BIRMINGHAM CITY COMMISSION AGENDA
REGULAR MEETING
APRIL 7, 2025
MUNICIPAL BUILDING, 151 MARTIN
7:30 P.M.

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Therese Longe, Mayor

II. ROLL CALL

Alexandria Bingham, City Clerk

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

ANNOUNCEMENTS

- Happy Birthday Commissioner Schafer

APPOINTMENTS

A. Architectural Review Committee
   1. Charles Heid

   To appoint_____ as a regular member to the Architectural Review Committee to serve a three-year term to expire April 11, 2028.

B. Cablecasting Board
   1. Jim Cleary

   To appoint _____ to the Cablecasting Board as a regular member to serve a three-year term to expire March 30, 2028.

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

V. 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 regular meeting minutes of March 24, 2025.

B. Resolution to approve the warrant list, including Automated Clearing House payments, dated March 27, 2025 in the amount of $1,057,918.42.

C. Resolution to approve the warrant list, including Automated Clearing House payments, dated April 3, 2025 in the amount of $282,336.70.

D. Resolution to approve a special event permit as requested by the City of Birmingham Department of Public Services to hold the Pumpkin Patch event on October 25, 2025 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.

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

F. Resolution to amend the asset allocation table in the Retiree Health Care Fund Investment Policy Statement as recommended by the Retiree Health Care Investment Committee.

G. 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 Bird Street from Pierce Street to Grant Street on Monday, April 21, 2025, at 7:30 P.M.; and

If necessity is determined on April 21, 2025, to meet on Monday, May 5, 2025, at 7:30 P.M., for all 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 Bird Street from Pierce Street to Grant Street.

VI. 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 bhamgov.org/manager.

None.

VII. UNFINISHED BUSINESS

A. Resolution to approve the proposed design for the Willits and Bates Project by converting Bates Street from Maple to Willits down to 2 lanes (Conceptual Recommendation C), to approve that the intersection of Willits and Chester to be designed to remove the current island as indicated in Exhibit A, bump outs to be installed at the intersection of Willits and Bates as shown in Exhibit B and have F&V review if the pedestrian crossing time can be extended further, and to install a bump out at the southeast corner of Willits and Bates intersection with a mountable curb as shown in Exhibit D.

VIII. NEW BUSINESS

A. Public Hearing of Necessity - Wimbleton Phase 1 Project, Contract #6-25(W) Sewer and Water Lateral Special Assessment District (SAD)

1. 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 Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end; 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 1 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 1 Project (Contract #6-25(W)):

   Wimbleton Drive - Woodward Ave. to Oxford Road
   Abbey Street - Wimbleton south to the dead end
   Twin Oaks - Wimbleton north to the dead end

   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 $100.00 per foot of 6" diameter sewer service pipe, $90.00 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 April 21, 2025 and give notice of same.

Sewer and/or Water Lateral

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1925251022	175 ABBEY RD	$3,500.00	-
1925255006	519 WIMBLETON DR	$3,100.00	-
1925256002	111 ABBEY RD	$2,400.00	-
1925177022	999 TWIN OAKS LN	$1,900.00	$0.00 *
1925177023	951 TWIN OAKS LN	$1,000.00	$0.00 *
1925177024	187 WIMBLETON DR	-	-
1925177025	175 WIMBLETON DR	$3,450.00	$4,230.00
1925177026	165 WIMBLETON DR	$3,500.00	$4,140.00
1925177027	155 WIMBLETON DR	$2,800.00	$0.00 *
1925177028	139 WIMBLETON DR	$3,600.00	$5,760.00
1925180003	176 WIMBLETON DR	$2,700.00	-
1925180004	144 WIMBLETON DR	$3,500.00	-
1925251023	147 ABBEY RD	$2,400.00	-
1925254008	205 WIMBLETON DR	$3,100.00	$1,890.00
1925254011	287 WIMBLETON DR	$3,100.00	$1,890.00
1925254012	323 WIMBLETON DR	$3,100.00	$1,890.00
1925254013	341 WIMBLETON DR	$3,100.00	$1,890.00
1925254014	355 WIMBLETON DR	$3,100.00	$1,890.00
1925254015	379 WIMBLETON DR	$3,100.00	$1,890.00
1925254016	421 WIMBLETON DR	$3,100.00	-
1925254017	463 WIMBLETON DR	$3,100.00	-
1925254019	245 WIMBLETON DR	-	-
1925254020	269 WIMBLETON DR	$3,100.00	-
1925256001	129 ABBEY RD	$2,400.00	-
1925257001	202 WIMBLETON DR	-	-
1925257002	244 WIMBLETON DR	$3,000.00	-
1925257003	266 WIMBLETON DR	$3,000.00	-
1925257004	282 WIMBLETON DR	$3,000.00	$3,600.00
1925257005	322 WIMBLETON DR	$3,000.00	$3,600.00
1925257008	380 WIMBLETON DR	$3,000.00	$3,600.00
1925257012	498 WIMBLETON DR	$3,000.00	$3,600.00
1925257018	460 WIMBLETON DR	$3,000.00	-
1925257019	420 WIMBLETON DR	$6,000.00	-
1925257020	444 WIMBLETON DR	$3,000.00	-

1925257023	340 WIMBLETON DR	$3,000.00	-
1925401001	N/A POPPLETON PARK	-	-
1925255007	541 WIMBLETON DR	$3,800.00	$2,430.00
1925258001	520 WIMBLETON DR	$3,000.00	$3,600.00

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

B. Public Hearing of Necessity - Wimbleton Phase 1 Project, Contract #6-25(W) Wimbleton Phase 1 Project for Paving Special Assessment District (SAD)

1. 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 Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end; and

   WHEREAS, The City has previously established a policy requiring converting an unimproved road to an improved road; and

   WHEREAS, The City Commission, after the public hearing, has determined that paving Wimbleton Drive from Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end, 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 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 1 Project (Contract #6-25(W)):

   Wimbleton Drive - Woodward Ave. to Oxford Road
   Abbey Street - Wimbleton south to the dead end
   Twin Oaks - Wimbleton north to the dead end

   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 improvement, new concrete curb and gutter, 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 (calculated at the rate of $171.20 per front footage for paving, $40.00 per square foot to reinstall salvage brick pavers, $75.00 per square year for remove concrete approach or asphalt approach and install 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 April 21, 2025 and give notice of same.

Paving

Sidwell Number	Address	Estimated Total Paving SAD Costs
1925177022	999 TWIN OAKS LN	$5,999.49
1925177023	951 TWIN OAKS LN	$13,013.47
1925177024	187 WIMBLETON DR	$18,768.10
1925177025	175 WIMBLETON DR	$12,203.06
1925177026	165 WIMBLETON DR	$10,702.23
1925177027	155 WIMBLETON DR	$11,733.86
1925177028	139 WIMBLETON DR	$18,522.40
1925180003	176 WIMBLETON DR	$10,311.32
1925180004	144 WIMBLETON DR	$30,852.35
1925251022	175 ABBEY RD	$4,413.47
1925251023	147 ABBEY RD	$26,229.46
1925254008	205 WIMBLETON DR	$10,528.65
1925254011	287 WIMBLETON DR	$11,678.66
1925254012	323 WIMBLETON DR	$10,718.66
1925254013	341 WIMBLETON DR	$10,681.16
1925254014	355 WIMBLETON DR	$11,273.66
1925254015	379 WIMBLETON DR	$9,953.57
1925254016	421 WIMBLETON DR	$9,953.57
1925254017	463 WIMBLETON DR	$17,084.49
1925254019	245 WIMBLETON DR	$11,633.66
1925254020	269 WIMBLETON DR	$10,673.66
1925255006	519 WIMBLETON DR	$15,165.13
1925256001	129 ABBEY RD	$18,049.37
1925256002	111 ABBEY RD	$10,439.70
1925257001	202 WIMBLETON DR	$15,318.98
1925257002	244 WIMBLETON DR	$12,151.34
1925257003	266 WIMBLETON DR	$10,427.63

1925257004	282 WIMBLETON DR	$9,991.07
1925257005	322 WIMBLETON DR	$9,968.57
1925257008	380 WIMBLETON DR	$9,991.07
1925257012	498 WIMBLETON DR	$6,660.87
1925257018	460 WIMBLETON DR	$10,126.07
1925257019	420 WIMBLETON DR	$10,043.57
1925257020	444 WIMBLETON DR	$11,731.07
1925257023	340 WIMBLETON DR	$18,984.65
1925258001	520 WIMBLETON DR	$6,660.87
1925401001	N/A POPPLETON PARK	$22,426.88 *

