annual city tax roll. Such charges so assessed shall be collected in the same manner as general city taxes.~~

(Ord. No. 1666, 2-9-98; Ord. No. 1829, 4-19-04; Ord. No. 2010, 2-8-10)

Secs. 114-126—114-145. Reserved.

ARTICLE III. SEWER SERVICE

DIVISION 1. GENERALLY

Sec. 114-146. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Act or *the act* means the Federal Water Pollution Control Act, P.L. 92-500 also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq.

Approval authority means the state department of natural resources or the Environmental Protection Agency.

As-built plans means engineering drawings prepared after installations of wastewater facilities which shall show a statement by a registered engineer or surveyor certifying them to be as-built plans and shall include, but not be limited to, length of sewer, invert elevation, locations with respect to property lines, wye and riser locations and depths, sewer material and joints used, and mechanical, electrical, and structural details for pump stations, wastewater treatment facilities and other appurtenances.

Authorized representative of industrial user refers to:

(1) A corporate officer, if the industrial user is a corporation;

(2) A general partner or proprietor, if the industrial user is a partnership or proprietorship, respectively; or

(3) A duly authorized representative of the individual designated in either of the above, if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates or is the identified corporation, partnership or proprietorship representative for responding to discharge inquiries or actions.

Biochemical oxygen demand (BOD) means the quantity of dissolved oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure five days at 20 degrees Celsius expressed in terms of weight and concentration [milligrams per liter (mg/l)] as measured by standard methods.

Board means the Board of Water Commissioners of the City of Detroit.

Building drain means that part of the lowest horizontal piping of a drainage system which receives discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building's sewer (house sewer). The latter begins five feet outside the inner face of the building wall.

Building sewer means the extension from the building drain that connects the building in which the sanitary sewage originates to the public sewer or other place of disposal and conveys the sewage of but one building.

Categorical standards means the National Categorical Pretreatment Standards or a pretreatment standard as promulgated under authority of the act, 40 CFR 403.

Chemical oxygen demand (COD) means a measure of the oxygen-consuming capacity of inorganic and organic matter present in water or wastewater. It is expressed as the amount of oxygen consumed from a chemical oxidant in a specified test. It does not differentiate between stable and unstable organic matter and thus does not necessarily correlate with biochemical oxygen demand. Also known as OC and DOC, oxygen consumed and dichromate oxygen consumed, respectively.

Chlorine demand means the difference between the amount of chlorine applied and the amount of free chlorine available at the end of the contact time, expressed in milligrams per liter.

Combination sewer or *combined sewer* means a sewer receiving both surface runoff and sewage.

Compatible pollutant means BOD (biochemical oxygen demand), FOG (fats, oils or grease), phosphorus, suspended solids, and fecal coliform bacteria, plus other pollutants which do not exceed the control authority's interference or pass through limitations or the limitations of this article.

Composite sample means a series of grab samples of equal volume taken over a specified time period with no regard to the flow in the waste stream which are combined into one sample. The arrangement of the sample series shall be tailored to the specific circumstances of the wastestream being tested and shall reasonably reflect the characteristics of the waste stream at the time of each individual sample.

Consent judgment means the judgment issued by Federal District Court on September 14, 1977, *U.S. EPA v. City of Detroit, et al,* C.A. No. 77- 1100, as amended.

Control authority means the Detroit Water and Sewerage Department (DWSD) which has been officially designated as such by the state under the provisions of 40 CFR 403.12 or authorized representatives or employees of the DWSD.

Control manhole means a suitable manhole, together with such necessary meters, including where appropriate, adequate power source and other appurtenances, to facilitate observation, sampling and measurement of wastewater to be constructed in accordance with plans approved by the county's engineering personnel.

County means the County of Oakland, State of Michigan, or its authorized representative, the Detroit Water and Sewerage Department.

County agency means the county drain commissioner or the county department of public works.

Cooling water shall mean the noncontact water discharged from any use such as air conditioning, cooling or refrigeration to which the only pollutant added is heat.

Critical materials means the organic and inorganic substances, elements or compounds, listed in the register compiled by the water resources commission of the state department of natural resources.

Days means, for purposes of computing a period of time prescribed or allowed by this article, consecutive calendar days.

~~*Debt service charge*~~ [JB2]~~means charges levied to customers of the wastewater system which are used to pay principal, interest and administrative costs of retiring the debt incurred for construction of the wastewater system. The debt service charge is separate and distinct and may be in addition to the user charge specified below.~~

Department means the department of public services.

Direct discharge means the discharge of treated or untreated wastewater directly into the waters of the state.

Director means the director of the Detroit Department of Water and Sewerage or the director's deputy.

Domestic user means a person who contributes, causes or permits wastewater to be discharged into the publicly-owned treatment works from a place of domicile for one or more persons, including, but not limited to, single-family houses, apartment buildings, condominiums, townhouses and mobile homes. It shall also include churches, schools and government buildings.

Dwelling means any structure designed for year-round habitation including, but not limited to, houses, mobile homes, apartment buildings, condominiums and townhouses.

Environmental protection agency (EPA) means the United States Environmental Protection Agency or, where appropriate, the term may also be used as a designation for the administrator or other authorized official of such federal agency.

Fats, oil, or grease (FOG) means any hydrocarbons, fatty acids, soaps, fats, waxes, oils and any other nonvolatile material of animal, vegetable or mineral origin that is extractable by solvent in accordance with standard methods.

Federal grant means a grant made or to be made for the construction of wastewater collection, transportation and/or treatment works provided under the act, P.L. 92-500, as amended.

Flow proportional sample means a composite sample taken with regard to the flow rate of the waste stream.

Footing drain means a pipe or conduit which is placed around the perimeter of a building foundation and which intentionally admits groundwater.

Garbage means the animal and vegetable waste resulting from the handling, preparation, cooking and serving of foods. It is composed of putrescible organic matter and its natural moisture content.

General specifications means the current edition of standard material and construction requirements of the county.

Grab sample means a sample which is taken from a waste stream on a one-time basis without regard to the variations in flow rate, but which shall reasonably reflect the characteristics of the waste stream at the time of sampling.

Groundwater means subsurface water occupying the saturation zone, from which wells and springs are fed.

Holding tank waste means any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks and vacuum-pump tank trucks.

Incompatible pollutants means any pollutant which is not a compatible pollutant.

Indirect discharge means the discharge or the introduction of pollutants from any nondomestic source, regulated under section 307(b), (c), or (d) of the act (33 U.S.C. 1317), into the publicly-owned treatment works.

Industrial user means a person who contributes, causes, or permits wastewater to be discharged into the publicly-owned treatment works from a place of business, endeavor, arts, trade or commerce, whether public or private, commercial or charitable. Domestic users are specifically excluded.

Industrial waste means the discharge into the publicly-owned treatment works of any liquid, solid or gaseous waste or form of energy, or combination thereof, resulting from any processes of industry, manufacturing, business, trade or research, including the development, recovery or processing of natural resources.

Infiltration means any waters entering the system from the ground, through such means as, but not limited to, defective pipes, pipe joints, connections or manhole walls. Infiltration does not include and is distinguished from inflow.

Infiltration/inflow means the total quantity of water from both infiltration and inflow.

Inflow means any waters entering the system through such sources as, but not limited to, building downspouts, footing or yard drains, cooling water discharges, seepage lines from springs and swampy areas, and storm drain cross connections.

Interference means a discharge by a user which, alone or in conjunction with discharges by other sources, inhibits or disrupts the publicly-owned treatment works or its treatment processes or operations, or its sludge processes, use or disposal, and which causes a violation of any requirement of the publicly-owned treatment works NPDES permit, including an increase in the magnitude or duration of a violation, or the prevention of sewage sludge use or disposal by the publicly-owned treatment works in accordance with the following statutory provisions and regulations or permits issued thereunder, or more stringent state or local regulations: Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA), including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to subtitle D of the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

Laboratory determination means the measurements, tests and analyses of the characteristics of waters and wastes in accordance with the methods contained in the latest edition at the time of any such measurement, test,

or analysis of "Standard Methods for Examination of Water and Wastewater," a joint publication of the American Public Health Association, the American Waterworks Association, and the Water Pollution Control Federation or in accordance with any other method prescribed by the rules and regulations promulgated pursuant to federal or state law.

Lateral line means that portion of the sewer system located under the street, within the street right-of-way or in an easement from the property line to the trunk line or interceptor and which collects sewage from a particular property for transfer to the trunk line or interceptor.

Local means a prefix denoting jurisdiction by the city.

Municipality means the City of Birmingham.

National categorical pretreatment standard means any regulation containing pollutant discharge limits promulgated by the environmental protection agency in accordance with section 307(b) and (c) of the act (33 U.S.C. 1317) which applies to a specific class or category of industrial users.

National pollutant discharge elimination system (NPDES) permit means a permit issued to a publicly-owned treatment works pursuant to section 402 of the act (33 U.S.C. 1342).

Natural outlet means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which is commenced after the publication of the proposed national categorical pretreatment standards under section 307(c) of the act, which will be applicable to such source if such standards are thereafter promulgated in accordance with that section.

Normal domestic strength sewage or *normal domestic strength wastewater* means a sewage or other wastewater effluent which shall be a compatible pollutant with BOD of 275 milligrams per liter or less, suspended solids of 350 milligrams per liter or less, total phosphorus of 12 milligrams per liter or less, and fats, oil, and greases of 100 milligrams per liter or less.

Obstruction means any object of whatever nature which substantially impedes the flow of sewage from the point of origination to the trunk line or interceptor. This shall include, but not be limited to, objects, sewage, tree roots, rocks and debris of any type.

Operation and maintenance (O&M) means all work, materials, equipment, utilities and other effort required to operate and maintain the wastewater transportation and treatment system consistent with insuring adequate treatment of wastewater to produce an effluent in compliance with the NPDES permit and other applicable state and federal regulations, and includes the cost of replacement.

Owner means the owners of record of the freehold of the premises or lesser estate therein, a mortgagor or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person in control of a building.

Pass through means the discharge of pollutants through the publicly-owned treatment works into navigable waters in quantities or concentrations which, alone or in conjunction with discharges from other sources, is a cause of violation of any requirement of the publicly-owned treatment works national pollutant discharge elimination system permit, including an increase in the magnitude or duration of a violation.

pH means the negative reciprocal of the logarithm of the hydrogen-ion concentration. The concentration is the weight of hydrogen-ions, in grams per liter of solution.

Pollutant means any substance or energy added or introduced into the user's water source.

Pollution means the humanmade or human-induced degradation or impairment of the chemical, physical, biological or radiological integrity of water.

Pretreatment means the reduction of the amount of pollutants, the removal of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the publicly-owned treatment works. The reduction, removal or alteration may be attained by physical, chemical or biological processes, or process changes by other means except as prohibited by federal, state or local law, rules and regulations.

Pretreatment requirements means any substantive or procedural requirements related to pretreatment other than a national categorical pretreatment standard imposed on an industrial user.

Private means a prefix denoting jurisdiction by a nongovernmental entity.

Properly shredded garbage means the waste from the preparation, cooking and dispensing of foods that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch (1.27 centimeters) in any dimension.

Public means a prefix denoting jurisdiction by any governmental subdivision or agency.

Public sewer means a common sewer controlled by a governmental agency or public utility.

Publicly-owned treatment plant or *POTW treatment plant* means that portion of the publicly-owned treatment works designed to provide treatment to wastewater, including recycling and reclamation of wastewater.

Publicly-owned treatment works (POTW) means a treatment works as defined by section 212 of the act (33 U.S.C. 1292), which is owned in this instance by the City of Detroit. This definition includes any sewers that convey wastewater to the POTW treatment plant. For the purposes of this article, "Publicly-owned treatment works" or "POTW" shall also include any sewers under the jurisdiction of the city and/or the county.

Replacement means the replacement in whole or in part of any equipment, appurtenances and accessories in the wastewater transportation or treatment systems to insure continuous treatment of wastewater in accordance with the NPDES permit and other applicable state and federal regulations.

Sanitary sewer means a sewer which carries sewage and to which stormwaters, surface waters and groundwaters are not intentionally admitted.

Separate means a prefix denoting a wastewater transmission facility or sewer which is intended to transport sanitary wastewater only.

Service area shall mean any area whose wastewater is received by the city or the county for transmission for treatment by the City of Detroit DWSD.

Sewage or *wastewater* means spent water which may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, institutions or other land uses, including drainage water and groundwater inadvertently present in such waste.

Sewage treatment plant or *wastewater treatment plant* means any arrangement of devices and structures used for treating sewage.

Sewage works means all facilities for collecting, pumping, treating and disposing of sewage.

Sewer means a pipe or conduit that carries wastewater or drainage water. See the following definitions modifying sewer:

(1) *Building sewer,* in plumbing, means the extension from the building drain to the public sewer or other place of disposal. Also called house connection.

(2) *Combined sewer* or *combination sewer* means a sewer intended to receive both wastewater and stormwater or surface water or drainage water.

(3) *Common sewer* means a sewer in which all owners of abutting properties have equal rights.

(4) *County sewer* means a public sewer controlled by the county agency.

(5) *Intercepting sewer* means a sewer that receives dry-weather flow from a number of transverse sewers of outlets in frequently additional predetermined quantities of stormwater, if from a combined system, and conducts such waters to a point for treatment of disposal.

(6) *Lateral sewer* means a sewer which is designed to receive a building sewer.

(7) *Municipal sewer* means a public sewer, exclusive of a county sewer or City of Detroit sewer.

(8) *Public sewer* means a common sewer controlled by a governmental agency or public utility.

(9) *Sanitary sewer* means a sewer that carries liquid and water-carried waste from residences, commercial buildings, industrial plants and institutions, together with minor quantities of groundwater, stormwater, and surface water and into which drainage waters are not admitted intentionally.

(10) *Storm sewer* means a sewer that carries stormwater and surface water, street wash and other wash waters, or drainage, but excludes domestic wastewater and industrial wastewater. Also called a storm drain.

(11) *Trunk sewer* or *trunk line* means a sewer which connects the lateral sewer to the intercepting sewer and to which building sewers may be connected.

Sewer service charge means the sum of the applicable user charge, surcharges and debt service charges.

Significant user means any industrial user of the POTW who:

(1) Has a discharge flow of 50,000 gallons or more per average workday, exclusive of stormwater and sanitary wastewater;

(2) Has discharges subject to the national categorical pretreatment standards;

(3) Requires pretreatment to comply with the specific pollutant limitations of this article;

(4) Has, in its discharge, toxic pollutants as defined pursuant to section 307 of the act, or other applicable federal and state laws and regulations which are in concentrations and volumes that are subject to regulation under this article as determined by the control authorities;

(5) Is required to obtain a permit for the pretreatment, storage, or disposal of hazardous waste pursuant to regulations adopted by the state or adopted under the Federal Solid Waste Disposal Act, as amended; by the Federal Resource Conservation and Recovery Act and any amendments thereto and who may or does contribute or allow waste or wastewater into the POTW including, but not limited to, leachate or runoff; or

(6) Is found by the control authority to have significant impact, either singly or in combination with other contributing industries, on the POTW, the quality of sludge, the POTW's effluent quality, or air emissions generated by the POTW.

Slug means any pollutant released in a discharge at a flow rate and/or concentration which will cause interference or pass through at the POTW as determined by the control authority.

Standard industrial classification (SIC) refers to a classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972, as amended.

Standard Methods means the laboratory procedures set forth in the latest edition, at the time of analysis, of "Standard Methods for the Examination of Water and Wastewater" prepared and published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation, or methods set forth in 40 CFR 136 "Guidelines for Establishing Test Procedures for Analysis of

Pollutants." Where these two references are in disagreement on procedures for the analysis of a specific pollutant, the methods given in 40 CFR 136 shall be followed.

Stormwater means the water running off from the surface of a drainage area during and immediately after a period of rain.

Superintendent means the director of the city department of public services or his duly authorized representative or agent.

Surcharge means an additional charge which may be imposed to cover the cost of treatment of excess strength wastewater discharged by any customer.

Surface water means:

(1) All water on the surface as distinguished from groundwater or subterranean water.

(2) Water appearing on the surface in a diffused state, with no permanent source of supply or regular course for any considerable time, as distinguished from water appearing in watercourses, lakes or ponds.

Suspended solids means the total suspended matter that floats on the surface of, or is suspended in, water, wastewater or other liquids, and which is removable by laboratory filtration or as measured by standard methods.

Total equivalent master metered water consumption [JB3]means the equivalent to the total amount of potable water used by a municipality as recorded by a master water meter for sewered premises, and shall include, but not be limited to, fire protection water, gardening and lawn water.

Toxic pollutant means any pollutant or combination of pollutants designated as toxic in regulations promulgated by the administrator of the environmental protection agency under the provisions of section 307(a) of the Clean Water Act (33 U.S.C. 1317), or included in the critical materials register promulgated by the state department of natural resources, or other federal or state laws, rules or regulations.

Uncontaminated industrial waste or *unpolluted industrial process water* means industrial process water or cooling water which has not come into contact with any substance used in or incidental to industrial processing operations and to which no chemical or other substance has been added, and which is completely compatible with applicable stream standards, excepting thermal limitations.

Upset or *upset condition* means an exceptional incident in which there is an unintentional or temporary noncompliance with limits imposed under this article or with national categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance or careless or improper operation.

User means any person who contributes, causes or permits the discharge of wastewater into the publicly-owned treatment works.

User charge means a charge levied on users of a treatment works for the cost of operation and maintenance of sewerage works pursuant to section 204(b) of P.L. 92-500 and includes the cost of replacement. [JB4]

Wastewater means the liquid and water-carried industrial or domestic wastes of dwellings, commercial buildings, industrial facilities and institutions, whether treated or untreated, which are contributed to or permitted to enter the publicly-owned treatment works. Wastewater may also contain infiltration and inflow waters and cooling water.

Wastewater discharge permits means permits issued by the control authority or its designated representative as set forth in this article.

Wastewater facilities means the structures, equipment and processes required to collect, carry away, and treat domestic and industrial waste, and dispose of the effluent.

Watercourse means a channel in which a flow of water occurs, either continuously or intermittently.

Waters of the state refers to all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

(Code 1963, § 2.122; Ord. No. 1512, § 2.122, 12-16-91)

Cross reference(s)—Definitions generally, § 1-2.

Sec. 114-147. Abbreviations.

The following abbreviations shall, for the purposes of this article, have the designated meanings:

(1) *BOD* means biochemical oxygen demand.

(2) *CFR* means the Code of Federal Regulations.

(3) *COD* means chemical oxygen demand.

(4) *DWSD* means the Detroit Water and Sewerage Department.

(5) *EPA* means the Environmental Protection Agency.

(6) *FOG* means fats, oil or grease.

(7) *l* means liter.

(8) *MDNR* means the state department of natural resources.

(9) *mg* means milligrams.

(10) *mg/l* means milligrams per liter.

(11) *NPDES* means national pollutant discharge elimination system.

(12) *P* means phosphorus.

(13) *POTW* means publicly-owned treatment works.

(14) *RCRA* means the Resource Conservation and Recovery Act.

(15) *SIC* means standard industrial classification.

(16) *SICM* means the standard industrial classification manual.

(17) *SS* means suspended soils.

(18) *SWDA* means the Solid Waste Disposal Act, 42 U.S.C. 6901 et seq.

(19) *O&M* means operation and maintenance.

(20) *TSS* means total suspended solid.

(21) *USC* means the United States Code.

(22) *CWA* means the Clean Water Act.

(Ord. No. 1512, § 2.122a, 12-16-91)

Sec. 114-148. Waste deposits.

It shall be unlawful for any person to place, deposit or permit to be deposited in an unsanitary manner upon public or private property within the city, or in any area under the jurisdiction of the city, any human or animal excrement, garbage or other objectionable waste.

(Code 1963, § 2.123)

Sec. 114-149. Water pollution.

It shall be unlawful to discharge to any natural outlet within the city, or in any area under the jurisdiction of the city, any unsanitary sewage, industrial wastes or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter.

(Code 1963, § 2.124)

Sec. 114-150. Privies and septic tanks.

Except as provided in this chapter, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage.

(Code 1963, § 2.125)

Sec. 114-151. Sewer connection required.

The owner of all houses, buildings or properties used for human occupancy, employment, recreation or other purpose situated within the city and abutting on any street, alley or right-of-way in which there is low located or may in the future be located a public sanitary or combined sewer of the city, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this chapter and regulations supplementary hereto, within 90 days after date of official notice to do so.

(Code 1963, § 2.126)

Sec. 114-152. Private property sewer main abandonment.

(a) *Purpose.* The purpose of this section is the protection of health, safety and public welfare by authorizing the city's director of engineering department to develop a written procedure and take the necessary actions to abandon any sewer mains currently located on private property and require the affected residents to connect to the sewer main system either currently existing, or that which will be constructed, in the city street. The city has determined that certain private property sewer mains should be abandoned and no longer used for several reasons including, but not limited to, that said sewer mains are nearing or have exceeded the end of their service life; are increasingly in need of repairs as they age; subject to collapse; pipe failure causing damage to private property improvements such as trees, landscaping and garages that are located over or near the sewer main; corrective action when repairing/replacing sewer mains causing damage to same.

(b) *Procedure to be developed.* The city engineering department shall develop a procedure for the abandonment of private property sewer mains and set forth the requirements for disconnecting from private property

sewer mains and for connection to the sewer main located, or to be located, in the city street. Said procedure shall include the procedure, requirements and timing of disconnection and connection.

(c) *Procedure approval.* The procedure developed, or any amendment thereto, shall not become effective until approved by the city commission. The approved procedure and all subsequent amendments approved by the city commission shall be incorporated herein by reference. A copy of the approved procedure and any amendments thereto, shall be sent to all properties currently serviced by a private property sewer main. A copy of the approved procedure shall also be available for review at the city's engineering department during normal business hours.

(d) *Connection and disconnection required.* The owners of all houses, buildings or properties currently serviced by a private property sewer main are hereby required, at the owner's own expense, to arrange for and complete the connection to the sewer located in the street and disconnect from the private property sewer as required and within the time frames set forth in the approved procedure, including obtaining the necessary permits, paying the appropriate fees and obtaining city inspections and approvals for said work as set forth in the city's ordinances.

(e) *Penalty for non-compliance.*

(1) Any person who fails to disconnect and connect as set forth in this section and the approved procedure shall be considered in violation of this section and shall be subject to a fine of no less than $100.00 per offense.

(2) Each day that a violation is permitted to exist shall constitute a separate offense. The rights and remedies set forth for violations of this section are cumulative and in addition to any other remedies provided by law.

(Ord. No. 2137, 12-16-13)

Secs. 114-153—114-160. Reserved.

DIVISION 2. CONNECTIONS

Subdivision I. In General

Sec. 114-161. Installation of sewers.

The type, capacities, location, and layout of all sewers shall comply with all recommendations of the state department of public health, and shall be constructed and connected in accordance with regulations of the city.

(Code 1963, § 2.127)

Sec. 114-162. Connections outside city.

No connection shall be made to any sewer from property outside the city without approval of the city commission.

(Code 1963, § 2.128)

Sec. 114-163. Unauthorized sewer connections.