* City Property – 100% costs paid by the City

C. Resolution to award the N Adams Road Resurfacing Project Contract #12-24(P) to DiPonio Contracting LLC in the amount of $2,289,787.75 plus a 10% construction contingency for a total of $2,518,766.53. 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 DiPonio Contracting LLC. Funding for this project has been budgeted in the following in the following years:

FY 2024/2025

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Major Street Fund	202.0-449.001-981.0100	$1,265,373.75	$126,537.38	$1,391,911.13
Sewer Fund	590.0-537.000-981.0100	$422,683.00	$42,268.30	$464,951.30
Water Fund	591.0-544.000-981.0100	$601,731.00	$60,173.10	$661,904.10

AND

Make a motion adopting a resolution to approve the appropriation and amendment to the fiscal year 2024/2025 budget as follows:

<u>Major Street Fund:</u>
Revenues:
Draw from Fund Balance 202.0-000.000-400.0000 $471,700

Expenditures:
Public Improvement 202.0-449.001-981.0100 $471,700

<u>Sewer Fund:</u>
Revenues:
Draw from Net Position 590.0-000.000-400.0000 $259,230

Expenditures:
Public Improvements 590.0-537.000-981.0100 $259,230

Water Fund:
Revenues:

Draw from Net Position	591.0-000.000-400.0000	$282,310

Expenditures:

Public Improvement	591.0-544.000-981.0100	$282,310

D. Resolution to implement "Option 2", narrowing of lanes via painted striping for safety and speed mitigation on Shirley and Arlington.

E. Resolution to adopt the Aging in Place Citywide Action Plan in its entirety and through this plan, commit to improving the health, safety, welfare and quality of life for older adults in the City of Birmingham.

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.

IX. REMOVED FROM CONSENT AGENDA

X. COMMUNICATIONS

A. Communications regarding the Birmingham Community and Senior Center

XI. REPORTS

A. Commissioner Reports
B. Commissioner Comments
C. Advisory Boards, Committees, Commissions' Reports and Agendas
D. Legislation
E. City Staff
    1. Pesticides

INFORMATION ONLY

XII. ADJOURN

Should you wish to participate in this meeting, 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.

NOTICE: Individuals requiring accommodations, such as mobility, visual, hearing, interpreter or other assistance, 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.

Las personas que requieren alojamiento, tales como servicios de interpretación, la participación efectiva en esta reunión deben ponerse en contacto con la Oficina del Secretario Municipal al (248) 530-1880 por lo menos el día antes de la reunión pública. (Title VI of the Civil Rights Act of 1964).

BIRMINGHAM
A WALKABLE CITY

NOTICE OF INTENTION TO APPOINT TO THE ARCHITECHTURAL REVIEW COMMITTEE

At the meeting of Monday, April 7, 2025, the Birmingham City Commission intends to appoint one regular member to the Architectural Review Committee to serve a three-year term to expire April 11, 2028.

Interested citizens 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, April 2, 2025. These applications will appear in the public agenda for the regular meeting at which time the City Commission will discuss recommendations, and may make nominations and vote on the appointments.

Board Duties

The purpose of the Architectural Review Committee is to review certain public improvement projects initiated by the City and referred to the committee by the City Manager or his/her designee. The Committee is expected to offer opinions as to what physical alterations or enhancements could be made to these projects in order to improve the aesthetic quality of the project and the City's overall physical environment.

Members of this Committee will be appointed by the City Commission. The Committee shall consist of three Michigan licensed architects who reside in the City of Birmingham.

Applicant(s) Presented for City Commission Consideration:

Applicant Name	**Qualifications** Michigan Licensed Architect & resident of the City of Birmingham
Charles Heid	8-year resident and Michigan licensed architect who was awarded a Master of Architecture degree from the University of California – Los Angeles.

SUGGESTED ACTION:

To appoint_____ as a regular member to the Architectural Review Committee to serve a three-year term to expire April 11, 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

Martha Valone <mvalone@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#51]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Fri, Feb 7, 2025 at 2:42 PM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Architectural Review Committee
Specific Category/Vacancy on Board (see below)	Regular Member
Name	Charles Heid
Residential Address	1358 Bowers St Birmingham, MI 48009 United States
Business Address	33717 Woodward Ave Suite 271 Birmingham, MI 48009 United States
Phone Number *	(248) 207-0179
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.**	charlie@heidarchitects.com
Length of Residence	8 years
Occupation	Architect

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

I bring extensive experience working in the commercial development sector as a licensed architect for the past 8 years. My experience ranges from design insight to exhaustive financial assessment for projects as large as $1.7 billion developments in downtown Detroit.

I've reviewed a multitude of City Master Planning agendas in order to promote architectural projects and buildings that enhance the long term goals as well as the immediate aesthetic qualities of community and place.

I realize that the City of Birmingham is undergoing an enormous growth period with significant financial implications. This growth will require a lot of attention to architectural quality and integrity in order to maintain the City as a beacon of Art, culture, and progressive design leadership.

As a local practicing Architect, I would like to help the City Commission and the Design Review Board identify moments or opportunities to improvements existing buildings, infrastructure, and landscape areas throughout the City.

List your related employment experience	2018-present HEID Architects, Birmingham, MI Principal, Owner 2018-2021 Bedrock Detroit, Detroit, MI Senior Project Architect 2016-2018 McIntosh Poris Architects, Birmingham/Detroit, MI Project Architect 2012-2016 Gehry Partners, Los Angeles, CA Intermediate Architect / Project Designer 2011 Behnisch Architekten Intern Designer 2010 John Friedman Alice Kimm Architects (JFAK) Intern Designer 2007-2009 Ghaffari Associates, Chicago
List your related community activities	None to date besides professional appearances with prior employers.
List your related educational experience	2003-2004 The University of Vermont Environmental Engineering Studies 2004-2007 The University of Illinois – Chicago SoA, BA in Architectural Studies 2009-2012 The University of California – Los Angeles AUD, Master of 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? *	Yes

ARCHITECTURAL REVIEW COMMITTEE

Resolution #: 03-101-04

Purpose: To review certain public improvement projects initiated by the city and referred to the committee by the city manager or his/her designee. The committee is expected to offer opinions as to what physical alterations or enhancements could be made to these projects in order to improve the aesthetic quality of the project and the city's overall physical environment.

Members: The committee shall consist of three Michigan licensed architects who reside in the City of Birmingham.

Term: Three years

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Alvarez-Isasi 937 Smith	**Javier**	(718) 490-9833 *jalvarez.isasi@gmial.com*	9/18/2023 Michigan Licensed Architect & Resident of Birmingham	4/11/2026
Bertollini 1275 Webster	**Larry**	(248) 646-6677 *lbertollini@att.net*	6/25/2012 Michigan Licensed Architect & Resident of Birmingham	4/11/2027
Vacated	**4/11/2022**		4/11/2028 Michigan Licensed Architect & Resident of Birmingham	

03-29-04

03-101-04 AD HOC ARCHITECTURAL REVIEW COMMITTEE

Mr. Sabo introduced this resolution and stated that this committee does not create another level of review.

Commissioner Hoff suggested that architects be considered who work in the city as well as live in the city.

Mr. Markus responded that he felt that members who lived in the city would be more practical with the city taxes.

MOTION: Motion by Thorsby, seconded by Plotnik:

Whereas, the Downtown Birmingham 2016 report Process Two, page 45, of the final report dated November 1, 1996 found that certain discretionary aesthetic decisions are, of necessity, made by City staff, and

Whereas, in the discussion of Process Two it was noted that the physical design of certain improvements within the City do not receive the benefit of an eye worthy of a City that considers itself the artistic capital of the region, and

Whereas, in the recommendation of Process Two it was suggested that the position of consulting town architects could be created to advise staff in matters of design review, and

Whereas, the Planning Division recommended, in a report to the City Commission dated February 23, 2004, that an architectural review Ad Hoc committee be created for a one year trial period, and

Whereas, the Birmingham City Commission determined that such an Ad Hoc committee should be created for a one year trial basis for purposes of reviewing certain public improvement projects and offering advisory opinions.

Now Therefore Be It Resolved that an Ad Hoc Architectural Review Committee for review of certain public improvement projects is hereby established and is subject to the following provisions:

1. A three member committee shall consist of three Michigan licensed architects who reside in the City of Birmingham. The members shall be appointed by the City Commission for a term of one year from the date of appointment.

2. The purpose of the Architectural Review Committee shall be to meet in properly noticed public meetings to review certain public improvement projects initiated by the City and referred to the committee by the City Manager or his/her designee. The committee is expected to offer advisory opinions as to what physical alterations or enhancements could be made to these projects in order to

improve the aesthetic quality of the project and the City's overall physical environment.

3. Only those public projects which are initiated after the appointment of all Ad Hoc Architectural Committee members and which are referred by the City Manager or his/her designee shall be reviewed by the committee. Generally, only those projects which are above grade improvements, and/or for which no other appointed board or committee review is conducted, and/or for which no adopted City standard is in place for the proposed improvement would be reviewed by the committee.

4. It is intended that the review process will not cause additional time to be added to the improvement process so as to be seamless in the review of certain public improvement projects. It is anticipated that the committee and appropriate City staff will arrange for an orderly flow of meetings early enough in the improvements process to minimize the added cost of any aesthetic enhancement that may be added to a public improvement. The City Manager or his/her designee will be the final determinant in deciding whether to incorporate the advisory recommendations or not. The determination will be reported to the committee and included in the minutes/records of the committee.

5. The City staff will keep minutes/records of the meetings of the committee which will be available to the public.

6. The committee will operate for a period of one year from the date of the last appointment of the three member committee.

7. During the last month of the operation of the committee the City Manager or his/her designee will file a report with the City Commission as to the operation of the committee so that the Commission may determine if they wish to continue the operation of the committee beyond the one year trial period.

8. The City Clerk is hereby directed to advertise the vacancies on this committee and arrange for the applicants to be interviewed by the City Commission for appointment to this committee.

Mr. Markus responded to Clinton Baller that this could become a standing committee after a trial period. Mr. Baller also suggested that the language include landscape architects as well. Mr. Markus clarified that only city projects which are not already designed by architects or landscape architects would be sent to this review committee.

VOTE: Yeas, 7
Nays, None
Absent, None

ARCHITECTURAL REVIEW COMMITTEE FOR REVIEW OF CERTAIN PUBLIC IMPROVEMENT PROJECTS

Whereas, the Downtown Birmingham 2016 report Process Two, page 45, of the final report dated November 1, 1996 found that certain discretionary aesthetic decisions are, of necessity, made by City staff, and

Whereas, in the discussion of Process Two it was noted that the physical design of certain improvements within the City do not receive the benefit of an eye worthy of a City that considers itself the artistic capital of the region, and

Whereas, in the recommendation of Process Two it was suggested that the position of consulting town architects could be created to advise staff in matters of design review, and

Whereas, the Planning Division recommended, in a report to the City Commission dated February 23, 2004, that an architectural review Ad Hoc committee be created for a one year trial period, and

Whereas, on March 29, 2004, the City Commission created an Architectural Review Ad Hoc committee for a one year trial period for purposes of reviewing certain public improvement projects and offering advisory opinions, and

Whereas the City Commission has determined that the involvement of the Ad Hoc Architectural Review Committee has been beneficial and should be created as a standing committee.

Now Therefore Be It Resolved that an Architectural Review Committee for review of certain public improvement projects is hereby established as a standing committee and is subject to the following provisions:

1. A three member committee shall consist of three Michigan licensed architects who reside in the City of Birmingham. The members shall be appointed by the City Commission for a term of three years fro the date of appointment. The initial terms of the committee shall be one term for one (1) year, one term for (2) years, and one term for three (3) years beginning from the date of appointment. Thereafter, all terms shall be for three years. Members shall serve without compensation and shall serve until replaced. Members may be removed by majority vote of the city commission.
2. The purpose of the Architectural Review Committee shall be to meet in properly noticed public meetings to review certain <u>public</u> improvement projects initiated by the City and referred to the committee by the City Manager or his/her designee. The committee is expected to offer advisory opinions as to what physical alterations or enhancements could be made to these projects in order to improve the aesthetic quality of the project and the City's overall physical environment.

3. Only those public projects which are initiated after the appointment of all Ad Hoc Architectural Committee members and which are referred by the City Manager or his/her designee shall be reviewed by the committee. Generally, only those projects which are above grade improvements, and/or for which no other appointed board or committee review is conducted, and/or for which no adopted City standard is in place for the proposed improvement would be reviewed by the committee.

4. It is intended that the review process will not cause additional time to be added to the improvement process so as to be seamless in the review of certain public improvement projects. It is anticipated that the committee and appropriate City staff will arrange for an orderly flow of meetings early enough in the improvements process to minimize the added cost of any aesthetic enhancement that may be added to a public improvement. The City Manager or his/her designee will be the final determinant in deciding whether to incorporate the advisory recommendations or not. The determination will be reported to the committee and included in the minutes/records of the committee.

5. The City staff will keep minutes/records of the meetings of the committee which will be available to the public.

BIRMINGHAM
A WALKABLE CITY

NOTICE OF INTENTION TO APPOINT TO THE CABLECASTING BOARD

At the regular meeting of Monday, April 7, 2025 the Birmingham City Commission intends to appoint the following positions to the Cablecasting Board:

- One regular member to serve a three-year term to expire March 30, 2028
- One alternate member to serve a three-year term to expire March 30, 2028
- One regular member to serve the remainder of a three-year term to expire March 30, 2027
- One regular member to serve the remainder of a three-year term to expire March 30, 2026

Interested citizens 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, April 2, 2025. These documents will appear in the public agenda for the regular meeting at which time the City Commission will discuss recommendations, and may make nominations and vote on appointments.

Board Duties

- Advise the municipalities on matters relating to cable communications
- Monitor the franchisee's compliance with the franchise agreement and the cable communications ordinance
- Conduct performance reviews as outlined in Chapter 30, Article VII of the city code
- Act as liaison between the franchisee and the public
- Hear complaints from the public and seek their resolution from the franchisee
- Advise the various municipalities on rate adjustments and services according to the procedure outlined in Chapter 30, Article VI
- Advise the municipalities on renewal, extension or termination of a franchise
- Appropriate those moneys deposited in an account in the name of the Cablecasting Board by the member communities
- Oversee the operation of the education, governmental and public access channels
- Apprise the municipalities of new developments in cable communications technology
- Hear and decide all matters or requests by the operator (Comcast Cablevision)
- Hear and make recommendations to the municipalities of any request of the operator for modification of the franchise requirement as to channel capacity and addressable converters or maintenance of the security fund
- Hear and decide all matters in the franchise agreement which would require the operator to expend moneys up to fifty thousand dollars
- Enter into contracts as authorized by resolutions of the member municipalities
- Administer contracts entered into by the board and terminate such contracts

Applicant Name	**Qualifications** Applicants must be residents of the City of Birmingham.
Jim Cleary	30+ year resident and current board member since 2020.

SUGGESTED ACTION:

To appoint _____ to the Cablecasting Board as a regular member to serve a three-year term to expire March 30, 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

Martha Valone <mvalone@bhamgov.org>

FromClerksOffice- APPLICATION FOR CITY BOARD OR COMMITTEE [#54]

1 message

'Wufoo' via Clerks Office <ClerksOffice@bhamgov.org> Fri, Feb 28, 2025 at 10:12 AM
Reply-To: no-reply@wufoo.com
To: clerksOffice@bhamgov.org

Board/Committee of Interest	Birmingham Area Cable Board
Specific Category/Vacancy on Board (see below)	committee member
Name	Jim Cleary
Residential Address	2001 Fairway Birmingham, Michigan 48009 United States
Business Address	Retired
Phone Number *	(248) 840-8416
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.	clearyjp@gmail.com
Length of Residence	30 + years
Occupation	retired college professor
Reason for Interest: Explain how your background and skills will enhance the board to which you have applied.	I have been a member of the BACB since 2020 and I would like to continue to serve on the committee.
List your related employment experience	I am a retired Marketing professor
List your related community activities	Served on the Birmingham Area Cable Board since 2020.
List your related educational experience	BBA, University of Notre Dame, 1968 MBA, Central Michigan University, 1986
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

3B

BIRMINGHAM
A WALKABLE CITY

CABLECASTING BOARD

Chapter 30 - Section 30-226 - Birmingham City Code
Meeting Schedule: 3rd Wednesday of the month - 7:45 A. M

The Board shall consist of 12 members, which includes 7 members who are residents of the City of Birmingham. Each member community shall also appoint one alternative representative. (30-226)

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Abraham 898 Arlington	**George**	(248) 642-1257 *georgeabrahamjr@outlook.com*	5/14/2018 Birmingham resident	3/30/2027
Brown 662 Wallace St	**Deanna**	(248) 705-8371 *deannadbrown@comcast.net*	2/27/2023 Birmingham Resident	3/30/2026
Cleary 2001 Fairway	**Jim**	(248) 840- 8416 *clearyjp@gmail.com*	12/21/2020 Birmingham resident	3/30/2025
Eick 559 Greenwood	**R. David**	(248) 231-8067 *eickhouse@comcast.net*	12/14/2015 Birmingham resident	3/30/2027
Shand 1645 Buckingham Ave.	**Donovan**	(248) 330-0747 *dgshand@gmail.com*	12/4/2017 Birmingham resident	3/30/2026

For Cable Inquires:
Cathy White 248-336-9445
P.O. Box 165, Birmingham, MI 48012

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Vacated	**3/30/2018**			3/30/2027
			Birmingham resident	
Vacated	**3/30/2022**			3/30/2028
			ALTERNATE	
Vacated	**3/30/2023**			3/30/2026
			Birmingham Resident	

For Cable Inquires:
Cathy White 248-336-9445
P.O. Box 165, Birmingham, MI 48012

Sec. 30-226. Creation and membership of board.