No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof. That portion of the building sewer lying within the right-of-way of any street or alley, or easement shall be installed by the department.

(Code 1963, § 2.129)

Sec. 114-164. Permit fee.

All connections with the sanitary or combined sewers of the city shall be made only by the department after a permit has been issued by the city on payment of such fees as shall be established from time to time by the city commission in addition to payment of all Capital Connection Charges.

(Code 1963, § 2.130)

Sec. 114-165. Building sewer guarantee.

The city shall maintain the portion of any building sewer installed by it subsequent to July 17, 1967, for ten years from the date of installation, but such obligation shall be limited to corrections necessitated by defective materials or faulty workmanship.

(Code 1963, § 2.131)

Sec. 114-166. Separate building sewers.

(a) A separate and independent building sewer shall be provided for every building except as hereinafter provided. The commission may permit more than one building to be connected to a single building sewer where the commission determines:

(1) The requirements of the section will create an undue hardship for a property owner,

(2) The city engineer determines the proposed connection will create no engineering problems,

(3) All affected property owners, if more than one, agree in writing to the proposed connection. Such agreement shall:

a. State that the parties are aware that the city accepts no liability or responsibility for any problems that may develop as a result therefrom, and that the permission by the city is not a waiver of the city's rights to make special assessments against the subject property for any public improvements.

b. Be recorded with the county register of deeds prior to making the connection.

c. Be filed with the city clerk prior to making the connection.

(b) If at a later date the city commission determines that the hardship no longer exists, the commission may order a property owner to connect directly to a proper public sewer in accordance with the provisions of this article.

(Code 1963, § 2.132)

Sec. 114-167. Installation of building sewer.

All building sewer construction and the installation of pipes, fittings and appurtenances shall be done in accordance with the building regulations of the city and such supplementary rules and regulations as the superintendent may prescribe, which shall be effective upon approval by the city manager.

(Code 1963, § 2.133)

Sec. 114-168. Prohibited uses.

Except as provided in this article, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

(1) Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit.

(2) Any water or waste which may contain more than 100 parts per million, by weight, of fat, oil or grease.

(3) Any gasoline, benzene, naphtha, fuel or other flammable or explosive liquid, solid or gas.

(4) Any garbage that has not been properly shredded.

(5) Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works.

(6) Any waters or wastes having a pH lower than 5.0 or higher than 10.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.

(7) Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters of the sewage treatment plant.

(8) Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.

(9) Any noxious or malodorous gas or substance capable of creating a public nuisance.

(Code 1963, § 2.134)

Sec. 114-169. Control manholes.

When required by the superintendent, the owner of any property served by a building sewer carrying industrial wastes shall install a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, shall be accessible at all times to the superintendent and shall be constructed in accordance with plans approved by the superintendent. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

(Code 1963, § 2.139)

Sec. 114-170. Measurements and tests.

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in section 114-168 shall be determined in accordance with Standard Methods for the Examination of Water and Sewage, as published by the American Public Health Association, and shall be determined at the control manhole provided for in section 114-169, or upon suitable samples taken at such control manhole. If no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected.

(Code 1963, § 2.140)

Sec. 114-171. Required lateral replacement.

(a) *Purpose.* The purpose of this section is the protection of the health, safety and public welfare by requiring the replacement of lateral sewer lines when necessary and to bring them up to current standards when the city street over which the public sewer is located is open for repairs or reconstruction and access to the public sewer and lateral sewer lines are the most accessible for replacements. This is to avoid unnecessarily re-opening the city street in the future to repair lateral sewer lines and reconnect them to the public sewer so that the integrity of the newly constructed street can be maintained. Some of the existing lateral sewer lines are very old and are past, or approaching, the end of their service life, are made of materials no longer deemed suitable for use by the city engineering department, or are constructed in such a fashion that makes it difficult or impossible to reconnect the lateral sewer line to the public sewer.

(b) *Meanings of words.* For purposes of this section, "public sewer line" shall mean the main sewer line located in the road right-of-way; "lateral sewer line" shall mean the portion of the pipe going from the public sewer line to the property line and connecting to the building sewer line; "building sewer line" shall mean the sewer line connecting from the lateral sewer line at the property line to the building located on personal property.

(c) *Procedure to be developed.* The city engineering department shall develop a procedure titled "Procedure for Sewer Lateral Replacement", hereinafter referred to as the "PSLR," for replacement of the lateral sewer lines in accordance with this section when a city street is going to be open for repairs or reconstruction. Said procedures shall include the requirements and timing of said replacement.

(d) *Procedure approval.* The PSLR, or any amendment thereto, shall not become effective until approved by the city commission. The PSLR and all subsequent amendments approved by the city commission shall be incorporated herein by reference. A copy of the PSLR and any amendments thereto shall be sent to all properties in advance of the road opening affecting that property owner. A copy of the PSLR shall also be available for review at the city clerk's office and the city engineering department during normal business hours.

(e) *Required replacement.* At the time that the city street is opened to perform repairs or reconstruction which warrant addressing the replacement of lateral sewer lines, the city's engineering department shall utilize the evaluation criteria set forth in the PSLR to review and consider the condition of the lateral sewer line and the connected building sewer line, for the purposes of determining the integrity of said lines to allow a successful reconnection to the public sewer line during reconstruction.

    (1) If the city engineering department has determined that the lateral sewer line meets the criteria for replacement set forth in the PSLR, the lateral sewer line will be replaced as a part of the street reconstruction project. The cost of the sewer lateral line replacement will be at homeowner expense. The cost may be eligible for inclusion in a special assessment district if one is established for this purpose. If the lateral sewer line and building sewer line do not meet the criteria in the PSLR for

replacement, and otherwise appears to conform to the city engineering department standards at the time of the street repair and its service life appears to warrant its continued use, the existing lines connecting the house to the pubic sewer line may be utilized and maintained. A determination that no replacement is required by the city at the time shall not serve or constitute as any warranty or representation as to the condition of the pipe or its continued suitability, and the property owner may nevertheless opt to replace the lateral sewer line and/or building sewer line and reconnect to the public sewer line, the cost of which shall be borne by the property owner.

(2) If the lateral sewer line is not currently approved material, does not conform to the city engineering department standards at the time of the street repair, is in poor condition and/or has a service life warranting replacement in the opinion of the city engineering department, the lateral sewer line shall be replaced and connected to the building sewer line. The cost to replace the lateral sewer line and connect it to the building sewer line shall be specially assessed to the individual property owners.

(3) Should a replacement of the lateral sewer line be required, the individual property owner may opt to replace the building sewer line during the construction period and make arrangements to have the property owner's private contractor at the property owner's expense, make the replacement and connection from the house to the lateral sewer line at the property line using the current conforming material and methods. A time frame will be provided by the engineering department to allow the private property owner contractor to perform the work.

(4) All work done on private property, which shall include repairs to or replacement of the building sewer line and the required connections, shall be made at the property owner's own expense by way of private contractor and not eligible to be included in a special assessment district. All costs associated with work done on the road, public sewer line, and the lateral sewer line shall be eligible to be included in the special assessment district. Building sewer work performed by the owner's contractor must be completed during a designated period of time while the city's contractor is working or may need to be performed subsequent to the completion of the road as designated by the engineering department.

(5) All designated single lots with existing structures, designated double lots with an existing structure and a single lateral sewer line, will come under the criteria for replacement set forth in this section. Designated double lots, as determined by the engineering department, with a structure situated on one lot, will come under the criteria for replacement set forth in this section for the lateral sewer line serving the structure on the double lot and shall have a lateral sewer line installed and capped at the property line serving the vacant second lot. A vacant single lot, shall have a lateral sewer line installed and capped at the property line serving the vacant lot. The cost of the installation of lateral sewer lines on lots under this section shall be specially assessed to the individual property owners.

(Ord. No. 1906, 1-22-07)

Secs. 114-172—114-180. Reserved.

Subdivision II. Downspout Connections[2]

[2]Editor's note(s)—Ord. No. 1701, adopted Apr. 26, 1999, repealed former §§ 114-183, 114-184 and 114-186, which pertained, respectively, to determining necessity, defining critical area, and variances and exceptions, and derived from Code 1963, §§ 2.146, 2.147, and 2.148. Said Ord. No. 1701 set out chapter 114, article III, division 2, subdivision II to read as herein set out.

Sec. 114-181. Prohibition against connection.

Downspouts and eaves troughs for the collection and conveyance of stormwater shall not be directly connected to any city sewer or county combined drain that lies within the combined drainage district.

(Code 1963, § 2.144; Ord. No. 1701, 4-26-99)

Sec. 114-182. Disconnection.

Downspouts and eaves troughs for the collection of stormwater which are connected to any city sewer or county combined drain shall be disconnected from such city sewer or county combined drain.

(Code 1963, § 2.145; Ord. No. 1701, 4-26-99)

Sec. 114-183. Duty to disconnect.

It shall be the duty of each owner, tenant or occupant to disconnect or cause the disconnection of such downspouts or eaves troughs on the property so owned, leased or occupied within the time frame set forth in section 114-184. Failure to do so shall be deemed a violation of this Code.

(Code 1963, § 2.148; Ord. No. 1701, 4-26-99)

Sec. 114-184. Time for compliance.

Disconnection must be completed no later than October 1, 1999, for residential buildings and structures. For commercial and industrial buildings and structures, disconnection must be completed within four years of the effective date of the ordinance which amended this subdivision.

(Ord. No. 1701, 4-26-99)

Secs. 114-185—114-195. Reserved.

DIVISION 3. WASTEWATER DISCHARGE CONTROL[3]

Sec. 114-196. Delegation of authority.

The City of Detroit, through the Detroit water and sewerage department, as the state-approved control authority, is authorized to administer and enforce the provisions of this article on behalf of the city. The city has executed and hereby ratifies its delegation agreement with the City of Detroit through the Detroit water and sewerage department, which sets forth the terms and conditions of such delegated authority, consistent with this article, and shall allow the Detroit water and sewerage department to perform the specific responsibilities of control authority pursuant to state and federal law.

[3]Editor's note(s)—Ord. No. 1994, adopted August 10, 2009, repealed and reenacted division 3 in its entirety to read as herein set out. Formerly, division 3 pertained to similar subject matter, and derived from Ord. No. 1769, adopted November 12, 2001.

(Ord. No. 1994, 8-10-09)

Sec. 114-197. Purpose.

(a) The purpose of this division is the protection of the environment, and of public health and safety by abating and preventing pollution through the regulation and control of the quantity and quality of wastes admitted to or discharged into the wastewater collection and treatment system under the jurisdiction of the city and enabling the city to comply with all applicable state and federal laws required by the Federal Water Pollution Control Act, being 33 U.S.C. § 1251, et seq.), and the General Pretreatment Regulations, being 40 C.F.R. part 403.

(b) The objectives of this division are:

(1) To prevent the introduction of pollutants into the wastewater system which will interfere with the operation of the system or contaminate the resulting sludge, or will pose a hazard to the health or welfare of the people or of employees of the City of Detroit water and sewerage department;

(2) To prevent the introduction of pollutants into the wastewater system which will pass inadequately treated through the system into receiving waters, the atmosphere or the environment, or otherwise be incompatible with the system;

(3) To improve the opportunity to recycle or reclaim wastewater or sludge from the system in an economical and advantageous manner; and

(4) To provide for the recovery of the costs from users of the wastewater collection and treatment system sufficient to administer regulatory activities and meet the costs of the operation, maintenance, improvement or replacement of the system.

(c) This division provides for the regulation of contributors to the Detroit and city wastewater collection and treatment system through the issuance of wastewater discharge permits to certain users and through the enforcement of general requirements for all users, authorizes monitoring and enforcement, and authorizes fees and penalties.

(Ord. No. 1994, 8-10-09)

Sec. 114-198. Authority.

By virtue of the obligations and authority placed upon the city by the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, being (33 U.S.C. § 1251 et seq.; the 1963 Constitution of the state; Public Act 245 of 1929, as amended, being MCL 323.1 et seq.; the City Charter; the national pollutant discharge elimination system (NPDES) permit for the City of Detroit Publicly Owned Treatment Works (POTW); the Consent Judgment in U.S. EPA v. City of Detroit et al, Federal District Court for the Eastern District of Michigan Case No. 77-1100, as amended; and existing or future contracts between the board of water commissioners and suburban communities or other governmental or private entities; or by virtue of common law usage of the system, this division shall apply to every user contributing or causing to be contributed, or discharging, pollutants or wastewater into the wastewater collection and treatment system of the City of Detroit POTW.

(Ord. No. 1994, 8-10-09)

Sec. 114-199. Definitions.

(a) For purposes of this division and unless the context specifically indicates otherwise, the following terms and phrases, shall have the meanings ascribed to them by this section:

Act or *the act* means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, being 33 U.S.C. § 1251 et seq.

Authorized representative of industrial user means:

(1) Responsible corporate officer, where the industrial user submitting the reports required by this division is a corporation, who is either:

a. The president, vice-president, secretary, or treasurer of a corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or

b. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000.00 in second-quarter 1980 dollars, when authority to execute documents has been assigned or delegated to said manager in accordance with corporate procedures; or

(2) A general partner or proprietor where the industrial user submitting the reports required by this division is a partnership or sole proprietorship respectively. See subsection 114-200(n).

Available cyanide means the quantity of cyanide that consists of cyanide ion (CÑ) hydrogen cyanide in water (HCNaq), and the cyano-complexes of zinc, copper, cadmium, mercury and silver, determined by EPA method OIA-1677, or other method designated as a standard method or approved under 40 CFR 136.

Best management practices (BMP) means programs, practices, procedures or other directed efforts initiated and implemented by the user, which can or do lead to the reduction, conservation or minimization of pollutants being introduced into the ecosystem, including but are not limited to the Detroit sewer system. BMPs include, but are not limited to, equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw material, and improvements in housekeeping, maintenance, training, or inventory control and may include technical and economic considerations.

Biochemical oxygen demand (BOD) means the quality of dissolved oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure five days at 20 degrees centigrade expressed in terms of mass and concentration (milligrams per liter (mg/l)) as measured by standard methods.

Board means the board of water commissioners of the City of Detroit.

Bypass means the intentional diversion of a wastestream from any portion of an industrial user's treatment facility. See 40 C.F.R. § 403.17.

Centralized waste treatment (CWT) facility means any facility that treats any hazardous or nonhazardous industrial waste received from off-site by tanker truck, trailer roll-off bins, drums, barges, or any other forms of shipment including:

(1) A facility that treats industrial waste received exclusively from off-site, and

(2) A facility that treats industrial waste generated on-site as well as industrial waste received from off-site.

City means the City of Birmingham.

Compatible industrial wastewater means wastewater that is produced by an industrial user which has a pollutant strength or characteristics similar to those found in domestic wastewater, and which can be efficiently and effectively transported and treated with domestic wastewater.

Compatible pollutant means pollutants which can be effectively removed by the POTW treatment system to within the acceptable levels for the POTW residuals and the receiving stream.

Composite sample means a collection of individual samples which are obtained at regular intervals and collected on a time-proportional or flow-proportional basis over a specified period and which provides a representative sample of the average stream during the sampling period. A minimum of four aliquot per 24 hours shall be used where the sample is manually collected. See 40 C.F.R. § 403, Appendix E.

Confidential information means the information which would divulge information, processes or methods of production entitled to protection as trade secrets of the industrial user. See section 114-205.

Control authority means the Detroit Water and Sewerage Department which has been officially designated as such by the state under the provisions of 40 C.F.R § 403.12. See 40 C.F.R. § 403.12(a).

Cooling water means the non-contact water discharged from any use such as air conditioning, cooling or refrigeration, and whose only function is the exchange of heat.

Days mean consecutive calendar days for the purpose of computing a period of time prescribed or allowed by this division.

Department means the City of Detroit water and sewerage department, and authorized employees of the department.

Direct discharge means the discharge of treated or untreated wastewater directly to the waters of the state.

Director means the Director of the Detroit water and sewerage department, or the director's designee.

Discharger means a person who, directly or indirectly, contributes, causes, or permits wastewater to be discharged into the POTW.

Domestic sewage means waste and wastewater from humans or household operations which is discharged to, or otherwise enters, a treatment works.

Environmental Protection Agency or *administrator* or *EPA administrator* means the United States Environmental Protection Agency or, where appropriate, the authorized representatives or employees of the EPA.

Facility means a location, which contributes, causes or permits wastewater to be discharged into the POTW including, but not limited to, a place of business, endeavor, arts, trade or commerce, whether public or private, commercial or charitable.

Fats, oils or grease (FOG) means any hydrocarbons, fatty acids, soaps, fats, waxes, oils, and any other nonvolatile material of animal, vegetable or mineral origin that's extractable by solvent in accordance with standard methods.

Flow proportional sample means a composite sample taken with regard to the flow rate of the wastestream.

Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, which reasonably reflects the characteristics of the stream at the time of sampling.

Indirect discharge or *discharge* means the discharge or the introduction of pollutants into the POTW from any non-domestic source regulated under 33 U.S.C. § 1317(b), (c) or (d).

Industrial user means a person who contributes, causes or permits wastewater to be discharged into the POTW, including, but not limited to, a place of business, endeavor, arts, trade or commerce, whether public or private, commercial or charitable but excludes single family and multi-family residential dwellings with discharges consistent with domestic waste characteristics.

Industrial waste means any liquid, solid or gaseous waste or form of energy, or combination thereof, resulting from any processes of industry, manufacturing, business, trade or research, including the development, recovery or processing of natural resources.

Interference means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal, and

(2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): section 405 of the Clean Water Act, as amended, being 33 U.S.C. § 1345, the Solid Waste Disposal Act (SWDA), as amended, (including the Resource Conservation and Recovery Act (RCRA), and State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

May means permissive.

National categorical pretreatment standard means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with 33 U.S.C. § 1317 (b) and (c) which applies to a specific class or category of industrial users.

National pollutant discharge elimination system (NPDES) permit means a permit issued pursuant to 33 U.S.C. § 1342.

New source means:

(1) Any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under 33 U.S.C. § 1317(c) which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided, that: (a) the building, structure, facility or installation is constructed at a site where no other source is located; or (b) the building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or (c) the production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered;

(2) Construction on a site where an existing source is located resulting in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of subsections (1)(b) or (1)(c) of this definition but otherwise alters, replaces, or adds to existing process or production equipment; or

(3) Construction of a new source has commenced where the owner or operator has: (a) begun, or caused to begin as part of a continuous on site construction program: (1) any placement, assembly, or installation of facilities or equipment; or (2) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities that are necessary for the placement, assembly, or installation of new source facilities or equipment; or (b) entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this section.

Pass through means discharge which exits the POTW into waters of the United States in quantities or concentrations, which alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit including an increase in the magnitude or duration of a violation.

Person means any individual, partnership, copartner ship, firm, company, corporation, association, joint stock company, trust, estate, unit of government, school district, or any other legal entity, or their legal representative, agent or assigns.

pH means the intensity of the acid or base condition of a solution, calculated by taking the negative base-ten logarithm of the hydrogen ion activity. Activity is deemed to be equal to concentration in moles per liter.

Pollutant means any dredged spoil, solid waste, incinerator residue, sewage garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, or industrial, municipal and agricultural waste which is discharged into water.

Pollution means the introduction of any pollutant that, alone or in combination with any other substance, can or does result in the degradation or impairment of the chemical, physical, biological or radiological integrity of water.

Pretreatment means the reduction of the amount of pollutants, the removal of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the POTW. The reduction, removal or alteration may be attained by physical, chemical or biological processes, or process changes by other means, except as prohibited by federal, state or local law, rules and regulations.

Pretreatment requirements means any substantive or procedural requirements related to pretreatment, other than a national pretreatment standard imposed on an industrial user. See 40 C.F.R. § 403.3(r).

Pretreatment standards means all national categorical pretreatment standards, the general prohibitions specified in 40 C.F.R. § 403.5(a), the specific prohibitions delineated in 40 C.F.R. § 403.5(b), and the local or specific limits developed pursuant to 40 C.F.R. § 403.5(c), including the discharge prohibitions specified in section 114-200.

Public sewer means a sewer of any type controlled by a governmental entity.

Publicly owned treatment works (POTW) means a treatment works as defined by 33 U.S.C. § 1292(2)(A) which is owned by a state or municipality, as defined in 33 U.S.C. § 1362, including:

(1) Any devices and systems used in the storage, treatment, recycling, or reclamation of municipal sewage or industrial waste of a liquid nature;

(2) Sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant; or

(3) The municipality, as defined in 33 U.S.C. § 1362, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

POTW treatment plant means that portion of the POTW designed to provide treatment to wastewater, including recycling and reclamation of wastewater.

Quantification level means the measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calculated at a specified concentration above the detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

Representative sample means any sample of wastewater, which accurately and precisely represents the actual quality, character, and condition of one or more pollutants in the wastestream being sampled. Representative samples shall be collected and analyzed in accordance with 40 C.F.R. Part 136.

Sanitary wastewater means the portion of wastewater that is not attributable to industrial activities and is similar to discharges from domestic sources including, but not limited to, discharges from sanitary facilities and discharges incident to the preparation of food for on-site non-commercial consumption.

Shall means mandatory.

Significant noncompliance means any violation which meets one or more of the following criteria:

(1) Chronic violations of wastewater discharge limits, defined as those in which 66 percent or more of all of the measurements taken during a six-month period exceed by any magnitude the daily maximum limit or the average limit for the same parameter;

(2) Technical review criteria (TRC) violations, defined as those in which 33 percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);

(3) Any other violation of a pretreatment effluent limit (daily maximum or longer term average) that the department determines has caused, alone or in combination with other discharges, interference or pass-through including endangering the health of POTW personnel or the general public;

(4) Any discharge of a pollutant that has caused imminent endangerment to human health or welfare, or to the environment, or has resulted in the POTW's exercise of its emergency authority;

(5) Failure to meet a compliance schedule milestone contained in a local control mechanism, or enforcement order for starting construction, completing construction, or attaining final compliance within 90 days after the scheduled date;

(6) Failure to provide required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules within 30 days after the due date;

(7) Failure to accurately report noncompliance; or

(8) Any other violation or group of violations which the department determines will adversely affect the operation or implementation of the local pretreatment program.

Significant industrial users means any user of the POTW who:

(1) Has an average discharge flow of 25,000 gallons per day or more of process wastewater excluding sanitary, boiler lowdown, and noncontact cooling water;

(2) Has discharges subject to the national categorical pretreatment standards;

(3) Requires pretreatment to comply with the specific pollutant limitations of this division;

(4) Has in its discharge toxic pollutants as defined pursuant to 33 U.S.C. § 1317, or other applicable federal and State laws or regulations, that are in concentrations and volumes which are subject to regulation under this division as determined by the department;

(5) Is required to obtain a permit for the treatment, storage or disposal of hazardous waste pursuant to regulations adopted by this state or adopted under the Federal Solid Waste Disposal Act, as amended by the Federal Resource Conservation and Recovery Act, as amended, and may or does contribute or allow waste or wastewater into the POTW including, but not limited to, leachate or runoff; or

(6) Is found by the City of Detroit or the City of Birmingham to have a reasonable potential for adverse effect, either singly or in combination with other contributing industries, on the POTW operation, the quality of sludge, the POTW's effluent quality, or air emissions generated by the POTW.

Slug means any discharge of a non-routine episodic nature including, but not limited to, an accidental spill or a non-customary batch discharge.

Standard industrial classification (SIC) means a classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1987, as amended.

Standard methods mean methods set forth in 40 C.F.R. Part 136, "Guidelines for Establishing Test Procedures for Analysis of Pollutants" or the laboratory procedures set forth in the latest edition, at the time of analysis, of "Standard Methods for the Examination of Water and Wastewater" prepared and published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation, or methods set forth in 40 C.F.R. 136, "Guidelines for Establishing Test Procedures for Analysis of Pollutants." Where these two references are in disagreement regarding procedures for the analysis of a specific pollutant, the methods given in 40 C.F.R. Part 136 shall be followed.

State means the State of Michigan.

Storm water means any flow occurring during or following any form of natural precipitation and resulting therefrom.

Suspended solids (total) mean the total suspended matter which floats on the surface of, or is suspended in, water, wastewater or other liquids, and is removable by laboratory filtration or as measured by standard methods.

Total PCB means the sum of the individual analytical results for each of the PCB aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 during any single sampling event with any aroclor result less than the quantification level being treated as zero.

Total phenolic compounds means the sum of the individual analytical results for each of the phenolic compounds of 2-chlorophenol, 4-chlorophenol, 4-chloro-3-methylphenol, 2,4-dichlorophenol, 2,4-dinitrophenol, 4-methylphenol, 4-nitrophenol, and phenol during any single sampling event expressed in mg/1.

Toxic pollutant means any pollutant or combination of pollutants designated as toxic in regulations promulgated by the administrator of the U.S. Environmental Protection Agency under the provisions of the Clean Water Act, being 33 U.S.C. § 1317, or included in the Critical Materials Register promulgated by the state department of environmental quality, or by other federal or state laws, rules or regulations.

Trade secret means the whole, or any portion or phase, of any proprietary manufacturing process or method, not patented, which is secret, is useful in compounding an article of trade having a commercial value, and whose secrecy the owner has taken reasonable measures to prevent from becoming available to persons other than those selected by the owner to have access for limited purposes but excludes any information regarding the quantum or character of waste products or their constituents discharged or sought to be discharged into the Detroit wastewater treatment plant, or into the wastewater system tributary thereto.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with limits imposed under this division or with national categorical pretreatment standards due to factors beyond the reasonable control of the industrial user but excludes noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

User means any person who, directly or indirectly, contributes, causes or permits the discharge of wastewater into the POTW as defined herein.

Wastewater or *wastestream* means the liquid and water-carried industrial or domestic wastes of dwellings, commercial buildings, industrial facilities, and institutions, whether treated or untreated, which are contributed to or permitted to enter the POTW including infiltration and inflow waters, storm water, and cooling water.

Wastewater discharge permits mean permits issued by the department in accordance with section 114-202.

Waters of the state mean groundwater, lakes, rivers, streams, all other watercourses and waters within the confines of this state as well as bordering this state in the form of the Great Lakes.

(b) For purposes of this division, the following acronyms shall have the meanings designated by this section:

(1) BMR - Baseline monitoring report

(2) BOD - Biochemical oxygen demand

(3) C.F.R. - Code of Federal Regulations

(4) EPA - Environmental Protection Agency

(5) FOG - Fats, oil or grease

(6) l - liter

(7) MDEQ - Michigan Department of Environment Quality

(8) mg - milligrams

(9) mg/l - milligrams per liter

(10) NPDES - National pollutant discharge elimination system

(11) POTW - Publicly owned treatment works

(12) RCRA - Resource Conservation and Recovery Act, being 42 U.S.C. § 6901 et seq.

(13) SIC - Standard industrial classification

(14) SWDA - Solid Waste Disposal Act, being 42 U.S.C. § 6901 et seq.

(15) TSS - Total suspended solids

(16) U.S.C. - United States Code

(Ord. No. 1994, 8-10-09)

Sec. 114-200. Discharge prohibitions.

(a) *General pollutant prohibitions.* No user shall discharge or cause to be discharged into the POTW, directly or indirectly, any pollutant or wastewater which will cause interference or pass through. These general discharge prohibitions shall apply to all users of the POTW whether or not the user is subject to national categorical pretreatment standards or to any other federal, state, or local pretreatment standards or requirements. In addition, it shall be unlawful for a user to discharge into the POTW:

(1) Any liquid, solid or gas, which by reason of its nature or quantity, is sufficient either alone or by interaction with other substances to create a fire or explosion hazard or to be injurious in any other way to persons, to the POTW, or to the operations of the POTW. Pollutants, which create a fire or explosion hazard in a POTW, include, but are not limited to, wastestreams with a closed cup flash point of less than 140°F or 60°C using the test methods specified in 40 C.F.R. § 261.21;

(2) Any solid or viscous substance in concentrations or quantities, which are sufficient to cause obstruction to the flow in a sewer or other encumbrances to the operation of the POTW, including, but not limited to, grease, animal guts or tissues, bones, hair, hides or fleshing, entrails, whole blood, feathers, ashes, cinders, sand, cement, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, strings, fibers, spent grains, spent hops, wastepaper, wood, plastic, tar, asphalt residues, residues from refining or processing of fuel or lubrication oil, mud or glass grinding or polishing wastes, or tumbling and deburring stones;

(3) Any wastewater having a pH of less than 5.0 units or greater than 11.5 units;

(4) Any wastewater containing petroleum oil, non-biodegradable cutting oil, products of mineral oil origin, or toxic pollutants in sufficient concentration or quantity either singly or by interaction with other pollutants to cause interference, or pass through, or constitute a hazard to humans or animals;

(5) Any liquid, gas, solid or form of energy, which either singly or by interaction with other waste is sufficient to create toxic gas, vapor, or fume within the POTW in quantities that may cause acute worker health and safety problems, or may cause a public nuisance or hazard to life, or are sufficient to prevent entry into the sewers for their maintenance and repair;

(6) Any substance which is sufficient to cause the POTW's effluent or any other product of the POTW, such as residue, sludge, or scum to be unsuitable for reclamation processing where the POTW is pursuing a reuse and reclamation program. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria guidelines or regulations developed under 33 U.S.C. § 1345, with any criteria, guidelines, or developed and promulgated regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Federal Clean Air Act, the Federal Toxic Substances Control Act, or with state criteria applicable to the sludge management method being used;

(7) Any substance which will cause the POTW to violate either the Consent Judgment in U.S. EPA v. City of Detroit et al., Federal District Court for the Eastern District of Michigan Case No. 77-1100, or the City of Detroit's national pollutant discharge elimination system permit;

(8) Any discharge having a color uncharacteristic of the wastewater being discharged;

(9) Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into a public sewer which exceeds 150°F or which will cause the influent at the wastewater treatment plant to rise above 104°F (40°C);

(10) Any pollutant discharge which constitutes a slug;

(11) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established in compliance with applicable federal or state regulations;

(12) Any floating fats, oil or grease which are sufficient to cause interference with or pass through the POTW; or

(13) Any solid materials having a specific gravity greater than 1.2 or a cross section dimension of one-half inch or greater which are sufficient to cause interference with the POTW.

(b) *Specific pollutant prohibitions.* No user shall discharge wastewater containing in excess of the following limitations:

(1) *Compatible pollutants.* See appendix C.

(2) *Non-compatible pollutants.* No user shall discharge wastewater containing in excess of:

mg/1

Arsenic (As)1.0

Cadmium (Cd)See
..... appendix C

Chromium (Cr)25.0

Copper (Cu)2.5

Cyanide (CN) (Available)1.0

Iron (Fe)1000.0

Lead (Pb)1.0

Nickel (Ni)5.0

Silver (Ag)1.0

Zinc (Zn)7.3

Total Phenolic Compounds1.0 or see appendix B

All limitations are based on samples collected over an operating period representative of an industrial user's discharge, and in accordance with 40 C.F.R. part 136.

a. *The limitation for total PCB is non-detect.* Total PCB shall not be discharged at detectable levels, based upon U.S. EPA Method 608, and the quantification level shall not exceed 0.2 ugm/l, unless a higher level is appropriate because of demonstrated sample matrix interference. Where one or more samples indicate detectable levels of total PCB, the user shall be required to demonstrate compliance. For purposes of this section, this demonstration may be made using analytical data showing that the total PCB concentration is below the detection level, or submission of a BMP in accordance with subsection 114-207(d).

b. *The limitation of mercury (Hg) is non-detect.* Mercury (Hg) shall not be discharged at detectable levels, based upon U.S. EPA Method 245.1, and the quantification level shall not exceed 0.2 ugm/1, unless a higher level is appropriate because of demonstrated sample matrix interference. Where one or more samples indicate detectable levels of Mercury, the user shall be required to demonstrate compliance. For the purposes of this section, this demonstration may be made using analytical data showing that the mercury concentration is below the detection level, or submission of a BMP in accordance with subsection 114-207(d).

All limitations are based on samples collected over an operating period representative of an industrial user's discharge, and in accordance 40 CFR Part 136.

(3) *Compliance period.* Within 30 days of the effective date of the ordinance from which this division derives, the department shall notify all industrial user's operating under an effective wastewater discharge permit of the requirement to submit a compliance report within 180 days after the effective date of the ordinance from which this division derives. The compliance report shall demonstrate the user's compliance or non-compliance with these limitations, and, in the event of non-compliance, include the submission of a plan and schedule for achieving compliance with the stated limitation. In no event shall a compliance schedule exceed 18 months from the effective date of the ordinance from which this division derives. An industrial user who does not demonstrate compliance may petition the department for a second extension as part of an administrative consent order. The department shall include appropriate monitoring, reporting, and penalties into an administrative consent order that relates to a second extension, and shall enter into such an agreement only upon a good-faith showing by the industrial user of the actions taken to achieve compliance with this provision.

(c) *National categorical pretreatment standards.* All users shall comply with the applicable national categorical pretreatment standards and requirements promulgated pursuant to the act as set forth in 40 C.F.R. Subchapter N, Effluent Guidelines and Standards, which are hereby incorporated by reference and with all other applicable standards and requirements, provided, that where a more stringent standard or requirement is applicable pursuant to state law or regulation, or to this division, then the more stringent standard or requirement shall be controlling. Affected dischargers shall comply with applicable reporting requirements under 40 C.F.R. part 403 and as established by the department. The national categorical pretreatment standards which have been promulgated as of the effective date of this section are delineated in appendix A.

(1) *Intake water adjustment.* Industrial users seeking adjustment of national categorical pretreatment standards to reflect the presence of pollutants in their intake water must comply with the requirements of 40 C.F.R. § 403.15. Upon notification of approval by the department, the adjustment

shall be applied by modifying the permit accordingly. Intake water adjustments are not effective until incorporated into an industrial user's permit.

(2) *Modification of national categorical pretreatment standards.* The department may apply to the U.S. Environmental Protection Agency, or to the state department of environmental quality, whichever is appropriate, for authorization to grant removal credits in accordance with the requirements and procedures in 40 C.F.R § 403.7. Such authorization may be granted only when the POTW treatment plant can achieve consistent removal for each pollutant for which a removal credit is being sought, provided, that any limitation of such pollutant(s) in the NPDES permit neither are being exceeded nor pose the prospect of being exceeded as a result of the removal credit being granted. Where such authorization is given to the department, any industrial user desiring to obtain such credit shall make an application to the department, consistent with the provisions of 40 C.F.R. § 403.7 and of this division. Any credits which may be granted under this section may be subject to modification or revocation as specified in 40 C.F.R. § 403.7, or as determined by the department. A requisite to the granting of any removal credit may be that the industrial user pay a surcharge based upon the amounts of such pollutants removed by the POTW, such surcharge being based upon fees or rates which the board may establish and, when appropriate, revise from time to time. Permits shall reflect, or be modified to reflect, any credit granted pursuant to this section.

(3) *New sources.* Industrial users who meet the new sources criteria shall install, maintain in operating condition, and 'start-up' all pollution control equipment required to meet applicable pretreatment standards before beginning to discharge. Within the shortest feasible time and not to exceed 90 days, new sources must meet all applicable pretreatment standards.

(4) *Concentration and mass limits.* When limits in a categorical pretreatment standard are expressed only in terms of mass of pollutant per unit of production, the department may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual industrial users. Equivalent limitations shall be calculated in accordance with sections 40 C.F.R. § 403.6(c)(3) and/or 40 C.F.R. § 403.6(c)(4) and shall be deemed pretreatment standards for the purposes of 33 U.S.C. §1317(d) and of this division. Industrial users will be required to comply with the equivalent limitations in lieu of the promulgated categorical standards from which the equivalent limitations were derived.

(5) *Reporting requirements for industrial users upon effective date of categorical pretreatment standards-baseline report.* Within 180 days after the effective date of a categorical pretreatment standard, or 180 days after the final administrative decision made upon a category determination submission under section 40 C.F.R. § 403.6(a)(4), whichever is later, existing industrial users subject to such categorical pretreatment standards and currently discharging into or scheduled to discharge into the Detroit POTW shall submit to the department a report containing the information listed in 40 C.F.R. § 403.12(b)(1—7). Where reports containing this information have already been submitted to the director or regional administrator in compliance with the requirement of 40 C.F.R § 128.140(b), the industrial user will not be required to resubmit this information. At least 90 days before commencement of any discharge, each new source and any existing sources that become industrial users after the promulgation of an applicable categorical pretreatment standard shall submit to the department a report which contains the information listed in 40 C.F.R. § 403.12(b)(1—5). In such report, new sources shall include information concerning the method of pretreatment the source intends to use to meet applicable pretreatment standards. New sources shall provide estimates of the information requested in 40 C.F.R. § 403.12(b,)(4) and (5).

(d) *Dilution prohibited.* Except where expressly authorized to do so by an applicable pretreatment standard or requirement, no user shall increase the use of process water, or in any way dilute or attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the

limitations contained in the national categorical pretreatment standards, or in any other pollutant specific limitation or requirement imposed by the city, the City of Detroit or by the state.

(e) *Hauled in wastewater.* Any waste material or wastewater which is hauled into or within the service region for discharge to the POTW is subject to the requirements of this division including, but not limited to, permits, inspection, monitoring and enforcement. Unloading liquid or solid waste from hauling vehicles, directly or indirectly, into the POTW, with or without the benefit of pretreatment, is prohibited unless the person proposing to unload such waste has applied for and received a permit from the department for unloading such waste in accordance with the board's rules pertaining thereto. The discharger shall be subject to applicable terms and conditions, surcharges, fees or rates as established by the board. Hauled in wastewater shall only be discharged at points designated by the POTW after authorization or approval issued pursuant to the general permit requirements specified in section 114-202. The department may establish specific limitations for sludge from municipally owned or operated POTW treatment plants which are different than the specific limitations in this division.

(f) *Centralized waste treatment.* It is unlawful for a centralized waste treatment (CWT) facility to discharge any industrial waste or wastewater into the POTW without a wastewater discharge permit from the department. Any authorization granted, or permit issued, by the department to a centralized waste treatment (CWT) facility shall specify the type of wastewater for which treatment is provided, and discharge approval is sought, from the POTW. Unless such industrial waste or wastewater is determined by the department to require further authorization, a centralized waste treatment (CWT) facility that has submitted an application to, and received previous approval from, the department to discharge wastewater is not required to obtain further authorization from the department before discharging such wastewater.

An industrial user, that provides centralized waste treatment services and files an application for the treatment and discharge of such types of wastewater to the POTW, shall provide the following minimum information in support thereof:

(1) The general nature, source and process(es) generating the type of wastewater. Any wastewater, which is generated from those processes and is subject to national categorical pretreatment standards as delineated in appendix A, shall be so designated;

(2) The identity of the toxic pollutants known or suspected to be present in the wastewater;

(3) At least one sample report showing the results of an analysis for the EPA priority pollutants for each type of wastewater for which application is made in subsection (f)(1);

(4) A statement, that is certified by a professional engineer, which addresses the treatability and compatibility of the wastewater, received or collected by the facility's treatment process(es);

(5) The identity of the materials and/or pollutants whose transport or treatment are regulated by the EPA, by the state, or by any other governmental agency. Upon request, the centralized waste treatment (CWT) facility shall provide a copy of its permit and/or license to the department; and

(6) Other information requested by the department including, but not limited to, information required by subsections 114-202(c)(1)—(18), or by rules adopted by the board.

The discharge from a centralized waste treatment (CWT) facility will be deemed approved for those specific types of wastewater delineated in a permit and, upon issuance of such permit in accordance with the procedures contained in section 114-202, will be deemed approved for discharge into the POTW. The centralized waste treatment (CWT) facility shall comply with all applicable provisions contained in section 114-202 regarding permits. In furtherance of its obligations as control authority, the department may include in the permit a requirement to report at selected intervals the information mandated in subsections (1) through (6).

All users granted a permit under this section shall maintain records which, at a minimum, identify the source, volume, character, and constituents of the wastewater accepted for treatment and disposal. These records may be reviewed at any time by the department.

(g) *Groundwater discharges.* Unless authorization has been granted by the department, the discharge of any groundwater into the POTW is prohibited.

The department may authorize the discharge of groundwater resulting from maintenance and related activities of gas, steam, or electrical utilities through the use of general permits. Subject to appropriate reporting requirements, the general permit shall authorize discharge in accordance with the terms of the permit. Utilities shall comply with this provision within 180 days after its enactment.

If a person, who proposes to discharge groundwater resulting from purge, response activity, or UST projects, has applied for and received a permit from the department, the department may authorize the discharge of such wastewater. Permits shall be issued in accordance with the procedures contained in section 114-202, or in accordance with any rules adopted by the board.

(h) *City right of revision.* The City of Detroit and the City of Birmingham reserve the right to establish rules or regulations adopted by the board, additional or more stringent limitations or requirements on discharges to the POTW. Ninety days after adoption by the board, industrial users shall comply with such rules and regulations.

(i) *Accidental discharges.*

(1) Each industrial user, which does not currently have an approved spill prevention plan or slug control plan, shall provide protection from accidental discharge of prohibited materials or other substances regulated by this division, and all significant industrial users shall submit to the department detailed plans which show facilities and operating procedures to be implemented to provide protection against such accidental discharges. Facilities and measures to prevent and abate accidental discharges shall be implemented, provided, and maintained at the owner's or industrial user's cost or expense. Unless the significant industrial user has an approved spill prevention or slug control plan, all existing significant industrial users shall complete and submit such a plan within 60 days of the effective date of this division. New significant industrial users shall submit such a plan prior to the time they commence discharging.

For purposes of this section, the information provided shall include the approximate average and maximum quantities of such prohibited materials or substances kept on the premises in the form of raw materials, chemicals and/or waste therefrom and the containment capacity for each. Only substances that are in a form which could readily be carried into the POTW and constitute a concentration of five percent or greater in the raw material, chemical solution or waste material, are required to be reported. Volumes of less than 55 gallons, or the equivalent thereof, need not be reported unless lesser quantities could cause pass through or cause interference with the POTW.

The industrial user shall promptly notify the department of any significant changes or modifications to the plan including, but not limited to, a change in the contact person, or substance inventory.

(2) At least once every two years, the department shall evaluate whether a significant industrial user needs a plan to control slug discharges, as defined by 40 C.F.R. § 403.8(f)(2)(v). Unless otherwise provided, all significant users shall complete, implement, and submit such a plan within 30 days of notification by the department.

(j) *Notification requirements.* Unless a different notice is provided by this division or applicable law, within one hour of becoming aware of a discharge into the POTW which exceeds or does not conform with federal, state or city laws, rules, regulations or permit requirements, or which could cause problems to the POTW, or which has the potential to cause the industrial user to implement its plan prepared in accordance with subsection (1) of this section, the industrial user shall telephone the department at its control center and notify the

department of the discharge. The notification shall include the name of the caller, the location and time of discharge, the type of wastewater, the estimated concentration of excessive or prohibited pollutants and estimated volume, and the measures taken, or being taken, to abate the discharge into the POTW. Within five calendar days after the discharge, the industrial user shall submit a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences and when required by the department, the industrial user's wastewater discharge permit may be modified to include additional measures to prevent such future occurrences. Such notification shall not relieve the industrial user of any expense, cost of treatment, loss, damages or other liability which may be incurred as a result of damage to the POTW, fish kills, or any other environmental impairment or any other damage to person or property.

(k) *Notice to employees.* A notice shall be permanently posted on the industrial user's bulletin board, or other prominent place, advising employees whom to contact in the department in the event of an actual or excessive or prohibited discharge.

(l) *Recovery of costs.* Any user discharging in violation of any of the provisions of this division, which produces a deposit or obstruction, or causes damage to or impairs the department's POTW, or causes the department to violate its NPDES permit, shall be liable to the department for any expense, loss, damage, penalty or fine incurred by the department because of said violation or discharge. Prior to assessing such costs, the department shall notify the user of its determination that the user's discharge was the proximate cause of such damage, obstruction, impairment, or violation of the city's NPDES permit and the department's intent to assess such costs to the user. Any such notice shall include written documentation which substantiates the determination of proximate cause and a breakdown of cost estimates. Failure to pay the assessed costs shall constitute a violation of this division. Such charge shall be in addition to, and not in lieu of, any penalties or remedies provided under this division, or this Code, or other statutes and regulations, or at law or in equity.

(m) *Hazardous waste notification.* All industrial users, who discharge into the city collection system, shall notify the department in writing of any discharge of a substance which, if otherwise disposed of, would be a hazardous waste as set forth in 40 C.F.R. Part 261. Such notification must comply with the requirements of 40 C.F.R. § 403.12(p).

(n) *Authorized representative.* The authorized representative, as defined in section 114-199, may designate a duly authorized representative of the individual designated in section 114-199 where:

(1) The authorization is made in writing by the individual defined in section 114-199;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility where the industrial discharge originates, such as the position of plant manager, operator of a well or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

(3) The written authorization is submitted to the department.

(o) *Pollution prevention.* The department shall encourage and support industrial users to develop and implement pollution prevention programs that are designed to eliminate or reduce pollutant contributions beyond the levels required by this division. The department may require an industrial user to implement pollution prevention initiatives or BMP, as part of an enforcement response, or as necessary to comply with its NPDES permit.

(Ord. No. 1994, 8-10-09)

Sec. 114-201. Fees.

(a) The purpose of this section is to provide for the recovery of costs from users of the POTW. The applicable charges or fees established by the board shall be sufficient to meet the costs of the operation, maintenance, improvement or replacement of the system, or as provided by law or by board action.

(b) The board shall adopt charges and fees which shall include, but not be limited to:

(1) Fees for reimbursement of costs of establishing, operating, maintaining, or improving the department's industrial waste control and pretreatment programs; and

(2) User fees based upon volume of waste and concentration or quantity of specific pollutants in the discharge, and treatment costs including sludge handling and disposal; and

(3) Reasonable fees for reimbursement of costs for hearings including, but not limited to, expenses regarding hearings officers, court reporters, and transcriptions; and

(4) Other fees, which the board may deem necessary, to carry out the requirements contained herein, or as may be required by law.

(Ord. No. 1994, 8-10-09)

Sec. 114-202. Wastewater discharge permits.