(a) The Birmingham City Commission and the Village Councils of Beverly Hills, Bingham Farms, and Franklin have established a cablecasting board. The board shall continue to consist of 12 members, seven who are residents of the City of Birmingham who shall be appointed by the City of Birmingham, four who shall be residents of Beverly Hills who shall be appointed by that Village, one who shall be a resident of Bingham Farms who shall be appointed by that Village, and one who shall he a resident or appointed official of the Village of Franklin who shall he appointed by the Village. Each member shall also appoint one alternate representative. Members of the board shall serve without compensation and for such terms as their respective authorities shall determine. The City of Birmingham and the villages shall also have sole power to remove and/or replace their respective appointees.

(b) Each of the board's member communities is encouraged to appoint an elected or appointed official of that community to act as a liaison to the board, to attend board meetings, and to participate in board discussions.

(c) The Birmingham School District and the Baldwin Library are each also encouraged to appoint a representative to act as a liaison to the board and to participate in board discussions regarding matters relevant to their respective interests and constituencies.

(d) Seven members of the board shall constitute a quorum and the affirmative vote of a majority of the full board shall be required for board action.

(Ord. No. 1540, § 2.2909, 11-9-92; Ord. No. 1724, 3-20-00; Ord. No. 1757, 6-11-01)

Birmingham City Commission Minutes
March 24, 2025
Municipal Building, 151 Martin
7:30 p.m.
Vimeo Link: https://vimeo.com/1069016786

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Therese Longe, Mayor, opened the meeting with the Pledge of Allegiance.

II. ROLL CALL

City Clerk Bingham called the roll.

Present: Mayor Longe
MPT Baller
Commissioner Haig
Commissioner Host
Commissioner Long

Absent: Commissioner Emerine
Commissioner Schafer

Staff: City Manager Ecker; City Clerk Bingham, Finance Director Designee Chavez, Human Resources Manager Ciluffo, Assistant City Manager Clemence, Library Director Craft, Planning Director Dupuis, Assistant City Manager Fairbairn, Police Captain Kearney, City Attorney Kucharek, Parks and Recreation Manager Laird, Human Resources Generalist Matti, Fire Marshall Scaife, Fire Chief Wells, Department of Public Services Director Zielinski, Building Official Designee Zielke

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

Announcements

Oakland County Treasury Foreclosure Prevention

Appointments

03-046-25 Appointment of Mary Chavez to Finance Director/Treasurer

MOTION: Motion by Haig:
To confirm the City Manager's appointment of Mary Chavez to the position of Finance Director/Treasurer effective on March 31, 2025, to direct the Clerk to administer the oath of office, and to authorize Mary Chavez to be the primary authorized signer on all the City's bank accounts.

DRAFT

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-047-25 Planning Board

Scott Clein was interviewed for the appointment.

MOTION: Motion by Haig:
To appoint Scott Clein as a regular member to serve a three-year term to expire March 28, 2028.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-048-25 Planning Board

Robert Boyle was interviewed for the appointment.

MOTION: Motion by Long:
To appoint Robert Boyle as a regular member to serve a three-year term to expire March 28, 2028.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-049-25 Planning Board

Duncan Currie was interviewed for the appointment.

MOTION: Motion by Host:
To appoint Duncan Currie as an alternate member to serve the remainder of a three-year term to expire March 28, 2027.

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VOICE VOTE: Ayes, MPT Baller
Commissioner Emerine
Commissioner Host
Commissioner Haig
Commissioner Schafer
Mayor Longe
Commissioner Long

Nays, None

03-050-25 Multi-Modal Transportation Board

Z. Rosie Koul was interviewed for the appointment.

MOTION: Motion by Haig:
To appoint Z. Rosie Koul as a regular member to the Multi-Modal Transportation Board to serve the remainder of a three-year term to expire March 24, 2028.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-051-25 Parks and Recreation Board

Anne Lipp was interviewed for the appointment.

MOTION: Motion by Long:
To appoint Anne Lipp as a regular member to the Parks and Recreation Board to serve a three-year term to expire March 13, 2028.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-052-25 Parks and Recreation Board

Narlu Castellano was interviewed for the appointment.

MOTION: Motion by Baller:

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To appoint Narlu Castellano as an alternate member to the Parks and Recreation Board to serve a three-year term to expire March 13, 2028.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

Jessica Einstein and Jerome Dixon were not interviewed, Jack Burns and Sandy Labovitz were interviewed for the Parks and Recreation Board but not appointed.

CC Bingham swore in the present appointees.

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

Danielle Rumpel, Baldwin Library Board President, commented regarding the City's administrative service fees for Baldwin and the need for the City to provide financial information to Baldwin prior to Baldwin's board meetings.

V. CONSENT AGENDA

03-053-25 Consent Agenda

MOTION: Motion by Haig, seconded by Long:
To move the consent agenda as written with the exception of Items B, E, G, and J.

ROLL CALL VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

A. Resolution to approve the City Commission workshop meeting minutes of March 10, 2025.

C. Resolution to approve the warrant list, including Automated Clearing House payments, dated March 13, 2025 in the amount of $2,595,263.83.

D. Resolution to approve the warrant list, including Automated Clearing House payments, dated March 20, 2025 in the amount of $1,533,958.95.

F. Resolution to approve the Interlocal Agreement between the City of Birmingham and

Oakland County and authorize the Mayor and City Manager to sign the agreement on behalf of the city.

H. Resolution to set a public hearing date of April 21, 2025 to consider the Special Land Use Permit for 1740 W. Maple to transfer ownership and grant a Special Land Use Permit to the proposed new owner, 10 & Main OOOM, LLC.

I. Resolution demonstrating support of the Derby Road bridge project committing to a 50% match to the cost of replacement, and submittal of an application to the Michigan Department of Transportation for fiscal year 2028 funding assistance under their Local Bridge Program.

K. Resolution to approve the purchase of a new 2025 TORO Multi Pro 5800-G 4WD Sprayer Cart from Spartan Distributors located at 1050 Opdyke Road, Auburn Hills, MI 48326, through the Intergovernmental Cooperative Purchasing Agreement, OMNIA Contract #2017025, in the amount not to exceed $75,549.64 upon the execution of a signed contract. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. Funds for this purchase are available in the FY 2024-2025 account Auto Equipment FY 2024-2025 account #661.0-441.006.971.0100.

L. Resolution approving the request for additional design and construction administration services with Grissim, Metz, Andriese for the amount of $108,200. Funds are available in the Park System Construction Fund, Land Improvements Account #408.2-901.751-979.0000. Further, to authorize the Mayor and City Clerk to sign the agreement addendum on behalf of the City.

M. Resolution to accept the resignation of Julie Sloan from the Birmingham Shopping District Board, to thank her for her service and to direct the City Clerk to begin the process of filling the vacancy.

03-054-25 Meeting Minutes – March 10, 2025 (Item B)

Commissioner Haig pulled Item B and offered a clarification regarding the referenced senior millage.

Commissioner comments were as follows:

- The referenced senior millage focused more on infrastructure than services.
- If a change to the disbursement process were to be contemplated, that would necessitate a discussion.

MOTION: Motion by Haig, seconded by Host:
To approve the City Commission regular meeting minutes of March 10, 2025 as written.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-055-25 Woodward Ave. Service Drive Parking Restrictions (Item E)

Commissioner Haig pulled Item E and noted the City's efforts towards reducing noise along Woodward.

Commissioner comments were as follows:

- The Multi-Modal Transportation Board and Police Department are working to reduce noise along Woodward within the constraints of what the City controls.
- This was a successful pilot program in 2024, and this motion would make these changes permanent.
- The Police Chief and Police Department deserved thanks for their efforts in this regard.