(a) *Required.* It shall be unlawful for users to discharge into the POTW any wastewater which will cause interference or pass through, or otherwise not comply with the discharge prohibitions of section 114-200. It shall be unlawful for a significant industrial user to discharge into the POTW without a wastewater discharge permit from the Detroit water and sewerage department. Unless otherwise expressly authorized by the department through permit, order, rule or regulation, any discharge must be in accordance with the provisions of this division.

(1) All significant industrial users, which are in existence on the effective date of this division, shall apply for a wastewater discharge permit within 30 days of the effective date of this division. Significant industrial users who are currently operating with a valid wastewater discharge permit are not subject to this provision. These applications are to include all information specified in subsection 114-202(c) and, where applicable, any additional information which may be needed to satisfy the federal baseline monitoring report requirements of 40 C.F.R. § 403.12(b).

(2) All new significant users shall apply for a wastewater discharge permit at least 90 days prior to commencement of discharge. The application must include all information specified in subsection 114-202(c) and, where applicable, any additional information that may be needed to satisfy the federal BMR requirements of 40 C.F.R. § 403.12(b). Until a permit is issued and finalized by the department, no discharge shall be made into the POTW.

(3) Any user, who proposes to discharge any wastewater other than sanitary or noncontact cooling water into the POTW, shall request approval from the department for the discharge(s) at least 30 days prior to the commencement of the discharge.

(b) *Permit application or reapplication.* The department may require any user to complete a questionnaire and/or a permit application and to submit the same to the department for determining whether the industrial user is a significant user, or to determine changes in the wastewater discharges from a user's facility. Within 30 days of being so notified, a user shall comply with the department's request in the manner and form prescribed by the department. Failure of the department to so notify a user shall not relieve the user of the duty to obtain a permit as required by this division.

(1) A user, which becomes subject to a new or revised national categorical pretreatment standard, shall apply for a wastewater discharge permit within 90 days after the promulgation of the applicable national categorical pretreatment standard, unless an earlier date is specified or required by 40 C.F.R. § 403.12(b). The existing user shall provide a permit application which includes all the information specified in subsections 114-202(c) and (g).

(2) A separate permit application shall be required for each separate facility.

(3) Existing permittees shall apply for permit reissuance a minimum of 90 days prior to the expiration of existing permits on a form prescribed by the department.

(c) *Application or reapplication information.* In support of an application or reapplication for a wastewater discharge permit, the industrial user shall submit, in units and terms appropriate for evaluation, the following information:

(1) Corporate or individual name, any assumed name(s), federal employer identification number, address, and location of the discharging facility;

(2) Name and title of the authorized representative of the industrial user who shall have the authority to bind the industrial user financially and legally;

(3) All SIC numbers of all processes at this location according to the Standard Industrial Classification manual, issued by the Executive Office of the President, Office of Management and Budget, 1987, as amended;

(4) Actual or proposed wastewater constituents and characteristics for each parameter listed in the permit application form. Such parameters shall include those applicable pollutants having numeric limitations as enumerated in subsections 114-200(a) and (b), those pollutants limited by national categorical pretreatment standards regulations for applicable industries and any toxic pollutants known or suspected to be present in the discharge, regulated in the previous permit, or specifically requested by the Detroit water and sewerage department. For each parameter, the expected or experienced maximum and average concentrations during a one-year period shall be provided. For industries subject to national categorical pretreatment standards or requirements, the data requested herein shall be separately shown for each categorical process wastestream. Combined wastestreams proposed to be regulated by the combined wastestream formula shall also be identified. Sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to 33 U.S.C. § 1314(g) and contained in 40 C.F.R. Part 136, as amended. Where 40 C.F.R. Part 136 does not include sampling or analytical techniques for the pollutants in question, sampling and analysis shall be performed using validated analytical methods approved by the administrator.

(5) A listing and description of activities, facilities and plant processes on the premises. Those processes, which are subject to national categorical pretreatment standards or requirements, shall be so designated. As [it] pertains to subsection (c)(4), identify which pollutants are associated with each process;

(6) Restricted to only those pollutants referred to in subsection (c)(4), a listing of raw materials and chemicals which are either used in the manufacturing process or could yield the pollutants referred to in subsection (c)(4). Any user claiming immunity from having to provide such information for reasons of national security shall furnish acceptable proof of such immunity;

(7) A description of typical daily and weekly operating cycles for each process in terms of starting and ending times for each of the seven days of the week;

(8) Denote:

a. The average and maximum 24-hour wastewater flow rates including, if any, daily, monthly and seasonal variations;

b. Each national categorical process wastestream flow rate and the cooling water, sanitary water and storm water flow rates separately for each connection to the POTW; and

c. Each combined wastestream;

(9) A drawing showing all sewer connections and sampling manholes by the size, location, elevation and points or places of discharges into the POTW; also a flow schematic showing which connections receive each national categorical process wastestream and which connections receive storm water, sanitary water or cooling water; also show which lines handle each combined wastestream. This schematic shall be cross-referenced to the information furnished in subsection (c)(8);

(10) Each product produced by type, amount, process or processes and rate of production as pertains to processes subject to production based limits under the national categorical pretreatment standards or requirements only;

(11) A statement regarding whether or not the requirements of this division and of the national categorical pretreatment standards and requirements are being met on a consistent basis and, if not, what additional operation and maintenance work and/or additional construction is required for the industrial user to meet the applicable standards and requirements. This statement shall be reviewed and signed by the authorized representative and, as appropriate, certified by a qualified professional;

(12) Basic information on the program for the prevention of accidental discharges in accordance with the requirements of section 114-200(i);

(13) Proposed or actual hours of operation of each pretreatment system for each production process;

(14) A schematic and description of each pretreatment facility which identifies whether each pretreatment facility is of the batch type or continuous process type;

(15) If other than Detroit water and sewerage department potable water, the industrial user's source of intake water together with the types of usage and disposal method of each water source, and the estimated wastewater volumes from each source;

(16) If additional construction and/or operation and maintenance procedures will be required to meet the requirements of this division and the national categorical pretreatment standards, the shortest schedule by which the user will provide such additional construction and/or implement the required operation and maintenance procedures;

(17) Identify whether the user has conducted a waste minimization assessment or audit of its operations in order to identify all feasible source reduction and recycling practices that may be employed to reduce or eliminate the generation of pollutants and other waste at the facility; and

(18) Any other information as may reasonably be required to prepare and process a wastewater discharge permit.

(d) *Permit issuance.* Upon receipt of an application, the department shall review the application, determine, and so notify the industrial user in writing regarding any of the following:

(1) The industrial user does not meet the definition of a significant industrial user and is not required to have a wastewater discharge permit;

(2) The industrial user does meet the definition of a significant industrial user but is found by the department to have no reasonable potential for adversely affecting the POTW operation or for violating any pretreatment standard or requirement, and is not required to have a wastewater discharge permit. The department shall make such determination in accordance with the requirements of 40 C.F.R. § 403.8(f)(6);

(3) The application is incomplete or the information only partially satisfies the information and data required by 40 C.F.R. § 403.12 or by the department, and that additional information and data are required which shall be promptly furnished. Where appropriate, the industrial user is notified regarding specific information that is missing, or that the application is unacceptable;

(4) The industrial user is required to have a wastewater discharge permit. The department shall notify the industrial user of its determination and the basis of the determination.

The department may withhold issuance of a permit to a significant user, which has not submitted an adequate or timely report, or permit application, to the department as the control authority in accordance with the reporting requirements of 40 C.F.R. § 403.12, or whose discharge is in violation of this division. If the department determines that an industrial user is required to have a wastewater discharge permit and has evaluated and accepted the data furnished, the industrial user will be notified accordingly by certified mail. The notification shall contain a copy of the draft permit, so marked, for the industrial user's review. An industrial user has 30 days from the date of mailing to file a response to the draft permit and, in accordance with the procedures contained in section 114-208, 20 days from the date of mailing to file an appeal regarding a permit issued as final. Upon disposition by the department of any contested terms or conditions, a permit shall be issued as final. Only one facility location shall be included in each permit.

(e) *Permit conditions.* Wastewater discharge permits shall contain all requirements of 40 C.F.R. § 403.8(f)(1)(iii) and shall be deemed to incorporate all provisions of this division, other applicable laws, rules, regulations, and user charges and fees established by the City of Detroit or the City of Birmingham without repetition therein. In addition, permits may contain the following:

(1) Limits on the average and maximum wastewater constituents or characteristics which are equivalent, more restrictive than, or supplemental to the numeric limits enumerated in section 114-200, or the applicable national categorical pretreatment standards;

(2) Limits on average, and maximum rate and time of discharge or requirements for flow regulation and equalization;

(3) Requirements for installation, operation, and maintenance of discharge sampling manholes and monitoring facilities by the industrial user;

(4) Restrictions on which of the user's discharge wastestreams are to be allowed to be discharged at each point of connection to the POTW;

(5) Specifications for industrial user monitoring programs which may include sampling locations, frequency and type of sampling, number, types and standards for tests and reporting schedules;

(6) Requirements for the prevention of accidental discharges and the containment of spills or slug discharges;

(7) Restrictions based on the information furnished in the application;

(8) Additional reporting requirements:

a. All permittees shall submit a report on the form prescribed by the department, or on an alternative form approved by the department, indicating the status of compliance with all conditions enumerated or referred to in the wastewater discharge permit, or made applicable to the permit by this division. Unless required more frequently, the reports shall be submitted at six-month intervals on a schedule to be established by the department. Analytical data generated by the department may not be submitted in lieu of the facility's own monitoring data as required by the wastewater discharge permit.

b. Permittees not subject to national categorical pretreatment standards or requirements shall submit a report in accordance with the requirements of subsections (e)(8)d. and e. The report

shall show the concentration of each substance for which there is a specific limitation in the permit, or which may be identified by the department in accordance with subsections (e)(9) and (11).

c. Permittees subject to national categorical pretreatment standards or requirements shall submit compliance reports at the times and intervals specified by federal regulations and by the department. A compliance report shall be submitted to the department no later than 90 days following the final compliance date for a standard, or in the case of a new source, no later than 90 days, following commencement of the introduction of wastewater into the POTW, and in accordance with 40 C.F.R. § 403.12(d). A report on continued compliance shall be submitted at six-month intervals thereafter on the schedule established by the department and incorporated into the industrial users discharge permit and in accordance with subsections (e)(8)d. and e. The reports shall be either on a form prescribed by the department or on an alternate form approved by the department, and shall indicate the nature and concentration of all pollutants in the discharge from each regulated process which are limited by national categorical pretreatment standards, or which there is a specific limitation in the permit, or which may be identified by the department in accordance with subsections (e)(9) and (11). The report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the discharges regulated by the permit. The combined wastestream formula may be used for reporting purposes after the initial information has been furnished to the department, provided there have been no changes to the elements composing the combined wastestream.

d. Reports shall contain the results of representative sampling performed during the period covered by the report and of the discharge and analysis of pollutants contained therein, and, for significant industrial users subject to production based standards, shall be cross-referenced to the related flow or production and mass as required to determine compliance with the applicable pretreatment standards. The frequency of monitoring shall be as prescribed in the applicable general pretreatment regulations, being 40 C.F.R. Part 403, or by the department, but no less than is necessary to assess and assure compliance by the industrial user with the most stringent applicable pretreatment standards and requirements. All sampling and analysis shall be performed in accordance with applicable regulations contained in 40 C.F.R. Part 136 and amendments thereto. Where 40 C.F.R. Part 136 does not include sampling or analytical techniques for the pollutants in question, sampling and analysis shall be performed using validated analytical methods approved by the administrator.

   If an industrial user monitors any pollutant more frequently than required by the department using the procedures as prescribed in this section, the results of this monitoring shall be included in such report. The report shall state whether the applicable pretreatment standards are being met on a consistent basis and, if not, what additional operation and maintenance practices and/or pretreatment system improvements or changes are necessary to bring the industrial user into compliance with the applicable pretreatment standards.

e. This report, and those required under subsections (c)(5) and (e)(8)b. and c., shall include the following certification statement: "I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.["] Said certification shall be signed by the facility's authorized representative, as defined in subsection 114-199(a)(2). If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of

the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of the authorized representative definition must be submitted to the department prior to, or together with, any reports to be signed by an authorized representative.

f. If sampling performed by a permittee indicates a violation, the user shall notify the department within 24 hours of the time said user becomes, or should have become, aware of the violation. In addition, the user shall repeat the sampling and analysis, and submit the results of the repeat analysis to the department within 30 days after said user becomes, or should have become, aware of the violation.

(9) In the event the director determines that an industrial user is discharging substances in quality, quantity or at locations which may cause problems to the POTW, or the receiving stream, the department has the authority to develop and enforce effluent limits applicable to the user. To the extent the department seeks to impose restrictions in a permit which are more restrictive than established in this division, the department shall provide written documentation to explain the greater restriction for protection against pass through, interference, or violation of the NPDES permit;

(10) Requirement for pollution prevention initiatives; and

(11) Other requirements reasonably necessary to ensure compliance with this division.

(f) *Permit duration.* Permits shall be issued for a specified time period. Except as deemed necessary by the department, or as otherwise provided for under this division, permits shall be issued for a specified period of not more than five years nor less than one year. The existing permit for significant industrial users, who timely submit an application for permit reissuance to the department, shall be automatically extended until a permit is issued as final.

(g) *Permit modification.* The terms and conditions of the permit may be subject to modification by the department during the term of the permit as limitations or pretreatment standards and requirements identified in section 114-200 are amended, or other just cause exists. Just cause for a permit modification includes, but shall not be limited to, the following:

(1) Material or substantial changes to an industrial user's facility or operation, or changes in the characteristics of the industrial user's effluent. It shall be the industrial user's duty to request an application form and apply for a modification of the permit within 30 calendar days of the change;

(2) Change(s) in the department's NPDES permit;

(3) Embodiment of the provisions of a legal settlement or of a court order;

(4) Any changes necessary to fulfill the department's role as control authority;

(5) An industrial user's noncompliance with portions of an existing permit;

(6) A change of conditions within the POTW;

(7) A finding of interference or pass through attributable to the industrial user;

(8) Amendments to, or promulgation of, national categorical pretreatment standards or requirements including 40 C.F.R. Part 403 and those delineated in appendix A of this division. Permittees shall request an application form and apply to the department for a modified permit within 90 days after the promulgation of a new or revised national categorical pretreatment standard to which the industrial user shall be subject. Information submitted pursuant to this subsection shall be confined to that information related to the newly promulgated or amended national categorical pretreatment standard or requirement. However, information previously submitted need not be duplicated, insofar as the previously submitted information continues to be current and applicable. In addition, the department may initiate this action;

(9) Changes in the monitoring location (see section 114-203);

(10) Typographical errors or omissions in permits;

(11) The department may modify the permit on its own initiative based on its findings or reasonable belief of the above; or

(12) The user may request a modification of the permit.

When initiated by the department, the industrial user shall be informed of any proposed change in its permit. The department will issue a draft permit and an industrial user has 30 days to file a response to the draft modified permit. Thereafter, the department will issue a final permit and, unless appealed in accordance with the procedures contained in section 114-208, the permit will become effective 20 days after issuance.

(h) *Permit custody and transfer.* Wastewater discharge permits are issued to a specific person as defined herein for a specific discharge. A wastewater discharge permit shall not be reassigned or transferred or sold to a different person, new owner, new industrial user, different premises, or a new or changed operation without notice to and written approval of the department, and providing a copy of the existing permit to the new owner or operator. It shall be the permit holder's duty to notify the department of any such change at least 30 days before the date of the change. Wastewater discharge permits, which do not receive the written approval of the department prior to the change, shall be null and void regardless of reassignment, or transfer, or sale. If it has occurred, the department may revoke a permit. If a change takes place, the department may require the application for a new or modified permit. Any succeeding person shall comply with the terms and conditions of any existing permit which the department allows to be retained.

(i) *Permit notification requirements.* All industrial users shall promptly notify the department in advance of any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous waste for which initial notification under 40 C.F.R. § 403.12(p) has been made, request a permit application form, and apply for a modification of the permit at least 30 calendar days prior to the change. Failure of the industrial user to so apply shall be considered a violation of this division.

(Ord. No. 1994, 8-10-09)

Sec. 114-203. Monitoring facilities.

(a) Significant industrial users shall provide, operate and maintain at their own expense a sampling manhole or special structure to facilitate monitoring, inspection, sampling, and flow measurement of their discharge by the department and the industrial user, and to enable the department to conduct such other monitoring and sampling as required for determining compliance with discharge requirements, limits and standards as provided for in this division. In the event the department determines that the monitoring facility identified in the permit application is inadequate, a new monitoring facility must be identified, or provided, which shall allow for collection of a representative sample of the wastewater discharged from the facility. Unless otherwise determined at the discretion of the department, said facility shall be provided within 90 days of receipt of notification by the department. The industrial user shall provide the department with:

(1) A drawing showing all sewer connections and sampling manholes by the size, location, elevation, and points or places of discharges into the POTW;

(2) A flow schematic showing: (i) which connections receive each national categorical process wastestream, (ii) which connections receive storm water, sanitary water or cooling water, and (iii) which lines handle each combined wastestream. This report shall be certified by a professional engineer. If a significant industrial user fails to install the monitoring facilities within the prescribed time limits, then the department may install such structure or device and the significant user shall reimburse the department for any costs incurred therein.

(b) The sampling manhole should be situated on the industrial user's premises in a location readily accessible to the department. When such a location would be impractical or cause undue hardship to the industrial user, the department may allow the facility to be constructed in the public street or sidewalk area when there is room and the location will not be obstructed by landscaping or parked vehicles. It shall be the responsibility of the industrial user to obtain any necessary approvals which may be required from other government agencies for the location and construction of monitoring facilities. There shall be ample room in or near such sampling or monitoring manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility and any permanently installed sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the industrial user. Whether constructed upon public or private property, the sampling and monitoring facilities shall be provided in accordance with the department's requirements and all applicable local construction standards and specifications. See subsection 114-202(g).

(Ord. No. 1994, 8-10-09)

Sec. 114-204. Inspection, sampling and record-keeping.

(a) For purposes of administering and enforcing this division, any other applicable provisions of this Code or applicable state or federal laws and regulations, the department may inspect the establishment, facility or other premises of the industrial user. The department's employees or authorized representative shall have access to the industrial user's premises for purposes of inspection, sampling, compliance monitoring and/or metering activities.

(b) Each such inspection or sampling activity shall be commenced and completed at reasonable times, and in a reasonable manner. Upon arrival at the industrial user's premises, the department shall inform the industrial user, or the industrial user's employees, that sampling and/or inspection is commencing, and that the facility's authorized representative has the right to observe the inspection and/or sampling. The department shall neither refrain from, nor be prevented or delayed from, carrying-out its inspection or sampling duties due to the unavailability of the authorized representative of the facility to observe or participate in the inspection or sampling activity.

(c) While performing work on private property, employees or authorized representatives of the department shall observe all reasonable safety, security and other reasonable rules applicable to the premises as established by the industrial user. Duly authorized employees or representatives of the department shall bear proper credentials and identification, and at the industrial user's option may be accompanied by a duly authorized representative of the industrial user. Duly authorized department representatives shall not be restricted from viewing any of the facility site. Department employees or representatives may take photographs of facilities subject to this division. Which shall be maintained by the department as confidential in accordance with section 114-205.

(d) Where an industrial user has security measures in force, the industrial user shall make prompt and necessary arrangements with the security personnel so that, upon presentation of appropriate credentials, personnel from the department will be permitted to enter for the purposes of performing their specific responsibilities.

(e) Significant industrial users shall sample and analyze their discharge in accordance with the provisions of their permit. The department may require such samples to be split with the department for the department's independent analysis.

(f) Industrial users shall maintain records of all information from monitoring activities required by this division, or by 40 C.F.R. § 403.12(n). Industrial users shall maintain the records for no less than three years. This period of record retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user, or the operation of the City of Detroit's industrial waste program, or when requested by the department, by the state, or by the EPA.

(g) Upon the request of the department, industrial users shall furnish information and records relating to discharges into the POTW. Industrial users shall make such records readily accessible to the department at all reasonable times, and allow the department to copy such records.

(h) In the event the department obtains samples, and analyses are made of such samples, a copy of the results of such analyses shall be promptly furnished upon written request by the industrial user's authorized representative. When requested by the industrial user, the department employee or representative shall leave with the user, a portion of any sample of the user's discharge taken from any sampling point on or adjacent to the premises for the user's independent analysis. In cases of disputes arising over shared samples, the portion taken and analyzed by the department shall be controlling unless proven invalid.

(i) In addition to any other violation caused by the discharge described herein, in the event a single grab sample of the industrial user's discharge is obtained by the department, and then analyzed in accordance with 40 C.F.R. Part 136, and found to contain concentrations of pollutants which are two or more times greater than the numeric limitations as listed in subsection 114-200(b), or as contained in the facility's wastewater discharge permit, the industrial user shall implement its slug control plan, and shall provide a written report to the department within 14 days, which describes the cause of greater concentration and provides a description of the means by which future discharge concentrations will be held to values of less than two times the limitation in the future.

(Ord. No. 1994, 8-10-09)

Sec. 114-205. Confidential information.

(a) Information and data on an industrial user obtained from written reports, questionnaires, permit applications, permits and monitoring programs, and from inspections shall be available to the public or other governmental agencies without restriction unless the industrial user specifically requests and is able to demonstrate to the satisfaction of the department that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the industrial user.

When submitted to the department, all information claimed to be confidential must be clearly marked "confidential." When requested by the person furnishing the report, the portions of a report determined by the department to disclose trade secrets or trade secret processes, and which are clearly labeled as confidential, shall not be made available for inspection by the public, but shall be made available upon request to governmental agencies for uses related to this division, to the national pollutant discharge elimination system (NPDES) permit, and to the state disposal system permit and/or the pretreatment programs, provided, however that information shall be treated as confidential by the governmental agency, until such time as the information has been determined to be non-confidential by the governmental agency. Confidential information on industrial users, which the department releases pursuant to a request of another governmental agency, should be handled by the other governmental agency pursuant to its own confidentiality procedures. The department cannot control how another governmental agency handles such confidential information, and assumes no responsibility for the disposition of the information released to the governmental agency. The department will use sufficient care to inform the other governmental agency of the existence of the industrial user's confidentiality claim.

The department shall determine whether the information requested to be treated as confidential, in fact, satisfies the requirements of confidential information as defined herein. The decision of the department shall be made in writing.

Wastewater constituents and characteristics will not be recognized as confidential information.

(b) Except as otherwise determined by the department or provided for by applicable law, all information with respect to an industrial user on file with the city shall be made available upon request by such user or the user's authorized representative during normal business hours.

(Ord. No. 1994, 8-10-09)

Sec. 114-206. Statutes, laws and regulations.

The national categorical pretreatment standards defined in 40 C.F.R. Chapter I, Subchapter N, Parts 405—471, shall be and are incorporated by reference herein and made a part hereof. Unless otherwise provided, any reference in this division to a code, standard, rule, regulation, or law enacted, adopted, established, or promulgated by any private organization, or by any element or organization of government other than the city shall be construed to apply to such code, standard, rule, regulation, or law in effect or as amended or promulgated, from the date of enactment of this division.