MOTION: Motion by Haig, seconded by Long:
To permanently enact Woodward Ave. service drive parking restrictions as recommended by the Multi-Modal Transportation Board as follows:

1. 15-Minute Parking, 7 PM to 6 AM, Friday through Sunday:
   Southbound Woodward
   - Oakland to Brown
   - Lincoln to Davis
   - North edge of 33301 Woodward to Bird

   Northbound Woodward
   - Elm to Maple
   - Emmons to S. Adams
   - S. Worth to the south edge of 34164 Woodward
   - North edge of 35032 Woodward to Lawndale
2. 15-Minute Parking, 7 PM to 6 AM, Friday through Sunday:
   - Northbound Woodward from Sheffield to Emmons
3. 15-Minute Parking, 7 PM to 6 AM, Friday through Sunday:
   - 30-minute parking: Southbound Woodward from Brown to Hazel

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-056-25 Green Kitchen, LLC, doing business as Bloom, is requesting approval to transfer ownership and Location of a Class C License from Tiger Hospitality Holdings, LLC, formerly located at 27522 Northwestern Hwy, Southfield MI, to Green Kitchen which will be located at 239 N. Old Woodward Ave, Birmingham, MI. (Item G)

Commissioner Haig pulled Item G, recommending a small change in verbiage.

MOTION: Motion by Haig, seconded by Long:
To authorize the City Clerk to complete the Local Approval Notice at the request of Green Kitchen LLC, to approve the request for a transfer of ownership of the Class C liquor license, with Sunday sales from Tiger Hospitality Holdings LLC, formerly located at 27522 Northwestern Hwy, Southfield, MI to Green Kitchen that will be located at 239 N Old Woodward Ave, Birmingham, Oakland County, MI, changing 'restaurant' in the report to 'food and drink establishment' to eliminate potential future ambiguity.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

03-057-25 Birmingham Well Sites Park Designations (Item J)

Commissioner Host pulled Item J, recommending the Parks and Recreation Department consider name changes to the listed parks.

MOTION: Motion by Host, seconded by Long:
To designate the following "well sites" as parks: Baldwin Well, Derby Tank, Pumphouse Park, Redding Well, and West Lincoln Well sites.

VOICE VOTE: Ayes, MPT Baller
Commissioner Host
Commissioner Haig
Mayor Longe
Commissioner Long

Nays, None

VI. CITY MANAGER'S REPORT

CM Ecker and HRM Ciluffo presented the report. CM Ecker answered informational questions from the Commission.

Commissioners raised the following points during discussion:

- There were some concerns about the content of a recent City email regarding the proposed recreation center. The use of photos was questionable, and some of the statements presented as factual were either subjective or speculative.
- There is a need for community education. A year into this process, some members of the public are still confused about the general contours of the project. This indicates that more communication needs to occur.
- Educational campaigns regarding this project and containing validated information are appropriate, and should increase in frequency.

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- The Commission could review communications to the public if deemed appropriate.
- Given some of the emotions around this project, the City's communications should be kept as careful, simple, and neutral as possible.

VII. UNFINISHED BUSINESS

Schematic Design Progress and Test Fits - Birmingham Community and Senior Center

CM Ecker introduced the item, and Jim Stock of Neumann Smith and CM Ecker presented the item.

Commissioners raised the following points during discussion:

- The SCC felt option one was a more efficient use of space and more appropriate for Next's preferred uses.
- Changes to St. James Park could occur in conjunction with this project. Neighbors to the Park should be consulted on potential changes.
- While members of the SCC and the public raised some concerns about the test fit, it remained important to remember this is just one more part of a process that allows for revisions and modifications.
- Option one seemed to fit better in the neighborhood context.
- Toilets could be added to option one near the office area for shared Next/staff use, as well as a possible separate entrance for Next on the east side. The Next fitness room and the multipurpose room could be swapped in order to locate all of Next's walls closer together.
- Pool option three seemed more appropriate.
- If St. James Park is condensed to accommodate this building, it should be confirmed that baseballs would still be unlikely to affect the residential neighbors.
- Avoiding unmonitored space in the building would be necessary. Using keyfobs for Next entrances would be inappropriate.
- Resident comments regarding the pool have been valuable.
- The distance between accessible parking and the Midvale entrance is 180 feet. At the new facility, concerns about the distance between accessible parking and the entrance should not arise if it is under 180 feet.
- The proposal to have a rooftop deck raises some concerns.
- A local elementary school kitchen is 300 square feet. The new facility's proposed kitchen could likely be smaller.
- There are plans for stormwater retention on site which would help mitigate the loss of 42 feet of permeable space in St. James Park.
- The City may be aiming to fit too many features or programs into the available space.
- Concerns about the methodicalness of this process remain.
- The City must evaluate whether a new facility is necessary for service delivery, since service delivery is the goal.
- Using a small portion of St. James Park for parking had been contemplated and approved for a different project in the past.
- Some Next users would prefer to stay at Midvale, or would prefer to have their own space, as opposed to a shared space at this facility.

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Public Comment
David Bloom commented regarding community use of the facility and supported the project's review by the Planning Board.

Camille Jayne, Board President of The Community House, supported Next having one location to house most of its services and opposed this potential project having 'community' in the title.

Christine Allen, board member of Next, commented that Next board members communicate on behalf of Next's membership, that the kitchen would be for community use in addition to Next use, and that Next should have one location to house most of its services.

Frank Pisano supported the third pool option and increased resident education about the project overall.

Mike Clift supported a covered entrance to the facility.

YMCA/Next – Senior Services

CM Ecker introduced the item, and Patrick McGow of Miller Canfield and CM Ecker presented the item. Mr. McGow and staff answered informational questions from the Commission.

Commissioners raised the following points during discussion:

- It may be appropriate to state within the ballot question that Next and the YMCA are involved in this project.
- It may be appropriate to mention interest or an estimated total cost for the bond.
- Any time after the first ten years, bonds can be refinanced and/or paid off early.
- The presently proposed bond language would allow the City to replace the tenants of the building as appropriate.
- Since Next and the YMCA, as two private non-profit organizations, would have use of this building, there would need to be a public hearing regarding the bond issue. That public hearing should be added to the project timeline.
- The City's recent senior millage should be factored in more clearly to the discussion of funding for this project.
- The average Birmingham resident may see a slight decrease in taxes, even with the bond issue, if certain changes to the senior millage, Library levy, and City's operating levy are effectuated.
- It is likely the City will require a Headlee override in the future, and this project and other capital projects should be considered within that context.
- Concerns were shared about the City administration's approach to communication with the Library, and the City administration's approach to communication with the Commission and the public about the Library.
- All parties must figure out how to negotiate on funding collaboratively in order to reach the most optimal outcome for all involved.
- A 20 year bond would be more favorable than a 25 year bond.
- The 2016 Commission and City administration deserved commendation for its fiscal stewardship vis-a-vis the Library renovation project.
- The interlocal agreements should be discussed in the future.

- 'Community' could be changed to 'recreation' in the working title of the 400 E. Lincoln project.

The Commission motioned to take a five minute recess, and returned from recess.

Public Comment
LD Craft commented regarding the Baldwin Library's status as a Public Act 164 library, and the Library's plans to formalize its establishment.

Ms. Rumpel commented regarding how potential funding decreases by the City would affect the Baldwin Library.

Mr. Pisano commented that in addition to the City's potential funding decrease for the Library, a recent Presidential Executive Order would further limit library funding.

Melissa Mark and Jim Suhay commented regarding the 1998 millage for the Library, and the subsequent use of those funds.

Wendy Friedman commented regarding the Library's integration with the community.

Karen Rock supported the previous public comments regarding the Library, and supported good communication between the Library and the City.

George Dilgard supported negotiations between the City and the Library, supported a 25 year bond for the facility at 400 E. Lincoln, and supported the project at 400 E. Lincoln overall.

Mr. Bloom commented regarding the Library, the potential bond vote timing and language, and the potential financing of the project at 400 E. Lincoln.

Ms. Koul opposed the project at 400 E. Lincoln, citing perceptions of insufficient public support, Next's responsibility to maintain its own financial solvency, and perceived need for funds to be spent elsewhere in the City.

Kristy Barrett supported the other public comments given.

VIII. NEW BUSINESS

03-058-25 Public Hearing for 225 E. Maple – Social Kitchen & Bar – Special Land Use Permit Amendment, Final Site Plan & Design Review

Mayor Longe opened the public hearing at 11:40 p.m. and noted a request to postpone.