(Ord. No. 1994, 8-10-09)

Sec. 114-207. Enforcement.

(a) *Violations.* It shall be a violation of this division for any user to:

(1) Fail to completely and/or accurately report the wastewater constituents and/or characteristics of the industrial user's discharge;

(2) Fail to report significant changes in the industrial user's operations or wastewater constituents and/or characteristics within the time frames provided in subsection 114-202(g)(1);

(3) Refuse reasonable access to the industrial user's premises, waste discharge, or sample location for the purpose of inspection or monitoring;

(4) Restrict, lockout or prevent, directly or indirectly, access to any monitoring facilities constructed on public or private property. The locking or securing of the monitoring facility shall not constitute a violation pursuant to this subsection, provided, that upon request reasonable access to the facility is promptly provided to the department;

(5) Restrict, interfere, tamper with, or render inaccurate any of the department's monitoring devices including, but not limited to, samplers;

(6) Fail to comply with any condition or requirement of the industrial user's wastewater discharge permit;

(7) Fail to comply with any limitation, prohibition, or requirement of this division including any rule, regulation, or order issued hereunder. Industrial users acting in full compliance with wastewater discharge permits issued prior to the effective date of this division shall be deemed to be in compliance with the requirements of this division, and such permits shall remain in effect and be enforceable under this division until a superseding permit is effective. Industrial users shall comply with applicable national categorical pretreatment standards and requirements on the date specified in the federal regulations, regardless of compliance schedules.

(b) *Upsets.* An upset shall constitute an affirmative defense to an action brought for noncompliance with national categorical pretreatment standards where the requirements of subsection (1) are met.

(1) An industrial user who wishes to establish the affirmative defense shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

a. An upset occurred and the industrial user can identify the cause(s) of the upset;

b. At the time, the facility was being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures;

c. The industrial user has submitted the following information to the department, orally or in writing, within 24 hours of becoming aware of the upset and where this information is provided orally, a written submission must be provided within five days:

1. A description of the discharge and cause of noncompliance;

2. The period of noncompliance including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

3. Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

(2) In any enforcement proceeding, the industrial user seeking to establish the occurrence of an upset shall have the burden of proof;

(3) The industrial user shall control production of all discharges to the extent necessary to maintain compliance with this division upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

(c) *Bypass.* Bypasses are prohibited unless the bypass does not cause a violation of pretreatment standards or requirements, but only if it is for essential maintenance to ensure efficient operation of the treatment system. These bypasses are not subject to the provisions of subsections (1) and (2).

(1) *Notice of anticipated bypass.* Industrial users anticipating a bypass shall submit notice to the department at least ten days in advance.

(2) *Notice of unanticipated bypass.* An industrial user shall submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards within 24 hours from the time the industrial user becomes or should have become aware of the bypass. A written submission shall be provided within five days of the time the industrial user becomes or should have become aware of the bypass. The written submission shall contain a description of the bypass including exact dates and times, and if the bypass has not been corrected, the steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass.

(3) *Prohibition of bypass and enforcement.* Bypass is prohibited, and the department may take enforcement action against a user for a bypass, unless:

a. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

c. The industrial user properly notified the department as described in subsection (c)(2).

(4) *Bypass approval.* Where it meets all conditions in subsection (c)(3), the department may approve an anticipated bypass.

(d) *[When measurement exceeds daily maximum non-detect limit.]* Where one or more of the measurements taken for any pollutant defined in subsection 114-200(b) during a six-month period exceed by any magnitude the daily maximum non-detect limit for the same parameter, the industrial user may develop and implement

pollution prevention initiatives, or a bmp, as part of its response. The department may, as part of an administrative order, also require development of a BMP as a part of the department's enforcement response. Upon approval of the department, these pollution prevention initiative, or BMPs shall be made an enforceable part of the wastewater discharge permit. Industrial users shall provide, at six-month intervals, analytical results and certifications in support of its implementation of an approved pollution prevention initiative or BMPs. Upon demonstration of compliance, the industrial user may request to be relieved of this implementation requirement.

(e) *Emergency suspensions and orders.* The department may order suspension of the sewer or wastewater treatment service and/or a wastewater discharge permit where, in the opinion of the department, such suspension is necessary to stop any actual or threatened discharge which presents or may present an imminent or significant hazard to the health or welfare of persons or to the environment, interferes or may interfere with the POTW, or causes or may cause the City of Detroit to violate any condition of its NPDES permit. Any person notified of a suspension of the sewer or wastewater treatment service and/or the wastewater discharge permit shall immediately stop or eliminate the contribution. In the event the department provides informal notification under this section, written confirmation and an order shall be provided within 24 hours. In the event of a failure of the person to comply voluntarily with any suspension or revocation order, the department shall take such steps as deemed necessary, including immediate severance of the sewer connection or services, to prevent or minimize damage to the POTW system or danger to any individual or the environment. In the event such steps are taken, the director shall notify the industrial user within 24 hours in writing of such action and order, and the specific recourse available. In any event, the department shall provide the industrial user with an opportunity for a hearing before the director, or his designated representative, within ten days of such action. The industrial user shall submit a detailed written statement to the department within 15 days of the occurrence describing the causes of the harmful contribution and the measures taken to prevent any future occurrence. Upon proof of elimination of the noncomplying discharge, the department shall reinstate the wastewater discharge permit and/or the sewer or wastewater treatment service.

(f) *Notice of violation.* Except in the case of an actual or threatened discharge as specified in subsection (e), whenever the department has reason to believe that any industrial user has violated or is violating this division, the department shall serve a written notice stating the nature of the violation upon such industrial user. Where applicable, the department shall pursue appropriate escalating enforcement action as defined within its approved enforcement response plan. The failure of the department to issue a notice of violation shall not preclude the department from escalating its enforcement response.

(g) *Administrative actions.* Whenever the department has reasonable grounds to believe that a user is violating, or has violated, a provision of its wastewater discharge permit, or a pretreatment standard or requirement or any prohibition of this division, the department, may initiate appropriate administrative enforcement action, except in the case of emergency or flagrant violation, in order to compel the industrial user to eliminate or to remedy such violation as soon as possible.

(1) a. *Conferences.* The department may order any person, who violates this division, to attend a conference wherein the department may endeavor to cause the user to eliminate or remedy the violation by establishing an enforceable compliance schedule. The notice of violation shall be served at least ten days before the scheduled conference and shall set forth the date, time, and place thereof. The conference shall be conducted by a representative of the department. The industrial user shall present a plan and schedule for achieving compliance with this division. Nothing contained herein shall require the department to accept or agree to any proposed plan or schedule, or to prevent the department from proceeding with a show cause hearing as set forth in subsection (2). If the attendees agree upon a compliance schedule, the user and the department's duly authorized representative may enter, by consent, into a compliance agreement or an administrative order setting forth the terms of such agreement. An industrial user must exhibit good faith and expeditious efforts to comply with this division and any procedures, requirements, and agreements hereunder.

b. *Compliance schedules.* The user and the department may agree upon a schedule which sets forth the terms and conditions, and time periods or schedules for completion of actions to remedy or to eliminate the causes of violation. These schedules may be developed as part of a compliance agreement or an administrative consent order. Schedules developed under this subsection shall adhere to the following conditions:

1. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of upgraded or additional pretreatment facilities, or to the implementation of additional operation and maintenance procedures required for the industrial user to meet the applicable pretreatment requirements and standards including, but not limited to, hiring an engineer, completing preliminary plans, completing final plans, executing contracts for major components, commencing construction, and completing construction;

2. No single increment referred to in subsection 1. of shall exceed nine months;

3. Not later than 14 days following each date in the schedule and the final date for compliance, the industrial user shall submit a progress report to the department including, at a minimum, whether it complied with the increment of progress to be met on such date and, if not, the date which it expects to comply with this increment of progress, the reason(s) for delay, and the steps being taken by the industrial user to return to the established schedule; and

4. Any deviations from the compliance schedule may result in the industrial user being found in violation of this division.

c. *Administrative orders.* The department may order any industrial user, who violates or continues to violate this division or a duly issued permit, to install and to properly operate devices, treatment facilities, or other related appurtenances. In addition, orders may contain such other requirements as might reasonably be necessary and appropriate to address the violation including the installation of pretreatment technology, additional self-monitoring and management practices, implementation of a waste minimization assessment to identify and implement feasible source reduction, and recycling practices to reduce the generation or release of pollutants at the facility. An order may be either an administrative consent order, which is the result of an agreement, or a unilateral administrative order.

(2) *Show cause hearing.* The department may order any industrial user, who violates this division or allows such violation to occur, to show cause before the department why a proposed enforcement action should not be taken. A notice shall be served upon the industrial user specifying the time and place of a hearing before the department regarding the violation, the reason(s) why the action is to be taken, the proposed enforcement action, and directing the industrial user to show cause before the department why any proposed enforcement action should not be taken. The notice of the hearing shall be served personally, or by registered or certified mail with return receipt requested, at least ten days before the hearing. Service may be made upon any agent or officer of a corporation, or its authorized representative.

a. *Hearing proceeding.* The hearing shall be conducted in accordance with the procedures adopted by the board. A hearings officer shall conduct the show cause hearing and take the evidence, and may:

1. In the name of the board, issue notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in such hearing;

2. Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the director for action thereon.

b. *Transcript.* At any show cause hearing held pursuant to this division, testimony shall be recorded by a court reporter.

(3) *Actions.* After a show cause hearing has been conducted, the hearings officer shall issue an order to the industrial user directing any of the following actions:

a. Immediate compliance with the industrial user's wastewater discharge permit or with any applicable limitation, condition, restriction or requirement of this division, or applicable local, state or federal law or regulation;

b. Pretreatment of waste by installation of adequate treatment equipment or proper operation and maintenance of existing treatment equipment be accomplished within a specified time period;

c. Submission of compliance reports on effluent quality and quantity as determined by self-monitoring and analysis during a specified time period;

d. Submission of periodic reports on effluent quality and quantity determined by self-monitoring analysis throughout the final period set by a compliance date;

e. Control of discharge quantities;

f. Payment of costs for reasonable and necessary inspection, monitoring, and administration of the industrial user's activities by the department during compliance efforts; and/or

g. Any such other orders as are appropriate including, but not limited to, immediate termination of sewer or wastewater treatment services, or revocation of a wastewater discharge permit, or orders directing that following a specified time period sewer or wastewater treatment service will be discontinued unless adequate treatment facilities, devices, or operation and maintenance practices have been employed.

h. A finding the user has demonstrated by a preponderance of the evidence that a violation either of this division or of a duly issued permit did not occur.

(4) *Public notification of significant noncompliance.* The department shall publish in the largest daily newspaper published in the City of Detroit and the City of Birmingham a list of all industrial users which were in significant noncompliance with applicable pretreatment requirements at any time during the previous 12 months. All industrial users identified in a proposed publication shall be provided with a copy of the proposed notice at least 30 days before publication and allowed an opportunity to comment as to its accuracy.

(h) *Legal actions.*

(1) *Criminal action.* Any user, who violates any provision of this division including the failure to pay any fees, fines, charges or surcharges imposed hereby, or any condition or limitation of a permit issued pursuant thereto, or who knowingly makes any false statements, representations or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this division or wastewater discharge permit, or who tampers with or knowingly renders inaccurate any monitoring device required under this division, is guilty of a misdemeanor and, upon conviction, shall be punished by a fine not to exceed $500.00 for each violation per day, or by imprisonment for not more than 90 days, or by both. The department, consistent with the terms and conditions of the delegation agreement entered into with the city, is hereby authorized, through its counsel, to seek prosecution of criminal charges against any person violating any provision of this division.

(2) *Civil action.* Whenever the department has reasonable grounds to believe that a user is violating, or has violated, a provision of its wastewater discharge permit, a pretreatment standard or requirement or

any requirement of this division, the director may commence a civil action to compel compliance in a court of competent jurisdiction to enjoin the user from discharging, and/or to obtain appropriate relief to remedy the violations. The department or board may also seek additional legal and/or equitable relief. The commencement of suit does not constitute an exclusive election of remedies and does not prohibit the department, director, board, City of Detroit or the City of Birmingham from commencing action in federal court for discharges believed to be in violation of this division, state and federal requirements contained in the Clean Water Act, the City of Detroit's NPDES permit, or other applicable laws or requirements. In addition, the City of Detroit and/or the City of Birmingham may recover the reasonable attorney fees, court costs, court reporters' fees, and other unusual expenses related to enforcement activities or litigation against the person found to have violated this division, or the orders, rules, regulations and permits issued hereunder.

(3) All fines, costs, and penalties which are imposed by any court of competent jurisdiction shall be payable to the City of Detroit water and sewerage department and the City of Birmingham where applicable.

(Ord. No. 1994, 8-10-09)

Sec. 114-208. Reconsideration and appeal.

Through the procedures of reconsideration and appeal, a user may contest actions, determinations, or decisions of the department, which result from its construction, application and enforcement of this division. The procedures contained within this section govern reconsideration and appeal with respect to construction, application, and enforcement of this division.

(1) *Selection of reconsideration or of appeal.*

a. Except for those actions, determinations, or decisions which are expressly identified as subject only to appeal, reconsideration may be requested by any permit applicant, permittee, authorized industrial wastewater discharger or other discharger, who is adversely affected by any action, determination, or decision that is made by, or on behalf of, the department by the director, or an authorized representative, and that interprets, implements or enforces the provisions of this division.

b. An appeal may be requested by any permit applicant, permittee, authorized industrial wastewater discharger or other discharger, who is adversely affected (i) by a permit issued as final by the department, or (ii) by an administrative order entered after a show cause order and hearing, or after a hearing for reconsideration.

c. Unless otherwise expressly provided for by this division, a request for reconsideration or appeal must be signed by an authorized representative, and received at the department's general offices within 20 days from the date of the occurrence of the action, determination, or decision in dispute. A request for reconsideration shall contain the requester's name and address, a brief statement of the reason(s), and the factual basis underlying the request.

d. A request for reconsideration shall be filed in triplicate either by hand delivery or by certified mail to the general offices of the department. Where a request for reconsideration or appeal either is not filed within the time period provided for in this subsection or is improperly made, the action, determination or decision of the director, or the department's authorized representative, is final and any right to reconsideration or appeal may be deemed waived.

(2) *Reconsideration.* Within 15 days after receipt of a timely and proper request for reconsideration, the department shall notify the applicant of the time and place for a hearing.

a. A hearing for reconsideration shall be conducted by a hearings officer who is designated by the director and may be an employee of the department. The decision of the hearings officer shall be in the form of a recommendation to the director and embodied in an administrative order. Except for an administrative consent order that was negotiated and agreed to by both parties, an administrative order is appealable in accordance with subsection (3).

b. Where improperly or untimely submitted, the department may reject a request for reconsideration. The department shall notify the requester in writing that the request has been rejected.

c. Unless the date is mutually extended by both parties, the hearing shall be conducted neither less than ten days nor more than 30 days after mailing of the notice. For cause and at the discretion of the hearings officer, the hearing may be continued for a reasonable time.

d. The hearing for reconsideration shall be an informal consultation and conference where the requester in person, or by counsel, shall present their argument, evidence, data, and proof in connection with the issue(s) being reconsidered. The parties shall not be bound by the Michigan Rules of Evidence. The hearing shall be transcribed and the requester may obtain a copy of the hearing transcript, as appropriate, from the department or from the court reporter.

e. Within 30 days after the close of the hearing, the hearings officer shall issue a final decision which shall contain a recommendation to the director. The hearings officer shall send such decision to the requester by certified mail.

f. Unless such action is necessary to prevent pass-through, interference or other harm to the POTW, to the public or to the waters of this state, the filing of a request for reconsideration in accordance with this section shall stay the action by the department that is the subject of the hearing for reconsideration.

(3) *Appeal.* Within 30 days after receipt of a timely and proper request for an appeal, the department shall notify the applicant in writing regarding the time and place for a hearing. The hearing shall be conducted in accordance with procedures set by the board until rules are promulgated pursuant to section 2-111 of the 1997 Detroit City Charter. In addition:

a. Any request for an appeal must be made within 20 days of the department's action, determination or decision regarding the request for reconsideration or any permit issued in accordance with this division.

b. Where a request either is not filed within the time period contained in this subsection or is improperly made, the action, determination or decision of the director, or the department's authorized representative, is final and any right to appeal may be deemed waived. Where untimely or improperly submitted, the department may reject the request for an appeal, and shall notify the requester in writing that such request has been rejected.

c. The department shall appoint a hearings officer. The hearings officer shall review the evidence, and within 15 days after the close of the hearing shall issue a written recommendation to uphold, modify or reverse the action, determination, or decision of the department.

d. The written recommendation of the hearings officer shall be submitted to the board which shall render a final decision within 30 days of its next regularly scheduled meeting.

e. In accordance with applicable law, the user or the department may appeal any final decision of the board to a court of competent jurisdiction.

f. Unless such action is necessary to prevent pass through, interference, or other harm to the POTW, to the public or to the waters of this state, the filing of a request for appeal in accordance with this section shall stay the action by the department that is the subject of the appeal.

(Ord. No. 1994, 8-10-09)

Sec. 114-209. Appendices referred to in this division.

APPENDIX A

Aluminum Forming	C.F.R. Part 467
Asbestos Manufacturing	C.F.R. Part 427
Battery Manufacturing	C.F.R. Part 461
Builder's Paper and Board Mills	C.F.R. Part 431
Canned and Preserved Fruits and Vegetables	C.F.R. Part 407
Canned and Preserved Seafood Processing	C.F.R. Part 408
Carbon Black Manufacturing	C.F.R. Part 458
Cement Manufacturing	C.F.R. Part 411
Coal Mining	C.F.R. Part 434
Coil Coating	C.F.R. Part 465
Copper Forming	C.F.R. Part 468
Dairy Products Processing	C.F.R. Part 405
Electrical and Electronic Components I & II	C.F.R. Part 469
Electroplating	C.F.R. Part 413
Explosives Manufacturing	C.F.R. Part 457
Feed Lots	C.F.R. Part 412
Ferroalloy Manufacturing	C.F.R. Part 424
Fertilizer Manufacturing	C.F.R. Part 418
Glass Manufacturing	C.F.R. Part 426
Grain Mills	C.F.R. Part 406
Gum and Wood Chemicals Manufacturing	C.F.R. Part 454
Hospital	C.F.R. Part 460
Ink Formulating	C.F.R. Part 447
Inorganic Chemicals Manufacture (I & II)	C.F.R. Part 415
Iron and Steel	C.F.R. Part 420
Leather Tanning & Finishing	C.F.R. Part 425
Meat Products	C.F.R. Part 432
Metal Finishing	C.F.R. Part 433
Metal Molding and Casting	C.F.R. Part 464
Metal Products and Machinery	C.F.R. Part 438
Mineral Mining and Processing	C.F.R. Part 436
Nonferrous Metals Forming	C.F.R. Part 471
Nonferrous Metals Manufacturing I	C.F.R. Part 421
Nonferrous Metals Manufacturing II	C.F.R. Part 421
Ore Mining and Dressing	C.F.R. Part 440
Organic Chemicals, Plastics, and Synthetic Fibers	C.F.R. Part 414
Paint Formulating	C.F.R. Part 446

Paving and Roofing Materials	C.F.R. Part 443
Pesticide Chemicals	C.F.R. Part 455
Petroleum Refining	C.F.R. Part 419
Pharmaceutical	C.F.R. Part 439
Phosphate Manufacturing	C.F.R. Part 422
Photographic	C.F.R. Part 459
Plastics Molding and Forming	C.F.R. Part 463
Porcelain Enameling	C.F.R. Part 466
Pulp, Paper, and Paperboard	C.F.R. Parts 430 and 431
Rubber Manufacturing	C.F.R. Part 428
Soap and Detergent Manufacturing	C.F.R. Part 417
Steam Electric	C.F.R. Part 423
Sugar Processing	C.F.R. Part 409
Textile Mills	C.F.R. Part 410
Timber Products	C.F.R. Part 429

APPENDIX B

An industrial user may elect, in lieu of the total phenols limitation specified in subsection 114-200(b)(2), to substitute specific limitations for each of the eight individual phenolic compounds identified under the total phenols limitation. The following specific limitations, expressed in mg/l, shall be applied in lieu of the total phenols limitation, upon election:

2-Chlorophenol2.0 mg/l

4-Chlorophenol2.0 mg/1

4-Chloro-3-methylphenol1.0 mg/l

2,4-Dichlorophenol5.5 mg/l

2,4-Dinitrophenol2.0 mg/l

4-Methylphenol5.0 mg/l

4-Nitrophenol15.0 mg/l

Phenol14.0 mg/l

Following election, the wastewater discharge permit shall be modified to incorporate these substituted parameters and an Industrial User shall be responsible for monitoring and reporting compliance with these parameters.

APPENDIX C
INTERIM DISCHARGE LIMITATIONS

No user shall discharge wastewater containing any of the following pollutants in excess of the following interim pollutant discharge limitations:

(1) Compatible pollutants:

a. Any fats, oil or grease (FOG) in concentrations greater than 1,500 mg/l based on an average of all samples collected within a 24-hour period.

b. Any total suspended solids (TSS) in concentrations greater than 7,500 mg/l.

c. Any biochemical oxygen demand (BOD) in concentrations greater than 7,500 mg/l.

d. Any phosphorus (P) in concentrations greater than 250 mg/l.

Unless otherwise stated, all limitations are based upon samples collected over an operating period representative of a user's discharge, and in accordance with 40 CFR Part 136.

(2) Non-compatible pollutants:

Cadmium (Cd)1.0 mg/l

(Ord. No. 1994, 8-10-09)

Secs. 114-210—114-270. Reserved.

DIVISION 4. STORMWATER RUNOFF

Sec. 114-271. Purpose.

The purpose of this division is to regulate the rate of stormwater runoff flow from land within the city in order to protect the public health and minimize the problems resulting from an overloading of the city sewer system.

(Code 1963, § 2.155)

Sec. 114-272. Definitions.

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Affected area means that area of land, as determined by the city engineer, which will be affected by proposed construction in such a manner as to increase the rate of stormwater runoff therefrom, when that area is tributary to the city's sewer system.

Construction means any activity which will change the rate of stormwater runoff from any affected area, such as the construction or alteration of buildings, and the construction or alteration of surface improvements, such as parking lots.

(Code 1963, § 2.156)

Cross reference(s)—Definitions generally, § 1-2.

Sec. 114-273. Permit required.

No person shall commence or carry on any construction on any affected area within the city without complying with the provisions of this division and obtaining a stormwater runoff permit from the city engineer, except that this division shall not be applicable to and no permit shall be required for any one of the following:

(1) Construction of single-family dwellings together with permitted accessory buildings and other appurtenant improvements;

(2) Where the affected area is 3,500 square feet or less;

(3) Interior alterations or construction;

(4) Alterations to the facade or exterior of a building, landscaping, and other surface improvements that the city engineer determines will not materially affect the rate of stormwater runoff from the affected area; or

(5) Construction with a portion of the city which the city commission has, by resolution, designated as exempt from the provisions of this division because the existing capacity of sewers located therein is such that the limitations of this division are not required for the protection of the public health, safety and welfare.

(Code 1963, § 2.157)

Sec. 114-274. Maximum permitted runoff rate.

For parcels 0.50 acres or less:

(a) Construction shall not be permitted in an affected area where the stormwater runoff rate resulting from a ten-year storm will exceed:

(1) 0.20 cubic feet per second (cfs) per acre.

(2) Reserved.

(b) Any affected area where the estimated stormwater runoff will exceed the foregoing maximum permitted amounts must provide stormwater control and retention facilities on or within the affected area. Such facilities shall be so designed, constructed and maintained so that the stormwater runoff originating from the affected area which results from a ten-year storm does not exceed the maximum permitted runoff rate. Such stormwater control facilities shall be constructed in accordance with and in compliance with such standards and regulations as may be established by the city engineer, and approved by the city commission.

For parcels greater than 0.50 acres:

(a) The city accepts and will institute the following Oakland County Standards for Post-Construction Storm Water Runoff for parcels greater than 0.50 acres:

(1) The Oakland County "Post-Construction Storm Water Runoff Program" as amended from time to time, is hereby adopted by the city in this article for the control and treatment of stormwater runoff.

(2) All permanent and temporary stormwater management best management practices (BMPs), constructed as part of the requirements of this section, are subject to this article.

(3) Natural swales and channels should be preserved, whenever possible. If channel modification must occur, the physical characteristics of the modified channel will meet the existing channel in length, cross-section, slope, sinuosity, and carrying capacity.

Streams and channels will be expected to withstand all events up to the two-year storm without increased erosion.

(4) The city site plan review process includes the review of all site development projects by the city engineer for stormwater runoff impacts. Refer to chapter 126, article 7 processes, permits and fees, 7.25 site plan review: review for the site plan review process and requirements.

(5) The city recognizes that, due to the specific requirements of any given development, inflexible application of the design standards may result in development with excessive paving, stormwater runoff, and a waste of space which could be left as an open space. The city engineer shall have the authority to grant waivers from specific control provisions of the stormwater management standards due to site-specific conditions, but only if the waiver(s) are as restrictive as the Oakland County

Standards. The waiver shall be appropriate under the following criteria: (1) Because of unusual topographical or field conditions, there are undue burdens in the way of carrying out the strict letter of this article. (2) The proposed variance will not adversely affect the purpose or objectives of this article or otherwise impair the public health, safety, comfort, and welfare. (3) Reasonable and appropriate conditions may be attached to a grant of a waiver to ensure that the stormwater system improvements will continue to meet the criteria in the future. To receive a waiver, the owner of the property must provide a written request, engineering drawings and/or plans, stated reason for the waiver, and any other information requested by the city to help determine whether a waiver is appropriate.

(b) A maintenance agreement shall be required between the city and the owner for all vegetative, structural, and stormwater best management practices (BMPs) to be constructed on site. For projects in which the Oakland County Standards for Post-Construction Storm Water Runoff apply, stormwater facilities shall be maintained by the owner and shall be repaired and/or replaced by such person when such facilities are no longer functioning as designed. Records of installation and maintenance and repair shall be retained by the owner and shall be made available to the city upon request. The maintenance agreement shall be binding on all subsequent owners of land served by the stormwater management and facilities and shall be recorded in the office of the Oakland County register of deeds prior to the effectiveness of the approval of the city commission. If the stormwater management BMPs have not been adequately maintained, the city may notify the owner(s) in writing and require the necessary maintenance or repairs within 90 days of the written notice. Should the owner fail to comply with the provisions of this article, the city may, after giving reasonable notice and opportunity for compliance, have the necessary work completed and the owner shall be obligated to promptly reimburse the city for all costs incurred.

(Code 1963, § 2.158; Ord. No. 2513, 5-20-24)

Sec. 114-275. Application for permit.

Permits required pursuant to this division shall be applied for on forms provided by the city engineer and shall be accompanied by such information as he may require, and the applicant shall pay such fee as may be required for the securing of such permit as required by the schedule of fees, charges, bonds and insurance. No permit shall be issued by the city engineer unless he first determines that the proposed construction will not result in stormwater runoff from the affected area in violation of this division.

(Code 1963, § 2.159; Ord. No. 2010, 2-8-10)

Sec. 114-276. Appeal.

Any person aggrieved by a decision of the city engineer may appeal therefrom to the city commission, which shall consider the appeal at a public hearing set forth for that purpose. The appellant and any other interested parties shall be given notice of such hearing by regular mail at least five days prior to the date of hearing. Such public hearing shall be held and a decision made by the city commission within 30 days from the date of appeal unless a longer period is agreed to by the person appealing.

(Code 1963, § 2.160)

DIVISION 5. SEPARATE STORM SEWER SYSTEM

Sec. 114-277. Purposes.

The purpose of this division is to provide for the health, safety, and general welfare of the citizens of the city through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This division establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this division are:

(1) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.

(2) To prohibit illicit connections and discharges to the municipal separate storm sewer system.

(3) To establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with this division.

(4) As a requirement of the NPDES stormwater discharge permit and the city's municipal separate storm sewer system permit, the city accepts and will institute the following Oakland County Standards for Post-Construction Storm Water Runoff for parcels greater than 0.50 acres:

a. The Oakland County "Post-Construction Storm Water Runoff Program" as amended from time to time, is hereby adopted by the city in this article for the control and treatment of stormwater runoff.

b. All permanent and temporary stormwater management best management practices (BMPs), constructed as part of the requirements of this section, are subject to this article.

c. This article also applies to any activities which may affect the quantity or quality of a private or stormwater conveyance system or any waterway within the city. Any person(s) engaged in activities that may result in excessive quantities or pollutants entering any stormwater conveyance systems or waterways may be subject to the remedies for violation of this section. Examples of such pollutants may include, but is not limited to, debris, concrete washings, de-icing materials, fertilizers, heavy metals, automobile fluids, topsoil, yard wastes, and commercial or light industrial wastes.

d. Natural swales and channels should be preserved, whenever possible. If channel modification must occur, the physical characteristics of the modified channel will meet the existing channel in length, cross-section, slope, sinuosity, and carrying capacity. Streams and channels will be expected to withstand all events up to the two-year storm without increased erosion.

e. The city site plan review process includes the review of all site development projects by the city engineer for stormwater runoff impacts. Refer to chapter 126, article 7 processes, permits and fees, 7.25 site plan review: review for the site plan review process and requirements.

f. The city recognizes that, due to the specific requirements of any given development, inflexible application of the design standards may result in development with excessive paving, stormwater runoff, and a waste of space which could be left as an open space. The city engineer shall have the authority to grant waivers from specific control provisions of the stormwater management standards due to site-specific conditions, but only if the waiver(s) are as restrictive as the Oakland County Standards. The waiver shall be appropriate under the following criteria: (1) Because of unusual topographical or field conditions, there are undue burdens in the way of carrying out the strict letter of this article. (2) The proposed variance will not adversely affect the purpose or objectives of this article or otherwise impair the public health, safety, comfort, and welfare. (3) Reasonable and appropriate conditions may be attached to a grant of a waiver to ensure that the stormwater system improvements will continue to meet the criteria in the future. To receive a

waiver, the owner of the property must provide a written request, engineering drawings and/or plans, stated reason for the waiver, and any other information requested by the city to help determine whether a waiver is appropriate.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22; Ord. No. 2514, 5-20-24)

Sec. 114-278. Definition of terms.

For the purposes of this division, the following shall mean:

Authorized enforcement agency. The city engineer and his/her authorized representatives, which shall specifically include all inspectors and article enforcement, and any other individual designated by the city manager to enforce this division. Where applicable the terms may also mean the director of the Michigan Department of Environmental Quality or his/her designated official, and/or the United States EPA Administrator or his/her designated official.

Best management practices (BMPs). Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), and any subsequent amendments thereto.

Construction activity. Activities subject to NPDES construction permits or the city's grading ordinance. These include construction projects resulting in land disturbance of five acres or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Hazardous materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illegal discharge. Any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in division 5 of this article.

Illicit connections. An illicit connection is defined as either of the following:

(1) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by the authorized enforcement agency; or

(2) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by the authorized enforcement agency.

Industrial activity. Activities subject to NPDES industrial permits as defined in 40 CFR § 122.26(b)(14).

MS4. Municipal separate storm sewer system.

National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit. A permit issued by the EPA (or by a state under authority delegated pursuant to 33 USC 1342(b)) that authorizes the discharge of

pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-stormwater discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Person. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

Pollutant. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking areas.

Storm sewer system or *storm drainage system.* Publicly-owned or privately-owned facilities by which stormwater is collected and/or conveyed including, but not limited to, any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

Stormwater. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater pollution prevention plan. A document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

Wastewater. Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

(Ord. No. 2153, 5-11-15)

Sec. 114-279. Applicability.

This division shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by the authorized enforcement agency.

(Ord. No. 2153, 5-11-15)

Sec. 114-280. Responsibility for administration.

The city engineer or the city engineer's designee(s), shall administer, implement, and enforce the provisions of this division. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the city manager to persons or entities acting in the beneficial interest of or in the employ of the agency.

(Ord. No. 2153, 5-11-15)

Sec. 114-281. Ultimate responsibility.

The standards set forth herein and promulgated pursuant to this division are minimum standards; therefore this division does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

(Ord. No. 2153, 5-11-15)

Sec. 114-282. Discharge prohibitions.

No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

(1) The following discharges are exempt from discharge prohibitions established by this division if they are identified as not being a significant source of pollutants and/or a significant contributor to violations of state water quality standards: waterline flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, noncommercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools from single-, two- or three-family residences (if dechlorinated, typically less than one PPM chlorine), fire-fighting activities, and any other water source not containing pollutants.

(2) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.

(3) Dye testing is an allowable discharge, but requires authorization from the Michigan Department of Environmental Quality (Rule 97 certification of approval) and a verbal notification to the authorized enforcement agency prior to the time of the test.

(4) The prohibition shall not apply to any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(Ord. No. 2153, 5-11-15)

Sec. 114-283. Prohibition of illicit connections.

(a) The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited.

(b) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(c) A person is considered to be in violation of this division if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

(Ord. No. 2153, 5-11-15)

Sec. 114-284. Suspension of MS4 access.

(a) *Suspension due to illicit discharges in emergency situations.* The city engineer or other authorized enforcement agency may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the United States, or to minimize danger to persons.

(b) *Suspension due to the detection of illicit discharge.* Any person discharging to the MS4 in violation of this division may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the authorized enforcement agency.

(Ord. No. 2153, 5-11-15)

Sec. 114-285. Industrial or construction activity discharges.

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the authorized enforcement agency prior to the allowing of discharges to the MS4.

(Ord. No. 2153, 5-11-15)

Sec. 114-286. Monitoring of discharges.

(a) *Applicability.* This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

(b) *Access to facilities.*

(1) The city engineer and/or representatives of the authorized enforcement agency shall be permitted to enter and inspect facilities subject to regulation under this division as often as may be necessary to determine compliance with this division. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the city engineer or representatives of the authorized enforcement agency.

(2) Facility operators shall allow the city engineer and/or representatives of the authorized enforcement agency ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater (where applicable), and the performance of any additional duties as defined by state and federal law.

(3) The city engineer and/or representatives of the authorized enforcement agency shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's stormwater discharge.

(4) The city engineer has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.

(5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the city engineer and/or designee and shall not be replaced. The costs of clearing such access shall be borne by the operator.

(6) Unreasonable delays in allowing the authorized enforcement agency access to a facility are a violation of a stormwater discharge permit and of this division. An owner or a person who is the operator of a facility representing a discharge of stormwater associated with industrial activity commits an offense if the person denies the city engineer or authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this division.

(7) If the city engineer and/or representatives of the authorized enforcement agency has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this division, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this division or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

(Ord. No. 2153, 5-11-15)

Sec. 114-287. Watercourse protection.

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

(Ord. No. 2153, 5-11-15)

Sec. 114-288. Notification of spills.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drain system, or water of the U.S., said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the authorized enforcement agency within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on- site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

(Ord. No. 2153, 5-11-15)

Sec. 114-289. Maintenance agreements.

A maintenance agreement shall be required between the city and the owner for all vegetative, structural, and stormwater best management practices (BMPs) to be constructed on site. For projects in which the Oakland County Standards for Post-Construction Storm Water Runoff apply, stormwater facilities shall be maintained by the owner and shall be repaired and/or replaced by such person when such facilities are no longer functioning as designed. Records of installation and maintenance and repair shall be retained by the owner and shall be made available to the city upon request. The maintenance agreement shall be binding on all subsequent owners of land served by the stormwater management and facilities and shall be recorded in the office of the Oakland County register of deeds prior to the effectiveness of the approval of the city commission. If the stormwater management BMPs have not been adequately maintained, the city may notify the owner(s) in writing and require the necessary maintenance or repairs within 90 days of the written notice. Should the owner fail to comply with the provisions of this article, the city may, after giving reasonable notice and opportunity for compliance, have the necessary work completed and the owner shall be obligated to promptly reimburse the city for all costs incurred.

(Ord. No. 2371, 10-24-22)

Sec. 114-290. Enforcement; notice of violation.

Whenever the city engineer or authorized enforcement agency finds that a person has violated a prohibition or failed to meet a requirement of this division, the city engineer or other authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

(1) The performance of monitoring, analyses, and reporting;

(2) The elimination of illicit connections or discharges;

(3) That violating discharges, practices, or operations shall cease and desist;

(4) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;

(5) The payment of a fine to cover administrative and remediation costs; and

(6) Control measures or BMPs implemented or installed at violation source.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by the city or the authorized enforcement agency or a contractor and the expense thereof shall be charged to the violator.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Editor's note(s)—Ord. No. 2371, adopted October 24, 2022, redesignated the former sections 114-289—114-295.1 as sections 114-290—114-295.2. The historical notation of said sections has been preserved for reference purposes.

Sec. 114-291. Enforcement measures.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, then representatives of the authorized enforcement agency may enter upon the subject private property and are

authorized to take any and all measures necessary to abate the violation and/or restore the property upon the issuance of an order from a court of competent jurisdiction. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Note(s)—See editor's note at section 114-290.

Sec. 114-292. Cost of abatement of the violation.

Within 15 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this division shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of one percent above prime per annum shall be assessed on the balance beginning on the first day following discovery of the violation.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Note(s)—See editor's note at section 114-290.

Sec. 114-293. Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this division. If a person has violated or continues to violate the provisions of this division, the city engineer or authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Note(s)—See editor's note at section 114-290.

Sec. 114-294. Compensatory action.

In lieu of enforcement proceedings, penalties, and remedies authorized by this division, the city engineer or authorized enforcement agency may allow a violator to perform alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc. The decision to seek alternative compensatory actions does not waive the city or authorized enforcement agency's right to seek legal enforcement from a court of law.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Note(s)—See editor's note at section 114-290.

Sec. 114-295. Violations deemed a public nuisance.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this division is deemed a threat to public health, safety, and welfare, and is declared a nuisance, public nuisance and nuisance per se and may be summarily abated or restored at the

violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Note(s)—See editor's note at section 114-290.

Sec. 114-295.1. Violations.

(a) Any person, firm or corporation determined to have been in violation of the provisions of this division shall be responsible for a municipal civil infraction and subject to the provisions of this Code.

(b) The city commission by way of the city engineer, in addition to other remedies, may institute any appropriate action or proceeding to prevent, abate or restrain the violation.

(c) Each day's continuance of a violation shall be deemed a separate and distinct offense. Expenses in connection with such action shall be assessed as damages against the violation.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Note(s)—See editor's note at section 114-290.

Sec. 114-295.2. Remedies not exclusive.

The remedies listed in this division are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

(Ord. No. 2153, 5-11-15; Ord. No. 2371, 10-24-22)

Editor's note(s)—Ord. No. 2153, adopted May 11, 2015, enacted provisions intended for use as section 114-296. Inasmuch as there are already provisions so designated, and at the discretion of the editor, said provisions have been redesignated as section 114-295.1.

Note(s)—See editor's note at section 114-290.

ARTICLE IV. WATER AND SEWER BILLING

Sec. 114-296. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Commodity Charge means the charges to customers of the wastewater system or water system which are based on usage and charged based on 1,000 gallons used to pay operations, maintenance, reserves, service provider fees, capital investment, and/or debt service

Debt service charge means the charges levied to customers of the wastewater or water system~~systems~~ which are used to pay principal, interest, and administrative costs of retiring the debt incurred for construction of the system(s). The debt service charge shall be in addition to other ~~the user~~ charges.

Debt service charge means charges levied to customers of the wastewater system which are used to pay principal, interest and administrative costs of retiring the debt incurred for construction of the wastewater system. The debt service charge is separate and distinct and may be in addition to the user charge specified below. [JB5]

Capital Connection Charge – a one time charge to connect or reconnect to the water and/or sanitary/combined sewer that reflects the equitable reimbursement to the existing rate payers for their investment in the current system(s) to provide the capacity of the connecting premises. This shall be based on the equivalent water meter size of the connection.

Department means the city water utility department.

Fixed Charges are those charges that are based on equivalent meter charges for capacity/demand related system costs that are not dependent of volume used.

Operation and maintenance means all costs, direct and indirect, inclusive of all expenditures attributable to administration, replacement, and treatment and collection of sewage or wastes or delivery of potable water, necessary to ensure adequate treatment and collection of sewage or wastes or distribution of potable water on a continuing basis in conformance with the national pollutant discharge elimination system permit, and other applicable regulations.

OR

OPERATING AND MAINTENANCE COSTS — All direct and/or indirect costs, other than debt service, necessary to ensure adequate wastewater collection and treatment and to ensure an adequate and continuing water supply in conformance with related federal, state and local requirements. Such costs include cash-financed capital improvements, replacement costs, and payments made to other agencies for water supply and wastewater disposal

Premises means each lot or parcel of land, building or premises having any connection to the water distribution system of the city, or the sewage disposal system of the city.

Replacement means expenditures and costs for obtaining and installing equipment, accessories, or appurtenances which are necessary during the service life of the system to maintain the capacity and performance for which the system was designed and constructed.

Sewer service charge means the sum of the applicable user charges, fixed costs, surcharges and debt service charges.

Superintendent means the superintendent of the city water utility department.

User means the recipients of services provided by the system, including premises which are connected to and discharge sewage or wastes into the system.

User charge means a charge based on units levied on users of the system for the user's proportionate share of the cost of operation and maintenance, including replacement, reserves, service provider fees, capital investment, and/or debt service.~~of the system.~~

(Code 1963, § 2.161; Ord. No. 1521, § 2.161, 5-11-92)

Cross reference(s)—Definitions generally, § 1-2.

ADMINISTRATIVE FEE – A charge paid by parties connected to the system(s) who receive a bill for water and/or sewer service. The charge constitutes the party's proportionate share of the routine and normal administrative costs necessary to operate the water and sewer systems that are common expenses to all customers regardless of use or capacity.[JB6]

FIRE SUPPRESSION LINE CHARGE – A charge paid by parties that have connected to the water system with a dedicated line for a fire suppression system. The charge reflects the party's proportionate share of the system

assets dedicated to providing the additional capacity necessary to meet the demand of such a connection. This shall be based on connection diameter if no meter is installed.

READINESS TO SERVE – A charge paid by the parties that have connected to the water and/or sewer systems which covers a portion of the fixed operation, maintenance and repair, capital expenditure, and debt service costs of the system infrastructure owned by the City, as well as a portion of the fixed system costs incurred by the City from the governmental agency supplying water or sewer service to the City.

Sec. 114-297. Basis of charges.

(a) Water supply service shall be billed on the basis of a fixed amount plus an amount based on water consumed as determined by the meter installed at the premises by the department. Where furnished to any premises not having a meter, the water consumption shall be estimated by the superintendent. The fixed charge shall be determined by the size of the meter installed. Sewage disposal service shall be charged for as a unit rate multiple of water use as set forth in the schedule of fees, charges, bonds and insurance. Charges for disposition of wastewater from a private well shall be in accordance with this chapter. No free water supply service or sewage disposal service shall be furnished to any user of the wastewater system.

(b) Rates and charges for the use of the wastewater system of the city shall be based upon the methodology in the user charge system approved by the state department of natural resources. Rates for total sewer service charges shall be set as necessary to ensure sufficiency of revenues in meeting operation, maintenance and replacement costs, as well as debt service.

(c) User charges for operation, maintenance and replacement shall be subject to annual review. User charges shall be the same for all customers of the system regardless of geographical boundaries. The rates hereby fixed are estimated to be sufficient to provide for the expenses of operation, maintenance and replacement of the system as are necessary to preserve the same in good repair and working order.

(d) Such rates shall be fixed and revised from time to time as may be necessary to produce these amounts. An annual audit shall be prepared. Based on such audit, rates for sewage services shall be reviewed annually and revised as necessary by the city to meet system expenses and to insure that all user classes pay their proportionate share of operation, maintenance and equipment replacement costs.

(Code 1963, § 2.162; Ord. No. 1521, § 2.162, 5-11-92; Ord. No. 2010, 2-8-10)

OR SAMPLE LANGUAGE

Except as provided in this division, water supply service provided by the water supply system shall be paid by the owner or occupant of each lot or parcel of land, building, or premises connected to the water supply system based on water meter readings of water used by such owner or occupant. The water use charges shall be as follows:

(1) For all water meter readings, the water commodity charge shall be per 1,000 gallons of water used.

(2) A water readiness-to-serve fixed charge is imposed on all water connections to the system including residential, commercial, irrigation, and fire suppression lines and covers a portion of the fixed operation, maintenance and repair, capital expenditure, and debt service costs of the water system infrastructure owned by the City, as well as a portion of the fixed costs and debt service incurred by the City from the governmental agency supplying water to the City.

(3) Fixed charges for water readiness-to-serve, water bond debt service and water irrigation readiness-to-serve will be applied to the customer's bill by one of the following:

a. For single-family residential customers with one dwelling unit located on the premises, the fixed charge for water shall be the fixed charge multiplied by one dwelling unit.

b. For residential and nonresidential customers where more than one dwelling unit on a premises is served by a single water connection, the fixed charge for water shall be the fixed charge multiplied by the number of dwelling units served by such single water connection.

c. For nonresidential customers, the fixed charge for water shall be the fixed charge multiplied by the meter ratios set forth by resolution of the city commission from time to time.

d. The City shall impose a fire suppression line charge on all dedicated lines used for a fire suppression system per quarter multiplied by the meter ratios as set forth by resolution of the city commission from time to time. by diameter of the fire line or meter size:

Except as provided in this division, sewage disposal service provided by the wastewater system shall be paid by the owner or occupant of each lot or parcel of land, building or premises having a connection to the wastewater system on the basis of the water meter readings for the water used. The sewage disposal charges shall be as follows:

(1) For all water meter readings, the sewage disposal commodity charge shall be per 1,000 gallons of water used.

(2) A sewer readiness-to-serve fixed charge is imposed on all sewer connections to the system, including residential and commercial leads and covers a portion of the fixed operation, maintenance and repair, capital expenditure, and debt service costs of the sewer system infrastructure owned by the City, as well as a portion of the fixed costs and debt service incurred by the City from the agencies transporting and treating sewage for the City.