Seeing no public comment, the Mayor closed the public hearing at 11:41 p.m.

MOTION: Motion by Long, seconded by Host:
To postpone the public hearing date to April 21, 2025 to consider the Special Land Use Permit Amendment, Final Site Plan & Design Review application for 225 E. Maple, to permit the replacement of the current outdoor dining patio on the via (east) side of the building with an

aluminum pergola with roof and enclosure systems and to permit a bistro with 76 outdoor dining seats.

VOICE VOTE: Ayes, Commissioner Host
MPT Baller
Mayor Longe
Commissioner Long
Commissioner Haig

Nays, None

03-059-25 Public Hearing to amend Chapter 126, Zoning, Article 4, Accessory Structure Standards, Section 4.03, to add provisions for standby generators

Mayor Longe opened the public hearing at 11:42 p.m.

PD Dupuis presented the item

The Mayor closed the public hearing at 11:46 p.m.

Staff answered informational questions from the Commission.

Commissioner raised the following points during discussion:

- The City should recommend that residents take steps to reduce the entry of generator exhaust into buildings when a generator is in operation.
- This is an effort to reduce the burden generators can place on emergency services, and to improve residents' health, safety, and welfare.

MOTION: Motion by Haig, seconded by Long:
To adopt an ordinance to amend Chapter 126, Zoning, Article 4, Accessory Structure Standards, Section 4.03, to add provisions for standby generators.

VOICE VOTE: Ayes, Commissioner Host
MPT Baller
Mayor Longe
Commissioner Long
Commissioner Haig

Nays, None

Commission Items for Future Discussion

Commissioner Haig reiterated that interlocal agreements should be further discussed at a future meeting.

Commission Discussion On Items From A Prior Meeting

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IV. REMOVED FROM CONSENT AGENDA

X. COMMUNICATIONS

A. Communications regarding the Birmingham Community and Senior Center
B. Communication regarding parks
C. Communication regarding roads

XI. REPORTS

A. Commissioner Reports
    1. Notice of Intention to appoint to the Building Trades Appeals
    2. Notice of Intention to appoint to the Brownfield Redevelopment Authority
    3. Notice of Intention to appoint to the Business Shopping District
B. Commissioner Comments

Commissioner Host said he was sad that most who made public comment had to wait until discussion of the relevant item, which occurred later in the meeting.

Commissioners Long, Haig, and MPT Baller supported more actively encouraging student representatives on boards to attend, and potentially replacing student representatives who are regularly absent.

C. Advisory Boards, Committees, Commissions' Reports and Agendas
D. Legislation
E. City Staff
    1. Planning Department Annual Report

Commissioner comment was as follows:

- The graphics were impressive.

    2. Next Bylaws and Financial Information

INFORMATION ONLY

XII. ADJOURN

The Commission motioned to adjourn at 12:00 a.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

DRAFT

City of Birmingham
Warrant List Dated 03/27/2025

Meeting of 04/07/2025

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
302767	*	005430	21ST CENTURY MEDIA- MICHIGAN	951.50
302768	*	005123	2400 LINCOLN, LLC	23,610.83
302769		BDREFUND	420 E FRANK ST LLC	1,000.00
302770		BDREFUND	420 E FRANK ST LLC	15,000.00
302771	*	000855	48TH DISTRICT COURT	484,249.00
302772	*	000855	48TH DISTRICT COURT	500.00
302773	*	009406	911 MECHANICAL	1,425.00
302774		010028	A.M. LEONARD INC	234.84
302775		BDREFUND	AB CEMENT CO	100.00
302776		009346	ACCUFORM PRINTING & GRAPHICS, INC	203.50
302777	*	008872	ACE DOOR COMPANY	390.00
302778	*	008106	ACUSHNET COMPANY	430.02
302779	*	008015	ALL PHASE LOCK AND SAFE	130.00
302780		009813	ALMA TIRE SERVICE INC	51.00
302781		MISC	AMERICAN SYRIAN ARAB CULTURAL ASSOC	115.00
302782	*	006759	AT&T	74.28
302783	*	006759	AT&T	210.73
302784	*	006759	AT&T	210.73
302785	*	006759	AT&T	893.74
302786	*	003703	AT&T MOBILITY	1,221.19
302787	*	009541	AUGUST, LLC	2,547.98
302788	*	008165	B5 INVESTMENTS, LLC	338.77
302789		BDREFUND	Ball Construction	100.00
302790	*	010026	BCT DESIGN GROUP	40,620.00
302791		001282	BEAR PACKAGING & SUPPLY INC	445.12
302792		003526	BOUND TREE MEDICAL, LLC	277.78
302793		BDREFUND	BRAUN CONSTRUCTION GROUP	400.00
302794		BDREFUND	BRICKWORKS PROPERTY RESTORATION	100.00
302795	*	006953	JACQUELYN BRITO	52.99
302796		MRREFUND	BRUCE II, THOMAS E	100.00
302797		003786	C & G PUBLISHING INC.	352.50
302798		BDREFUND	C.R. ENTERPRISES LLC	2,500.00
302799		MISC	CAMERON CRAWFORD	1,497.17
302800	*	009078	CANON SOLUTIONS AMERICA INC	385.25
302801		007732	CAPITAL TIRE, INC.	720.00
302802		000595	CARRIER & GABLE INC	142.15
302803		BDREFUND	CHRISTOPHER ENRIGHT ARCHITECT	200.00
302804	*	000627	CONSUMERS ENERGY	4,732.15
302805		004386	CYNERGY PRODUCTS	576.00
302806		BDREFUND	D'ANGELO CONSTRUCTION CORP	5,000.00
302807		BDREFUND	D'ANGELO CONSTRUCTION CORP	1,000.00
302808	*	009549	DAN'S LAWN MAINTENANCE	3,700.00

City of Birmingham
Warrant List Dated 03/27/2025

Check Number	Early Release	Vendor #	Vendor	Amount
302809		000233	DEAN SELLERS	643.88
302810		BDREFUND	DELLA CASA CEMENT	1,700.00
302811	*	000179	DTE ENERGY	85.03
302812	*	000180	DTE ENERGY	9,310.93
302813		004493	ELITE IMAGING SYSTEMS, INC	1,127.98
302814		001495	ETNA SUPPLY	2,310.00
302815		BDREFUND	EVERDRY WATERPROOFING	200.00
302816		000585	FARMINGTON COMM. LIBRARY	8,419.50
302817	*	007136	FERGUSON ENTERPRISES, INC.	290.55
302818		BDREFUND	FERLITO CONSTRUCTION	100.00
302819	*	009307	FLS PROPERTIES #5, LLC	55,386.14
302820	*	009556	MADELINE GOLD	234.00
302821	*	004604	GORDON FOOD	130.41
302822	*	008007	GREAT LAKES WATER AUTHORITY	8,528.10
302823		BDREFUND	GREAT OAKS LANDSCAPE	1,400.00
302824		BDREFUND	HENTGEN BUILDING CO.	500.00
302825	*	001956	HOME DEPOT CREDIT SERVICES	1,516.20
302826		BDREFUND	HRH CONSTRUCTION LLC	2,000.00
302827		BDREFUND	JASON BARNUM	200.00
302828	*	008413	KARANA REAL ESTATE, LLC	982.47
302829		BDREFUND	KING, ANDRE	100.00
302830		000797	THE LIBRARY NETWORK	1,725.81
302831		BDREFUND	M&D Woodward LLC	100.00
302832		001669	MACP	890.00
302833		BDREFUND	MARK A VINCENT	100.00
302834		BDREFUND	MARTINO ENTERPRISES INC	200.00
302835	*	009546	MASTERS TELECOM	64.30
302836		BDREFUND	MHRAC INC	200.00
302837	*	009200	MICHAEL MORRISON	900.00
302838	*	009143	MICHAEL SHUKWIT	500.00
302839		000230	MIKE SAVOIE CHEVROLET INC	1,429.65
302840	*	002964	MR. GAS INC	557.00
302841		BDREFUND	N A MANS & SONS INC	1,000.00
302842	*	001854	NATIONAL RECREATION & PARK	700.00
302843		BDREFUND	NELSON BROS SWR & PLBG SVC INC	1,000.00
302844		005431	NILFISK, INC.	203.04
302844	*	005431	NILFISK, INC.	323.58
302845		BDREFUND	NU PIPE LLC	13.18
302846	*	008712	OAKLAND COUNTY HEALTH DIVISION	69.00
302847	*	009478	ODP BUSINESS SOLUTIONS, LLC	76.28
302848		006785	OVERDRIVE, INC.	10,041.07
302848	*	006785	OVERDRIVE, INC.	4,404.56
302849		BDREFUND	PELLA WINDOWS & DOORS, INC.	500.00