(3) Fixed charges for sewer readiness-to-serve and sewer bond debt service will be applied to the customer's bill by one of the following:

a. For single-family residential customers with one dwelling unit located on the premises, the fixed charge for sewer shall be the fixed charge multiplied by one dwelling unit.

b. For residential and nonresidential customers where more than one dwelling unit on a premises is served by a single sewer connection, the fixed charge for sewer shall be the fixed charge multiplied by the number of dwelling units served by such single sewer connection.

c. For nonresidential customers, the fixed charge for sewer shall be the fixed charge multiplied by the meter ratios set forth by resolution of the city commission from time to time.

Sec. 114-298. Sewer and water rates.

The rates to be charged for water supply service and sewage disposal service shall be as set forth in the schedule of fees, charges, bonds and insurance.

(Code 1963, § 2.163; Ord. No. 2010, 2-8-10)

Sec. 114-299. Service to city.

The city shall pay the same water and sewer rates for service to it as would be payable by a private customer for the same service. The city shall pay a flat annual charge for water used or available through fire hydrants and drinking fountains in such amount as shall be fixed by the schedule of fees, charges, bonds and insurance.

(Code 1963, § 2.164; Ord. No. 2010, 2-8-10)

Sec. 114-300. Billing.

Charges for all water service and sewage disposal service shall be billed and collected at least quarterly. All water meter outside registers shall be read at least every third month and the city shall make a reasonable and diligent attempt to read the inside meter at least once per year. Bills will be rendered during the month following inside meter or outside meter register reading, which bills shall be immediately due and payable and may be paid without penalty up to and including the 30th day after the billing date, and shall thereafter be subject to a one percent penalty per month for each and every month, or fraction thereof, that the same remains unpaid. Service may be discontinued in accordance with section 114-303. Failure to receive a bill does not invalidate the billing nor excuse the penalty.

(Code 1963, § 2.165; Ord. No. 1836, 5-10-04)

Sec. 114-301. Temporary disconnections.

In the case of the temporary vacancy of any premises, the water will be turned off at the stop cock, and the meter removed by the department upon written request of the owner of the premises to the water department. The water will be turned on again and the meter set when requested. A charge shall be made for this service as set forth in the schedule of fees, charges, bonds and insurance. The fixed charge for any quarter in which such vacancy occurs will be reduced in proportion to such vacancy, but no reduction will be allowed for a period of less than 30 successive days in any quarterly period. Where premises are left unoccupied, with the water not turned off by the department, no reduction will be allowed nor will any allowance be made for any water registered by the meter that may leak or waste through the plumbing or fixtures.

(Code 1963, § 2.166; Ord. No. 2010, 2-8-10)

Sec. 114-302. Claimed overcharges.

Persons claiming to be overcharged for water may make complaint to the commission who shall examine the matter and make such decision as may be found necessary and in conformity with the established rates.

(Code 1963, § 2.167)

Sec. 114-303. Collection.

(a) In addition to other collection remedies provided, unless otherwise prohibited by law, the city shall have the right to enforce the payment of charges for water service to any premises by discontinuing either the water service or the sewage disposal service to such premises. The payment of charges for sewage disposal service to any premises may be enforced by discontinuing either the water service or the sewage disposal service to such premises, or both. Action for such delinquent amounts plus costs and attorney fees incurred in bringing such action may be instituted by the city against the customer.

(b) When notice of intent to discontinue service for nonpayment of charges has been served, an additional charge as set forth in the schedule of fees, charges, bonds and insurance shall be made.

(c) The charges for water and sewer services, pursuant to the provisions of section 21 of Act No. 210 of the Public Acts of Michigan of 1941 (MCL 141.121), and section 2 of Act No. 178 of the Public Acts of 1939, as amended by Act No. 132 of the Public Acts of Michigan of 1981 (MCL 123.162), and as may be amended in the future, are a lien on all premises immediately upon either the distribution of water or the provision of sewage system service to the premises or property supplied.

(d) The city treasurer shall annually, on May 1, certify all unpaid charges for such services furnished to any premises which, on April 30 preceding, have remained unpaid for a period of six months, to the city assessor, who shall place the same on the next tax roll of the city. An additional penalty in an amount equal to 15 percent of the delinquent bill shall be added at the time the delinquent bill is entered on the tax roll.

(e) Such charges so assessed shall be collected in the same manner as general city taxes. In cases where the city is properly notified in accordance with section 21 of Act No. 210 of the Public Acts of Michigan of 1941 (MCL 141.121), and as may be amended in the future, that a tenant is responsible for water or sewage disposal service charges, no such service shall be commenced or continued to such premises until there has been deposited with the city treasurer a sum sufficient to cover three times the average quarterly bill for such premises as estimated by the superintendent, such deposit to be in no case less than $50.00. Where the water service to any premises is turned off to enforce the payment of water service charges or sewage disposal service charges a charge as set forth in the schedule of fees, charges, bonds and insurance shall be made for restoring services, and the water service shall not be recommenced until all delinquent charges have been paid and a deposit as in the case of tenants is made or a delinquent payment agreement is executed in accordance with section 114-308. In any other case where, in the discretion of the city director of finance, the collection of charges for water or sewage disposal service may be difficult or uncertain, a deposit may be required. Such deposits may be applied against any delinquent water or sewage disposal service charges and the application thereof shall not affect the right of the superintendent to turn off the water service to any premises for any delinquency thereby satisfied. No such deposit shall bear interest and such deposit, or any remaining balance thereof, shall be returned to the customer making the same when he shall discontinue receiving water and sewage disposal service or, except as to tenants as to whom notice of responsibility for such charges has been filed with the city, when any eight successive quarterly bills shall have been paid by such customer with no delinquency and such customer has filed a written request for refund of the deposit.

(Code 1963, § 2.168; Ord. No. 1576, § 2.168, 12-13-93; Ord. No. 1607, 4-24-95; Ord. No. 2010, 2-8-10)

Sec. 114-304. Industrial surcharge.

(a) An industrial surcharge in accordance with rates established by ordinance shall be levied against property devoted to industrial or commercial use from which sewage with concentrations exceeding the following levels is contributed to the system:

mg/l

(1) Biochemical oxygen demand (BOD)275

(2) Total suspended solids (TSS)350

(3) Phosphorous (P)12

(4) Fats, oils, and grease (FOG)100

(b) For purposes of this section, industrial or commercial use means the use of property for a purpose other than as a dwelling unit, as defined in chapter 126, except for restaurants.

(Ord. No. 1931, 5-14-07)

Editor's note(s)—Ord. No. 1931, adopted May 14, 2007, amended § 114-304 in its entirety to read as herein set out. Formerly, § 114-304 pertained to high strength surcharge, and derived from the Code of 1963, § 2.169.

Sec. 114-305. Industrial waste control charge.

(a) An industrial waste control charge shall be levied against all nonresidential properties, in accordance with rates established by ordinance.

(b) Nonresidential users shall be defined, for the purposes of this section, as all users other than single-family houses, apartment buildings, residential condominiums, townhouses, mobile homes, schools, churches and municipal buildings.

(Ord. No. 1931, 5-14-07)

Editor's note(s)—Ord. No. 1931, adopted May 14, 2007, amended § 114-305 in its entirety to read as herein set out. Formerly, § 114-305 pertained to nonresidential flow surcharge, and derived from the Code of 1963, § 2.170.

Sec. 114-306. Interim statements.

Upon request of the owner of the premises the city will read the water meter and prepare an interim statement of all charges due through the date of the read. This interim statement need not be in the same format as a regular water bill but may be presented with payment to the city treasurer. In such case, the interim statement will be stamped "PAID" or receipted by the treasurer's cash register.

(Code 1963, § 2.171)

Sec. 114-307. Budget payment plan.

The city finance director may offer some or all customers an option to pay for water supply service and sewage disposal service in equal monthly installments. To participate in this program, the customer must apply for a budget payment plan on forms prescribed by the city. The city will estimate annual billings and calculate a monthly payment amount. The monthly payment amount shall be reviewed and adjusted at least annually. It may be adjusted at any time if actual usage varies significantly from the original estimate. Customers participating in the budget payment plan will still receive the regular quarterly bill but will not be penalized for a negative account balance if the budget payments have been made on time. Customers failing to make the budget payments before the due date shall be removed from the budget plan and shall become subject to the regular penalty and collection procedures.

(Code 1963, § 2.172)

Sec. 114-308. Delinquent payment agreement.

The city may at its option enter into a delinquent payment agreement with a customer whose water service has been shut off or is scheduled to be shut off. Such agreement must provide for an immediate payment equal to at least 25 percent of the total amount due with the balance to be paid in installments over a period not to exceed six months. When a delinquent payment agreement is entered into with a tenant, the owner must co-sign the agreement. Failure to pay the installment in accordance with the agreement shall result in the water service being discontinued. Where service is discontinued for nonpayment of a delinquent payment installment it shall not be recommenced until all delinquent charges have been paid and a deposit received in accordance with section 114-303.

(Code 1963, § 2.173)

Sec. 114-309. Annual notification.

All customers of the city shall receive an annual notification, either printed on the bill or enclosed in a separate letter, which shall show the breakdown of the sewer service charge into its components for administration, operation, maintenance and replacement and for debt service.

(Ord. No. 1521, § 2.174, 5-11-92)

ARTICLE V. CONSUMERS ENERGY COMPANY GAS FRANCHISE

Sec. 114-310. Grant, term.

The City of Birmingham, Oakland County, Michigan, hereby grants to the Consumers Energy Company, a Michigan Corporation, its successors and assigns, hereinafter called the "grantee," the right, power and authority to lay, maintain and operate gas mains, pipes and services on, along, across and under the highways, streets, alleys, bridges, waterways, and other public places, and to do a local gas business in the City of Birmingham, Oakland County, Michigan, for a period of 30 years.

(Ord. No. 2127, 3-4-13)

Sec. 114-311. Consideration.

In consideration of the rights, power and authority hereby granted, said grantee shall faithfully perform all things required by the terms hereof.

(Ord. No. 2127, 3-4-13)

Sec. 114-312. Conditions.

No highway, street, alley, bridge, waterway or other public place used by said grantee shall be obstructed longer than necessary during the work of construction or repair, and shall be restored to the same order and condition as when said work was commenced. All of grantee's pipes and mains shall be so placed in the highways and other public places as not to unnecessarily interfere with the use thereof for highway purposes.

(Ord. No. 2127, 3-4-13)

Sec. 114-313. Hold harmless.

Said grantee shall at all times keep and save the city free and harmless from all loss, costs and expense to which it maybe subject by reason of the construction and maintenance of the structures and equipment hereby authorized. In case any action is commenced against the city on account of the permission herein given, said grantee shall, upon notice, defend the city and save it free and harmless from all loss, cost and damage arising out of such construction and maintenance. Provided, however, that this hold harmless provision shall not apply to any loss, cost, damage or claims arising solely out of the negligence of the city, its employees or its contractors. Furthermore, in the event that any loss, cost, damage or claims arise out of the joint negligence of the city, its employees or its contractors, this hold harmless provision shall not apply to the proportional extent of the negligence of the city, its employees or its contractors.

(Ord. No. 2127, 3-4-13)

Sec. 114-314. Extensions.

Said grantee shall construct and extend its gas distribution system within said city and shall furnish gas to applicants residing therein in accordance with applicable laws, rules and regulations.

(Ord. No. 2127, 3-4-13)

Sec. 114-315. Franchise not exclusive.

The rights, power and authority herein granted, are not exclusive. Either manufactured or natural gas may be furnished hereunder.

(Ord. No. 2127, 3-4-13)

Sec. 114-316. Rates.

Said grantee shall be entitled to charge the inhabitants of said city for gas furnished therein, the rates as approved by the Michigan Public Service Commission, to which commission or its successors authority and jurisdiction to fix and regulate gas rates and rules regulating such service in said city, are hereby granted for the term of this franchise. Such rates and rules shall be subject to review and change at any time upon petition therefor being made by either said city, acting by its city commission, or by said grantee.

(Ord. No. 2127, 3-4-13)

Sec. 114-317. Notification.

The said grantee shall, except in the case of an emergency situation, before entering upon any street, highway, alley or other public place for the purpose of constructing or installing any mains, pipes, gas works or other apparatus, notify the city engineer in writing of the proposed construction of installation and obtain a permit therefor, and shall, if the city engineer so requires, file with the city a sufficient plan and specification, showing the nature and extent of the proposed construction or installation.

(Ord. No. 2127, 3-4-13)

Sec. 114-318. Title of property.

Nothing in this grant shall be construed to alienate the title of the public in and to any street, alley or public place or any portion thereof, neither shall anything herein be construed in any manner as a surrender by the city of its legislative power with respect to the subject matter hereof, or with respect to any other matter whatsoever; nor as in any manner limiting the right of the said city to lawfully regulate the use of any street, alley or public place within its jurisdiction.

(Ord. No. 2127, 3-4-13)

Sec. 114-319. Revocation.

The franchise granted by this article is subject to revocation upon 60 days written notice by the party desiring such revocation.

(Ord. No. 2127, 3-4-13)

Sec. 114-320. Michigan Public Service Commission jurisdiction.

Said grantee shall, as to all other conditions and elements of service not herein fixed, be and remain subject to the reasonable rules and regulations of the Michigan Public Service Commission or its successors, applicable to gas service in said city.

(Ord. No. 2127, 3-4-13)

Sec. 114-321. Repealer.

The ordinance from which this article derives, when accepted and published as herein provided, shall repeal and supersede the provisions of a gas ordinance adopted by the city commission on February 25, 1974, entitled:

> AN ORDINANCE, granting to CONSUMERS POWER COMPANY, its successors and assigns, the right, power and authority to lay, maintain and operate gas mains, pipes and services on, along, across and under the highways, streets, alleys, bridges and other public places, and to do a local gas business in the CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN, for a period of thirty years.

and amendments, if any, to such ordinance whereby a gas franchise was granted to Consumers Energy Company.

(Ord. No. 2127, 3-4-13)

Sec. 114-322. Reservation.

The city reserves the right to make all regulations which shall be necessary to secure the safety, welfare and accommodation of the public, including, among other things, the right to pass and enforce ordinances to require proper and adequate extensions of the service of such grant in the manner heretofore provided, and to protect the public from danger or inconvenience in the operation of any work or business authorized by the grant hereof and the right to make and enforce all such regulations as shall be reasonably necessary to secure adequate, sufficient and proper service, extensions and accommodations for the people, and insure their comfort and convenience.

(Ord. No. 2127, 3-4-13)

Sec. 114-323. Miss Dig.

Said grantee shall remain a member of Miss Dig in good standing and abide by all of its requirements.

(Ord. No. 2127, 3-4-13)

Sec. 114-324. Marking paint.

The grantee or its agent is required to use marking paint within the central business district of a chalk paint variety or such other variety as is approved by the city. The use of said chalk paint or varieties thereof in other parts of the city is subject to the direction of the city engineer.

(Ord. No. 2127, 3-4-13)

Sec. 114-325. Effective date.

The article shall take effect upon the day after the date of publication thereof; provided, however, it shall cease and be of no effect after 30 days from its adoption unless within said period the grantee shall accept the same in writing filed with the city clerk. Upon acceptance and publication hereof, this article shall constitute a contract between said city and said grantee.

(Ord. No. 2127, 3-4-13)

Secs. 114-326—114-399. Reserved.

ARTICLE VI. STORM WATER UTILITY FEE

Sec. 114-400. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Combined sewer system: Public sewers, drains, ditches, roads and retention ponds used for collecting and transporting storm water and non-storm water in the city.

Director: The city engineer or such other person as the city manager may designate.

Equivalent storm water unit (ESWU): A subunit of measurement which relates the volume of storm water discharged from a lot based on the amount of total and impervious lot area, compared to the standard unit. The formula for an equivalent storm water unit (ESWU) is as follows:

1 ESWU = (0.15 (TAs - IAs) + (0.90 (IAs))

where,

TAs = total area of standard unit;

IAs = impervious area of standard unit;

0.15 = runoff coefficient for pervious area;

0.90 = runoff coefficient for impervious area.

One ESWU in the city is equal to the average runoff potential of the standard unit.

Impervious lot area: Impervious area means a surface area that is resistant to permeation by surface water.

Industrial sites Those sites that contain industrial activities which require wastewater discharge permits as set forth in section 114-202 of this Code.

Nonstorm water: All flows to the combined sewer system not defined as storm water in section 114-199, or as determined by the director.

Pervious lot area: All land area that is not impervious. Pervious lot area equals the total lot area, minus the impervious lot area. Pervious lot area has a runoff coefficient equal to 0.15.

Runoff potential: The runoff potential from a property is based on hydrologic principles for calculating runoff that use both the impervious surface area and the pervious surface area. Runoff potential is measured in square feet using the following formula:

Runoff Potential = 0.15x [Total Area - Impervious Area] + 0.9 x [Impervious Area]

Separated storm water sewer system: Public sewers, drains, channels, ditches, roads and retention ponds used for collecting and transporting storm water in the city.

Standard unit: Single-family residential parcel in the city within a lot size between 1.126 and 0.250 acres.

Storm water: Storm water runoff, snow melt runoff and surface runoff and drainage.

Storm water utility fee: The fee imposed for the use of that portion of the combined system that transports storm water, based on the number of ESWU's for a lot or parcel of land determined as provided in section 114-402.

Storm water sewer system: That portion of the combined sewer system and separated storm water sewer system that is attributable to the transportation and treatment of storm water.

User: An owner of property which directly or indirectly contributes to the combined sewer system.

(Ord. No. 2204, 12-5-16)

Sec. 114-401. Storm water utility fees.

(a) All users shall pay a storm water utility fee proportional to the volume of storm water which is projected to discharge into the combined sewer system and storm water sewer system from their property.

(b) The city commission shall, by resolution, set storm water utility fees at a rate which will recover from each user its share of the costs of the storm water sewer system attributable to the discharge of storm water from the users' property to the storm water system. The city shall use the revenues of the storm water utility fees to pay the costs of the water treatment operation and maintenance of the storm water sewer system, and for necessary improvements and additions to the storm water sewer system.

(c) The city may also collect from users fees imposed to pay the implementation and operation of any of the following:

(1) Monitoring, inspection and surveillance procedures;

(2) Reviewing discharge procedures and construction;

(3) Discharge permit applications; or

(4) Other fees as the city may deem necessary to operate the storm water sewer system.

(Ord. No. 2204, 12-5-16)

Sec. 114-402. Calculation of fees and appeals.

(a) Single-family residential ESWU. All single-family residential properties in each of the lot-size categories are assigned the same ESWU for that category. The ESWU values for the single-family residential categories are summarized in the fee schedule.

Property Type	SFR Class
Single-Family Residential, 0.125 acres or less	Class A
Single-Family Residential, 0.126 acres to 0.250 acres	Class B
Single-Family Residential, 0.251 acres to 0.500 acres	Class C
Single-Family Residential, 0.501 acres to 0.750 acres	Class D
Single-Family Residential, 0.751 acres to 1.000 acres	Class E

Single Family Residential, 1.001 acres or larger	Class F

(b) Non-single family ESWU. The storm water utility fee for non-single family lots shall equal the number of ESWU's for a given lot, multiplied by the annual rate established by the city commission per ESWU per year. The formula for determining the number of ESWU's per non-single family lot shall be calculated from the amount of pervious and impervious lot area as follows:

$$\text{Number of ESWU's} = \frac{0.15\ (TA - IA) + 0.90\ (IA)}{\text{Average runoff potential of the standard unit/ESWU}}$$

where,

TA = total area of each lot (reported in square feet);

IA = impervious area of each lot (reported in square feet).

(c) Any non-single-family residential property owner liable for a storm water utility fee may appeal the determination that the property utilizes the storm water system or the amount of a storm water utility fee, including a determination on a reduction in or the elimination of the fee under subsections (a) and (b). An appeal may be based on the quantity of storm water runoff generated, the reductions established, the reductions allocated, or any other matter relating to the determination of the storm water utility fee.

(d) A single-family residential property owner may appeal the determination that the property utilizes the storm water system, however, such an appeal shall be limited to the following reasons:

(1) The size of the lot has been miscalculated, or

(2) All or part of the storm water runoff drains to an open drainage course, such as a river, lake or creek, which affects the quantity of the storm water runoff generated that gets into the storm water sewer system.

(e) An appeal under subsections (c) and/or (d) shall be heard by a storm water utility appeals board appointed by the local unit of government. The appeals board shall consist of three members, two of whom shall be licensed professional engineers not employed by the local unit of government.

(f) An appeal of a storm water utility fee shall not be brought more than one year after the fee was billed.

(g) To prevail in an appeal of a storm water utility fee, the appellant shall demonstrate in accordance with the requirements of the plan for a non-single-family residential property that the use of the system by the property is less than the amount used by the local unit of government in the calculation of that property's storm water utility fee, or for all properties the classification of the property type is in error, or there was a mathematical error in the calculation of the fee.

(h) The sole remedy for a property owner who prevails in an appeal of a storm water utility fee is a prospective correct recalculation of the storm water utility fee.

(i) If in an appeal of a storm water utility fee the appeals board finds that the requirements of subsection (g) have not been met, that finding is conclusive until the property is modified to either increase or decrease the utilization of the system. The property owner remains eligible for reduction or elimination of fees under the storm water utility ordinance.

(j) A property owner making an appeal shall provide the appeals board with information necessary to make a determination.

(k) A person aggrieved by a decision of the appeals board on an appeal under this section may appeal to the circuit court in which the property is located. An appeal to the circuit court must be filed within 30 days of the appeals board's decision.

(Ord. No. 2204, 12-5-16; Ord. No. 2248, 9-11-17; Ord. No. 2489, 8-14-23)

Sec. 114-403. Credits.

(a) The purpose of this section is to provide for each property owner's control over contributions of storm flows to the storm water utility system and the related storm water utility fees and to advance protection of the public health, safety, and welfare.

(b) The city shall offer credits on an annual basis that will enable any property owner, through voluntary action, to reduce the storm water utility fees calculated for that property owner's property and will provide a meaningful reduction in the cost of service to the storm water system, or that shall be reasonably related to a benefit to the storm water system.

(1) Credits will only be applied if requirements outlined in this chapter and other applicable sections of the City Code are met, including, but not limited to: completion of ongoing maintenance, guaranteed right-of-entry for inspections, and submittal of annual self-certification reports.

(2) Credits will be defined as either set fee reduction or percent (%) reductions applied as a credit adjustment to the fee calculation equation.

(3) Credits are additive to each credit category.

(4) As long as the storm water facilities or management practices are functioning as approved, the credit reduction will be applied to the fee. If the approved practice is not functioning as approved or is terminated, the credit reduction will be cancelled and the fee will return to the baseline calculation. Once the credit reduction has been cancelled, a customer may not reapply for credit for a period of 12 months and only then if the deficiency has been corrected, as determined by city inspection.

(5) Credits will be applied to the next complete billing cycle after the application has been approved.

(c) The director shall define a method for applying and granting credits on an annual basis, as well as criteria for determining the credits a property owner may receive. The director may, by regulation, establish credits for one or more of the following:

(1) Installation and maintenance of rain barrels, rain gardens, bioswales, cisterns, dry wells, infiltration trenches, porous pavement or pavers, or disconnecting footing drains;

(2) Installation and maintenance of a storm water control facility, or other water quantity controls; and

(3) Other actions of the property owner that, in the judgment of the director, result in a measurable reduction in storm water runoff.