City of Birmingham
Warrant List Dated 03/27/2025

Meeting of 04/07/2025

Check Number	Early Release	Vendor #	Vendor	Amount
302850		009612	PLAYAWAY PRODUCTS LLC	74.99
302851	*	009367	PRECISION PLUMBING	1,051.00
302852		009951	PRINTMASTERS	56.00
302853		BDREFUND	PRISM	200.00
302854		BDREFUND	PURE ENERGY WINDOW	500.00
302855	*	002786	JOHN E. REID & ASSOC. INC	580.00
302856		BDREFUND	RENEWAL BY ANDERSEN	200.00
302857	*	010027	RESOLUTE CAREER COACHING, LLC.	6,000.00
302858		BDREFUND	ROGERS, JEFFREY KEITH	1,000.00
302859		BDREFUND	RYAN D MEANY	100.00
302860		BDREFUND	SHARP CONCEPTS	500.00
302861	*	007114	SHERWIN WILLIAMS COMPANY	224.86
302862	*	007142	SHERWIN-WILLIAMS COMPANY	82.07
302863		BDREFUND	SOUFAN, YAZMIN	300.00
302864		BDREFUND	STRYKER FAMILY HOMES	100.00
302865		BDREFUND	SW LUXURY HOMES	300.00
302866		BDREFUND	TEMPLETON BUILDING COMPANY	2,300.00
302867		009608	THE ROSSOW GROUP	205.00
302868	*	000158	VERIZON WIRELESS	308.16
302869	*	000158	VERIZON WIRELESS	98.48
302870		BDREFUND	WALLSIDE INC	500.00
302871		BDREFUND	WALTON, WILLIAM N	100.00
302872	*	002171	WEISSMAN'S COSTUMES	298.47
302873		009026	WELLS FARGO VENDOR FIN SERV	57.52
302873	*	009026	WELLS FARGO VENDOR FIN SERV	710.95
302874		BDREFUND	WILLIAM J CURRIER	900.00
302875	*	007620	WJE-WISS, JANNEY, ELSTNER ASSOC.INC	31,350.00
			SUBTOTAL PAPER CHECK	$765,049.38
ACH TRANSACTION				
12896	*	007345	BEVERLY HILLS ACE	8.09
12897		009183	BOB ADAMS TOWING	100.45
12898	*	003282	LISA MARIE BRADLEY	420.50
12899		007875	CANFIELD EQUIPMENT SERVICE INC.	186.50
12900		009352	CHRISTINA WOODS	112.00
12901	*	009122	CLAIRE CHUNG	304.75
12902		000605	CINTAS CORPORATION	195.69
12903		009840	THOMAS S. KLISE COMPANY, INC	286.18
12904	*	009195	CROWN CASTLE FIBER LLC	5,390.35
12905		009024	D.M. BURR GROUP	4,891.29
12906	*	009873	D/A CENTRAL INC.	1,626.30
12907		009181	DELTA TEMP SERVICES INC	11,000.00
12908	*	000565	DORNBOS SIGN & SAFETY INC	921.47
12909	*	001230	FIRE SYSTEMS OF MICHIGAN LLC	300.75

City of Birmingham
Warrant List Dated 03/27/2025

Meeting of 04/07/2025

Check Number	Early Release	Vendor #	Vendor	Amount
12910		000217	FOUR SEASON RADIATOR SERVICE INC	175.00
12911	*	009387	FRAIBERG & PERNIE PLLC	6,338.54
12912		007927	MICHELLE HOLLO	393.75
12913		000331	HUBBELL ROTH & CLARK INC	86,273.90
12913	*	000331	HUBBELL ROTH & CLARK INC	4,780.24
12914	*	003824	THOMAS I. HUGHES	95.39
12915		000261	J.H. HART URBAN FORESTRY	59,745.10
12916		000186	JACK DOHENY COMPANIES INC	895.89
12917	*	002576	JAX KAR WASH	141.00
12918	*	003458	JOE'S AUTO PARTS, INC.	519.51
12919	*	008827	KANOPY, INC	482.80
12920	*	005550	LEE & ASSOCIATES CO., INC.	178.00
12921	*	003527	LOWER HURON SUPPLY CO INC	1,053.35
12922		009663	MACQUEEN EQUIPMENT, LLC	831.68
12923		001417	MAJIK GRAPHICS INC	245.00
12924		002013	MIDWEST TAPE	11,662.07
12925		008336	NBS COMMERCIAL INTERIORS	856.00
12926	*	006359	NYE UNIFORM COMPANY	2,421.50
12927	*	006853	PAUL C SCOTT PLUMBING INC	361.00
12928	*	009820	PLUNKETT COONEY	1,242.50
12929	*	005344	RESERVE ACCOUNT	8,000.00
12930	*	001181	ROSE PEST SOLUTIONS	82.00
12931	*	003785	SIGNS-N-DESIGNS INC	1,100.00
12932		000254	SOCRRA	79,105.00
12933		009746	THE SAFETY COMPANY, LLC	52.80
12934		005861	UNIQUE MGMT SERVICE, INC	92.70
			SUBTOTAL ACH TRANSACTION	$292,869.04
			GRAND TOTAL	$1,057,918.42

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



Mark Gerber
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 04/03/2025

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
302876		BDREFUND	123 NET, INC	100.00
302877	*	006965	7UP DETROIT	241.40
302878		BDREFUND	ABRO DESIGN GROUP INC	500.00
302879	*	009346	ACCUFORM PRINTING & GRAPHICS, INC	1,468.00
302880	*	MISC	ACRISURE	517.63
302881		006638	ACTION MAT & TOWEL RENTAL, INC	70.72
302882	*	008106	ACUSHNET COMPANY	536.86
302883		004279	AJAX MATERIALS CORPORATION	6,727.05
302884		BDREFUND	ALISON RENEE ORLANS TRUST	1,560.00
302885		BDREFUND	ALLEN WOOD CONSTRUCTION	1,000.00
302886		006324	ALTA CONSTRUCTION EQUIPMENT LLC	315.22
302887		BDREFUND	AMERICAN STANDARD ROOFING	200.00
302888		000167	ANDERSON ECKSTEIN WESTRICK INC	2,400.00
302889		BDREFUND	ANTO GLASS BLOCK INC	100.00
302890	*	006759	AT&T	120.00
302891	*	006759	AT&T	641.31
302892	*	006759	AT&T	231.11
302893	*	010030	AUSTIN GREEN	25.00
302894		BDREFUND	B-DRY SYSTEM OF MICHIGAN INC	100.00
302895		000843	BAKER & TAYLOR BOOKS	581.32
302896		009609	BALIAN LEGAL, PLC	2,412.50
302897		009213	BAYSCAN TECHNOLOGIES	746.00
302898	*	010026	BCT DESIGN GROUP	69.94
302899		002231	BILLINGS LAWN EQUIPMENT INC.	620.31
302900		BDREFUND	BILLS BUILDING & GENERAL CONTRACTIN	100.00
302901		000525	BIRMINGHAM PUBLIC SCHOOLS	100.00
302902		BDREFUND	BLUMKE INSTALLATIONS	100.00
302903	*	009860	BOB'S SANITATION SERVICE, INC.	1,100.00
302904	*	007359	BRADY INDUSTRIES	99.15
302905	*	006966	BRIDGESTONE GOLF, INC	464.43
302906	*	009078	CANON SOLUTIONS AMERICA INC	121.90
302907		BDREFUND	CERTIFIED FLOORING INSTALLATION INC	200.00
302908	*	008243	CHARTER TOWNSHIP OF BLOOMFIELD	675.52
302909	*	008006	CLEAR RATE COMMUNICATIONS, INC	1,866.38
302910	*	000627	CONSUMERS ENERGY	10,570.53
302911	*	009145	CREATIVE COLLABORATIONS	3,800.00
302912	*	000574	CULTURAL COUNCIL OF	9,000.00
302913	*	006104	DAPHNE'S HEADCOVERS	765.50
302914		BDREFUND	DAVID AYYASH	100.00
302915		010022	DAVIS & STATON, INC	352.00
302916	*	000179	DTE ENERGY	6,296.15
302917	*	000179	DTE ENERGY	235.16