(Ord. No. 2204, 12-5-16)

Sec. 114-404. Billing.

The billing for the storm water utility may be combined with the billing for other utility services. Final determinations on measurements per ESWU will be determined by the director.

(Ord. No. 2204, 12-5-16)

Sec. 114-405. Collection.

Unpaid storm water utility fees shall constitute a lien against the property affected. Fees which have remained unpaid for a period of six months prior to April 30 may be certified to the city treasurer who shall place

the fees on the next tax roll of the city. In the alternative, the city commission may direct the city attorney to take appropriate legal action to collect unpaid fees.

(Ord. No. 2204, 12-5-16)

SERVICE ADDRESS		AQUAHAWK PIN	
151 MARTIN ST		05301991	
ACCOUNT NUMBER	CYCLE	BILL DATE	DUE DATE
00177-22018	1	11/13/2026	12/19/2026

TOTAL CURRENT CHARGES	$315.95
PREVIOUS BALANCE	$0.00
TOTAL AMOUNT DUE	**$315.95**
AMOUNT AFTER DUE DATE	$319.11

BIRMINGHAM
A WALKABLE CITY

Existing Rates

CITY OF BIRMINGHAM
C/O: TREASURER'S OFFICE
CITY HALL
P. O. BOX 3001
BIRMINGHAM, MI 48012-3001

1756010000177220180000166111161

Please mail stub with your payment or when paying in person, bring entire notice MAKE CHECK PAYABLE TO: City of Birmingham

City of Birmingham Water Bill

City of Birmingham
City Hall
151 Martin St
Birmingham, MI 48009

Contact Information

Billing Questions:	248-530-1830
Fax:	248-530-1070
Hours:	8:00am to 5:00pm
After Hours Emergency Service	248-530-1870
Website:	www.bhamgov.org

Pay your Bill by Credit Card or EFT (Check) at:
www.invoicecloud.com/CityofBirminghamMI
or by calling 1-866-608-6092
Convenience fees apply.
There is no fee for using EFT (Check)

Billing Codes
A - Actual
E - Estimate
C - Customer Read

Due date refers to the current charges, the previous balance may accrue additional penalties.

Payment must be received by due date to avoid penalties
If sending payment by mail please allow 5-7 business days

SERVICE INFORMATION

Account Number:	00177-22018		
Service Address:	151 MARTIN ST		
Service Period:	7/15/2026	-	10/15/2026
Previous Read:	0		
Current Read:	10	**Auto**	
Consumption:	10		
Yr Ago Cons:	0		
Aquahawk PIN	05301991		

DETAILED WATER INFORMATION

WATER	$88.70
SEWER	$128.80
BASE METER CHARGE	$8.15
STORM WATER EF	$90.30

CITY MESSAGES

Monitor your water use and help prevent surprise water bills with AQUA HAWK. Register at birmmi.aquahawk.us

PAYMENT DROP BOX IS LOCATED ON THE SOUTH SIDE OF THE BUILDING, IN THE POLICE PARKING LOT.

REMINDER: Residents and businesses shall keep all grass and noxious growth on their property cut and removed. Any growth higher than 8 inches may be cut by the city at the Owner's expense.

WATER QUALITY REPORT: The water quality report describing the source and quality of your drinking water is available at www.bhamgov.org/waterqualityreport. To receive a paper copy in the mail, contact the Engineering Department at WaterQuality@bhamgov.org.

Water Rates: $8.87 per 1,000 gallons
Sewer Rates $12.88 per 1,000 gallons

DUE DATE	12/19/2026
CURRENT AMOUNT DUE	$315.95
PREVIOUS BALANCE	$0.00
PLEASE PAY THIS AMOUNT	$315.95

1% LATE CHARGE ADDED IF NOT PAID IN FULL BY THE DUE DATE

SERVICE ADDRESS		AQUAHAWK PIN	
151 MARTIN ST		05301991	
ACCOUNT NUMBER	CYCLE	BILL DATE	DUE DATE
00177-22018	1	11/13/2026	12/19/2026

TOTAL CURRENT CHARGES	$357.95
PREVIOUS BALANCE	$0.00
TOTAL AMOUNT DUE	**$357.95**
AMOUNT AFTER DUE DATE	$361.53

BIRMINGHAM
A WALKABLE CITY

Proposed Rates

CITY OF BIRMINGHAM
C/O: TREASURER'S OFFICE
CITY HALL
P. O. BOX 3001
BIRMINGHAM, MI 48012-3001

1756010000177220180000166116 1

Please mail stub with your payment or when paying in person, bring entire notice MAKE CHECK PAYABLE TO: City of Birmingham

City of Birmingham Water Bill

City of Birmingham
City Hall
151 Martin St
Birmingham, MI 48009

Contact Information

Billing Questions:	248-530-1830
Fax:	248-530-1070
Hours:	8:00am to 5:00pm
After Hours Emergency Service	248-530-1870
Website:	www.bhamgov.org

Pay your Bill by Credit Card or EFT (Check) at:
www.invoicecloud.com/CityofBirminghamMI
or by calling 1-866-608-6092
Convenience fees apply.
There is no fee for using EFT (Check)

Billing Codes
A - Actual
E - Estimate
C - Customer Read

Due date refers to the current charges, the previous balance may accrue additional penalties.

Payment must be received by due date to avoid penalties
If sending payment by mail please allow 5-7 business days

SERVICE INFORMATION

Account Number:	00177-22018		
Service Address:	151 MARTIN ST		
Service Period:	7/15/2026	-	10/15/2026
Previous Read:	0		
Current Read:	10	**Auto**	
Consumption:	10		
Yr Ago Cons:	0		
Aquahawk PIN	05301991		

DETAILED WATER INFORMATION

WATER	$96.60
SEWER	$136.20
READY TO SERVE	$24.15
STORM WATER EF	$101.00

CITY MESSAGES

Monitor your water use and help prevent surprise water bills with AQUA HAWK. Register at birmmi.aquahawk.us

PAYMENT DROP BOX IS LOCATED ON THE SOUTH SIDE OF THE BUILDING, IN THE POLICE PARKING LOT.

REMINDER: Residents and businesses shall keep all grass and noxious growth on their property cut and removed. Any growth higher than 8 inches may be cut by the city at the Owner's expense.

WATER QUALITY REPORT: The water quality report describing the source and quality of your drinking water is available at www.bhamgov.org/waterqualityreport. To receive a paper copy in the mail, contact the Engineering Department at WaterQuality@bhamgov.org.

Water Rates: $9.66 per 1,000 gallons
Sewer Rates $13.62 per 1,000 gallons

DUE DATE	12/19/2026
CURRENT AMOUNT DUE	$357.95
PREVIOUS BALANCE	$0.00
PLEASE PAY THIS AMOUNT	$357.95

1% LATE CHARGE ADDED IF NOT PAID IN FULL BY THE DUE DATE

SERVICE ADDRESS		AQUAHAWK PIN	
151 MARTIN ST		05301991	
ACCOUNT NUMBER	CYCLE	BILL DATE	DUE DATE
00177-22018	1	11/13/2026	12/19/2026

TOTAL CURRENT CHARGES	$304.91
PREVIOUS BALANCE	$0.00
TOTAL AMOUNT DUE	**$304.91**
AMOUNT AFTER DUE DATE	$307.96

BIRMINGHAM
A WALKABLE CITY

Existing Rates

CITY OF BIRMINGHAM
C/O: TREASURER'S OFFICE
CITY HALL
P. O. BOX 3001
BIRMINGHAM, MI 48012-3001

1756010000177220180000166116 1

Please mail stub with your payment or when paying in person, bring entire notice MAKE CHECK PAYABLE TO: City of Birmingham

City of Birmingham Water Bill

City of Birmingham
City Hall
151 Martin St
Birmingham, MI 48009

Contact Information

Billing Questions:	248-530-1830
Fax:	248-530-1070
Hours:	8:00am to 5:00pm
After Hours Emergency Service	248-530-1870
Website:	www.bhamgov.org

Pay your Bill by Credit Card or EFT (Check) at:
www.invoicecloud.com/CityofBirminghamMI
or by calling 1-866-608-6092
Convenience fees apply.
There is no fee for using EFT (Check)

Billing Codes
A - Actual
E - Estimate
C - Customer Read

Due date refers to the current charges, the previous balance may accrue additional penalties.

Payment must be received by due date to avoid penalties
If sending payment by mail please allow 5-7 business days

SERVICE INFORMATION

Account Number:	00177-22018		
Service Address:	151 MARTIN ST		
Service Period:	7/15/2026	-	10/15/2026
Previous Read:	0		
Current Read:	10	**Auto**	
Consumption:	10		
Yr Ago Cons:	0		
Aquahawk PIN	05301991		

DETAILED WATER INFORMATION

WATER	$88.70
SEWER	$128.80
BASE METER CHARGE	$8.15
STORM WATER SO	$79.26

CITY MESSAGES

Monitor your water use and help prevent surprise water bills with AQUA HAWK. Register at birmmi.aquahawk.us

PAYMENT DROP BOX IS LOCATED ON THE SOUTH SIDE OF THE BUILDING, IN THE POLICE PARKING LOT.

REMINDER: Residents and businesses shall keep all grass and noxious growth on their property cut and removed. Any growth higher than 8 inches may be cut by the city at the Owner's expense.

WATER QUALITY REPORT: The water quality report describing the source and quality of your drinking water is available at www.bhamgov.org/waterqualityreport. To receive a paper copy in the mail, contact the Engineering Department at WaterQuality@bhamgov.org.

Water Rates: $8.87 per 1,000 gallons
Sewer Rates $12.88 per 1,000 gallons

DUE DATE	12/19/2026
CURRENT AMOUNT DUE	$304.91
PREVIOUS BALANCE	$0.00
PLEASE PAY THIS AMOUNT	$304.91

1% LATE CHARGE ADDED IF NOT PAID IN FULL BY THE DUE DATE

SERVICE ADDRESS		AQUAHAWK PIN	
151 MARTIN ST		05301991	
ACCOUNT NUMBER	CYCLE	BILL DATE	DUE DATE
00177-22018	1	11/13/2026	12/19/2026

TOTAL CURRENT CHARGES	$340.95
PREVIOUS BALANCE	$0.00
TOTAL AMOUNT DUE	**$340.95**
AMOUNT AFTER DUE DATE	$344.36

BIRMINGHAM
A WALKABLE CITY

Proposed Rates

CITY OF BIRMINGHAM
C/O: TREASURER'S OFFICE
CITY HALL
P. O. BOX 3001
BIRMINGHAM, MI 48012-3001

1756010000177220180000166116 1

Please mail stub with your payment or when paying in person, bring entire notice MAKE CHECK PAYABLE TO: City of Birmingham

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Billing Codes
A - Actual
E - Estimate
C - Customer Read

Due date refers to the current charges, the previous balance may accrue additional penalties.

Payment must be received by due date to avoid penalties
If sending payment by mail please allow 5-7 business days

SERVICE INFORMATION

Account Number:	00177-22018		
Service Address:	151 MARTIN ST		
Service Period:	7/15/2026	-	10/15/2026
Previous Read:	0		
Current Read:	10	**Auto**	
Consumption:	10		
Yr Ago Cons:	0		
Aquahawk PIN	05301991		

DETAILED WATER INFORMATION

WATER	$96.60
SEWER	$136.20
READY TO SERVE	$24.15
STORM WATER SO	$84.00

CITY MESSAGES

Monitor your water use and help prevent surprise water bills with AQUA HAWK. Register at birmmi.aquahawk.us

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REMINDER: Residents and businesses shall keep all grass and noxious growth on their property cut and removed. Any growth higher than 8 inches may be cut by the city at the Owner's expense.

WATER QUALITY REPORT: The water quality report describing the source and quality of your drinking water is available at www.bhamgov.org/waterqualityreport. To receive a paper copy in the mail, contact the Engineering Department at WaterQuality@bhamgov.org.

Water Rates: $9.66 per 1,000 gallons
Sewer Rates $13.62 per 1,000 gallons

DUE DATE	12/19/2026
CURRENT AMOUNT DUE	$340.95
PREVIOUS BALANCE	$0.00
PLEASE PAY THIS AMOUNT	$340.95

1% LATE CHARGE ADDED IF NOT PAID IN FULL BY THE DUE DATE

MEMORANDUM

Engineering Department

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Melissa Coatta, City Engineer

SUBJECT: Wimbleton Phase 1 Udpate

Construction on the Wimbleton Phase 1 project is progressing, with concrete work largely complete and restoration work starting soon. Work will continue over the next several weeks, followed by final roadway surfacing.

Completed Work

- On Friday, May 1, the City was alerted to a gas leak in the project area. Consumers Energy has been on site to replace the gas line that serves Twin Oaks. This work is expected to be complete by Saturday, May 16. Consumers Energy and City staff have been in contact with affected homeowners.
- On Friday, May 8, crews completed work to lower the water main at Wimbleton and Abbey. In addition, they completed exploratory digging at several properties to investigate utility leads.
- Concrete work is complete on the south side of Wimbleton. Crews began removing concrete driveway approaches on the north side of Wimbleton on Monday, May 11. It is anticipated that drive approaches and sidewalks will be poured on the north side of Wimbleton on Friday, May 15, pending weather conditions. Once poured, the concrete will require up to seven days to cure before vehicles may drive on it. Affected residents received door hangers with additional information regarding access and timing.

Remaining Work

- The contractor will soon begin restoration of grass within the public right-of-way. Grading and topsoil installation are expected to begin shortly on the south side of Wimbleton.
- Roadway chip sealing will take place after completion of concrete and heavy construction work.

MEMORANDUM

Building Department

DATE: May 18, 2026

TO: Jana Ecker, City Manager

FROM: Jeff Zielke, Building Official
Nick Dupuis, Planning Director
Scott Grewe, Chief of Police

SUBJECT: Short Term Rentals

Building Department

At the May 4, 2026 meeting, the City Commission directed the Building Department to prepare a report on short-term rentals in the City and related enforcement activities. The Building Department and Code Enforcement have taken several actions to identify, document, and monitor short-term rental properties in the City.

Staff have been reviewing short-term rental sites including Airbnb, VRBO and Booking.com to identify and document unregistered rental properties. Code Enforcement has issued tickets to each unregistered rental property upon identification. In addition, staff are investigating potential unregistered rental properties that have been reported by neighboring residents.

To date, the Building Department has documented 1,658 total rental units in the City, of which 1,127 are single-family homes and 531 are multifamily units or apartments. Each property is required to have a rental license that is re-issued on an annual basis. Currently, 89 rental properties are pending renewal or issuance of a rental license, including 22 that are on hold and 67 that have an outstanding balance.

During the investigation into short-term rentals units (STRs), the Building Department identified 61 STRs, of which 12 were found to be unregistered. The investigation also uncovered 17 unregistered long-term rental properties. All unregistered rental properties have been issued enforcement tickets.

The Building Department will continue monitoring and investigating rental properties in the City for compliance with all regulations and licensing requirements.

Police Department

Since the City Commission started discussions on short-term rentals (STRs), police officers have been instructed, when responding to calls for service, to indicate in the report whether the location is a STR. Officers were also instructed, when responding to disturbance calls, to determine on scene whether a homeowner is present, and, if not, whether the location is an STR.

Since the last Commission meeting held on May 4, 2026, the Police Department has responded to only one call for service that included a STR. In this incident, the person at the STR (2350 Derby) reported a complaint about a neighboring residence.

Currently, the Police Department is reviewing a list of addresses provided by the Building Department of confirmed STR locations. Once completed, the Police Department will provide the Building Department with information on all calls for service at these locations in the last three years.

Planning Department

On May 13, 2026, the Birmingham Planning Board held its first study session regarding the short-term rentals directive given by the City Commission on April 27, 2026. In this initial meeting, Planning Board members reviewed a short memorandum from the Planning Department, as well as some draft ordinance language to help guide discussions. The Planning Board members also received a copy of the full City Commission resolution on short-term rentals, Chapter 22, Article 6, Division 4 of the Birmingham Code of Ordinances, and a couple of written public comments. Overall, the Planning Board members were able to hold a nuanced discussion about the direction, best practices, experiences in other communities, and other opportunities.

Moving forward, the Planning Board requested more information from City staff including Birmingham rental data and more example ordinances from other communities. There was also a general consensus that a density limit on rentals in Birmingham did not seem to be appropriate, and that long-term rentals do not appear to be an issue. However, the Planning Board will review the additional information that they requested at their next meeting and make a final determination on density limitations. Finally, the Planning Board has some additional questions that they feel would be helpful to have answered by the City Commission, notably whether or not they wish to consider regulating rentals in *all* areas of the city, including commercial or mixed use districts, and also whether or not the City Commission may wish to delineate any further between rentals over 30 days.

The next meeting of the Planning Board at which short-term rentals will be discussed is planned for June 10, 2026. In addition, the Planning Board indicated that they will be looking to include short-term rentals on the agenda for the joint meeting of the City Commission and the Planning Board on June 15, 2026.

RECEIVED
MAY 04 2026
11:33 AM
CLERK'S OFFICE

CHARTER TOWNSHIP OF BLOOMFIELD

NOTICE OF PUBLIC HEARING

PLANNING COMMISSION

NOTICE IS HEREBY GIVEN that a public hearing will be held by the Planning Commission of the Charter Township of Bloomfield, Oakland County, Michigan on **MONDAY, MAY 18 , 2026 at 7:00 P.M.** at the Bloomfield Township Hall, 4200 Telegraph Road, for the purpose of considering a request to make site plan application under the Open Space Preservation Option of the Zoning Ordinance (Sec. 42-3.9) for the development of 6 single family residential homes. The Hamlet of Bloomfield Manor proposed for 7.15 acres with frontage on Big Beaver to the north, and Manor Road to the south.

SIDWELL NO: 19-25-226-003, -004, & -005

Comments regarding this proposal may be provided at the public hearing or by contacting the Planning Division at (248) 433-7795.

Andrea Szajnecki, Director
Planning, Building, and Ordinance

Dated: Thursday, April 30th, 2026

NOTE: The Charter Township of Bloomfield will provide necessary, reasonable auxiliary aids and services at all meetings to individuals with disabilities. All such requests must be made at least five days prior to said meeting. Individuals with disabilities requiring auxiliary aids or services should contact Bloomfield Township by writing or calling the following: Planning, Building, and Ordinance Department, P. O. Box 489, Bloomfield Hills MI 48303-0489 - Telephone: 248-433-7795.

CITY CLERK
CITY OF BIRMINGHAM
P.O. BOX 3001, 151 MARTIN STREET
BIRMINGHAM, MI 48012

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION NOTICE OF HEARING
FOR THE ELECTRIC CUSTOMERS OF
DTE ELECTRIC COMPANY
CASE NO. U-22046

- DTE Electric Company requests Michigan Public Service Commission for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority

- The information below describes how a person may participate in this case.

- You may call or write DTE Electric Company, 1 Energy Plaza, Detroit, MI 48226, (800) 477-4747, for a free copy of its application. Any person may review the documents at the offices of DTE Electric Company or on the Commission's website at: https://mi-psc.my.site.com/s/.

- A pre-hearing will be held:

DATE/TIME:	**Wednesday, May 27, 2026 at 9:00 AM**
BEFORE:	**Administrative Law Judge Theresa A.G. Staley**
LOCATION:	Video/Teleconference
PARTICIPATION:	Any interested person may participate. Persons needing any assistance to participate or who are seeking access to the video/teleconference should contact the Administrative Law Judge's secretary at (517) 284-8130 or by email at LARA-MOAHR-PSC@michigan.gov in advance of the hearing.

The Michigan Public Service Commission (Commission) will hold a pre-hearing to consider DTE Electric Company's (DTE Electric) April 28, 2026 application requesting the Commission to: 1) approve an additional annual revenue increase effective as soon as possible in the projected test year, as proposed by DTE Electric; 2) approve DTE Electric's proposed capital structure and return on equity; 3) approve new rates effective as early as March 1, 2027 as proposed of approximately $474.3 million, in order to recover, among other things, DTE Electric's continued infrastructure investments to improve the reliability of the grid as it makes progress toward meeting its own aspiration of reducing power outages by 30% and cutting outage time in half by 2029 and to sustain the reliability of its generation fleet while moving toward cleaner sources of generation, including the associated depreciation and property tax increases; 4) grant DTE Electric's request to approve the Power Supply Cost Recovery base; 5) approve DTE Electric's proposals to implement certain customer rate schedules and tariffs; 6) approve recovery of DTE Electric's investments related to the strengthening of its distribution system and improving reliability; 7) approve recovery of DTE Electric's generation and storage investments; 8) approve the extension, and expansion of the Infrastructure Recovery Mechanism, as proposed by DTE Electric; 9) approve all proposed regulatory accounting treatments, as proposed by DTE Electric; 10) approve the capacity charge calculated by DTE Electric which is based on the methodology approved in Case No. U-21860 and approve the capacity-related costs supported by DTE

Electric, as proposed; 11) grant any other and further relief as requested by DTE Electric and as the Commission may deem suitable and appropriate.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: https://mi-psc.my.site.com/s/. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in PDF format, as an attachment to an email sent to: LARA-MPSC-edockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 284-8090 or by email at: LARA-MPSC-edockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by May 19, 2026. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon DTE Electric Company's attorney, Andrea E. Hayden, One Energy Plaza, Detroit, MI 48226.

The prehearing is scheduled to be held remotely by video conference or teleconference. Persons filing a petition to intervene will be advised of the process for participating in the hearing.

Any person wishing to appear at the hearing to make a statement of position without becoming a party to the case may participate by filing an appearance. To file an appearance, the individual must attend the hearing and advise the presiding administrative law judge of their wish to make a statement of position. Mich Admin Code, R 792.10413 (Rule 413).

Any person wishing to file a public comment may do so by filing a written statement in this docket. The written statement may be mailed or emailed and should reference Case No. **U-22046**. Statements may be emailed to: LARA-MPSC-edockets@michigan.gov. Statements may be mailed to: Executive Secretary, Michigan Public Service Commission, 7109 West Saginaw Hwy., Lansing, MI 48917.

All information submitted to the Commission in this matter becomes public information, thus available on the Michigan Public Service Commission's website, and subject to disclosure. Please do not include information you wish to remain private. For more information on how to participate in a case, you may contact the Executive Secretary at the above address or by telephone at (517) 284-8090.

Requests for adjournment must be made pursuant to Michigan Office of Administrative Hearings and Rules R 792.10422 and R 792.10432. Requests for further information on adjournment should be directed to (517) 284-8130.

The Utility Consumer Representation Fund has been created for the purpose of aiding in the representation of residential utility customers in various Commission proceedings. Contact the Chairperson, Utility Consumer Participation Board, Department of Licensing and Regulatory Affairs, P.O. Box 30004, Lansing, Michigan 48909, for more information.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and Parts 1 & 4 of the Michigan Office of Administrative Hearings and Rules, Mich. Admin Code, R 792.10106 and R 792.10401 through R 792.10448.

U-22046