City of Birmingham
Warrant List Dated 04/03/2025

Check Number	Early Release	Vendor #	Vendor	Amount
302918	*	000179	DTE ENERGY	52.02
302919	*	000179	DTE ENERGY	194.00
302920		000179	DTE ENERGY	17.65
302921	*	000179	DTE ENERGY	32.96
302922	*	000179	DTE ENERGY	2,114.99
302923	*	000179	DTE ENERGY	53.15
302924	*	000179	DTE ENERGY	278.12
302925	*	000179	DTE ENERGY	7,140.97
302926	*	000179	DTE ENERGY	2,215.49
302927	*	000179	DTE ENERGY	5,782.34
302928	*	000179	DTE ENERGY	3,105.54
302929	*	000179	DTE ENERGY	17.65
302930	*	000179	DTE ENERGY	1,777.40
302931	*	000179	DTE ENERGY	47.09
302932	*	000179	DTE ENERGY	18.43
302933	*	000179	DTE ENERGY	37.10
302934	*	000179	DTE ENERGY	22.33
302935	*	000179	DTE ENERGY	552.89
302936		007505	EAGLE LANDSCAPING & SUPPLY	2,356.00
302937		010029	EDUCATIONAL DEVELOPMENT CORPORATION	36.98
302938		008164	GARY EISELE	68.60
302939		001495	ETNA SUPPLY	2,310.00
302940		BDREFUND	EXOCTIC CUSTOM POOLS	575.00
302941	*	001223	FAST SIGNS	312.08
302942		006737	FOREMOST PROMOTIONS	2,274.79
302943		BDREFUND	FOUNDATION SYSTEMS OF MICHIGAN INC.	300.00
302944		BDREFUND	FULLER CENTRAL PK PRP IV LLC	500.00
302945		BDREFUND	GILBERT HOMES INC	1,000.00
302946	*	006666	GRID 4 COMMUNICATIONS INC.	251.11
302947		001447	HALT FIRE INC	115.78
302948		BDREFUND	HANSONS GROUP LLC	500.00
302949		010006	HJP LEGAL	1,087.50
302950	*	007466	HOME BUILDERS ASSOC. OF SE MI	649.00
302951	*	001956	HOME DEPOT CREDIT SERVICES	568.08
302952		BDREFUND	HRH CONSTRUCTION LLC	1,000.00
302953		BDREFUND	IDEAL CUSTOM BUILDERS INC	600.00
302954	*	009564	JOE PIZIK ELECTRIC	304.00
302955	*	009946	JORDAN ZUPPKE LAW	437.50
302956	*	BDREFUND	JULIA MASSARO	1,750.00
302957	*	009403	JUSTIN ZAYID	1,875.00
302958		BDREFUND	KELLY BUILDING & DEVELOPMENT CO LLC	500.00
302959		BDREFUND	LAMARCO HOMES LLC	500.00
302960	*	009386	LAW OFFICE OF BRIAN P. FENECH	3,500.00

City of Birmingham
Warrant List Dated 04/03/2025

Check Number	Early Release	Vendor #	Vendor	Amount
302961	*	009963	LAW OFFICE OF ROBERT J MORAD PLLC	750.00
302962		BDREFUND	LIBURDI, ADRIANA	500.00
302963		010003	MANOOGIAN LAW PLLC	1,387.50
302964		009995	MARINA CHUPAC PLLC	1,125.00
302965	*	000888	MCKENNA ASSOCIATES INC	54,283.82
302966	*	009200	MICHAEL MORRISON	750.00
302967		000230	MIKE SAVOIE CHEVROLET INC	1,716.54
302968		BDREFUND	MR. ROOF HOLDING CO., LLC	100.00
302969		005431	NILFISK, INC.	1,009.87
302970		BDREFUND	OFFER & ASSOCIATES INC	100.00
302971		001325	P.K. CONTRACTING INC	950.00
302972		BDREFUND	PEAK CONSTRUCTION LLC	300.00
302973		009612	PLAYAWAY PRODUCTS LLC	924.15
302974	*	009951	PRINTMASTERS	64.95
302975	*	006625	PTS COMMUNICATIONS, INC	78.00
302976	*	BLREFUND	PURE GREEN	200.00
302977	*	009394	RABAA & NACHAWATI PLLC	375.00
302978		BDREFUND	REASONABLE ROOFING & REMODELING INC	100.00
302979		BDREFUND	RENEWAL BY ANDERSEN	500.00
302980		BDREFUND	RENEWAL BY ANDERSEN LLC	500.00
302981	*	009949	SMALL LAW PLLC	825.00
302982		BDREFUND	ROBERT J SOWLES	100.00
302983		BDREFUND	ROMA CEMENT CO INC	400.00
302984		BDREFUND	ROOF MANAGEMENT COMPANY, INC	200.00
302985		BDREFUND	ROOTMASTER SEWER & DRAIN	3,250.00
302986	*	000218	ROYAL OAK P.D.Q. LLC	100.00
302987		BDREFUND	S A CONSTRUCTION	100.00
302988		BDREFUND	SMOLYANOV HOME IMPROVMENT	100.00
302989	*	009604	THE DETROIT JEWISH NEWS FOUNDATION	875.00
302990	*	009384	THE EDITH BLAKNEY LAW FIRM, PLLC	375.00
302991		BDREFUND	THOMAS THEODORE MARCUCCI	100.00
302992		BDREFUND	TOMINA, ANNETTA J	200.00
302993		BDREFUND	TOWER BUILT LLC	100.00
302994	*	009552	TRAFFIC & SAFETY CONTROL SYSTEMS	1,115.00
302995		BDREFUND	TRESNAK CONSTRUCTION INC	200.00
302996	*	004379	TURNER SANITATION, INC	340.00
302997	*	001279	US FIGURE SKATING ASSOC.	525.00
302998	*	000158	VERIZON WIRELESS	149.79
302999	*	000158	VERIZON WIRELESS	618.58
303000	*	000158	VERIZON WIRELESS	1,073.48
303001		BDREFUND	WALLSIDE INC	500.00
303002	*	004497	WATERFORD REGIONAL FIRE DEPT.	187.00
			SUBTOTAL PAPER CHECK	$181,211.31

City of Birmingham
Warrant List Dated 04/03/2025

Meeting of 04/07/2025

Check Number	Early Release	Vendor #	Vendor	Amount
ACH TRANSACTION				
12955	*	002284	ABEL ELECTRONICS INC	475.00
12956	*	009943	ABIGAIL MURPHY	220.00
12957	*	007329	ALL AMERICAN ARENA PRODUCTS LLC	850.00
12958	*	009393	AMANDA MCBRIDE	750.00
12959	*	007345	BEVERLY HILLS ACE	15.81
12960		009183	BOB ADAMS TOWING	274.95
12961		007875	CANFIELD EQUIPMENT SERVICE INC.	2,362.10
12962	*	009396	CECILIA QUIRINDONGO BAUNSOE	1,187.50
12963		000605	CINTAS CORPORATION	195.69
12964		000605	CINTAS CORPORATION	59.15
12965		002234	CMP DISTRIBUTORS INC	1,808.00
12966		002668	CONTRACTORS CLOTHING CO	456.41
12967	*	000565	DORNBOS SIGN & SAFETY INC	185.29
12968	*	001077	DUNCAN PARKING TECH INC	2,900.00
12969	*	003801	JANA ECKER	517.00
12970		007684	ELITE TRAUMA CLEAN-UP INC.	70.00
12971		001230	FIRE SYSTEMS OF MICHIGAN LLC	119.75
12971	*	001230	FIRE SYSTEMS OF MICHIGAN LLC	523.30
12972	*	009387	FRAIBERG & PERNIE PLLC	4,575.00
12973	*	000243	GRAINGER	684.61
12974	*	001672	HAYES PRECISION INC	90.00
12975	*	009382	HB LAW, PLLC	375.00
12976	*	003824	THOMAS I. HUGHES	764.00
12977	*	009390	IDUMESARO LAW FIRM, PLLC	1,250.00
12978		009298	JCR SUPPLY INC	1,243.04
12979	*	003458	JOE'S AUTO PARTS, INC.	39.99
12980	*	007827	HAILEY R KASPER	1,522.50
12981	*	009392	LAMB LEGAL CONSULTING SERVICES	375.00
12982	*	009385	LAW OFFICE OF MICHAEL J. DICK	1,600.00
12983	*	005550	LEE & ASSOCIATES CO., INC.	2,025.30
12984	*	008723	BRADLEY MCNAB	1,483.15
12985	*	009844	MYA BROWN	235.81
12986	*	008843	OAKLAND COUNTY TREASURER- TAX PYMNT	45,525.22
12987	*	002767	OSCAR W. LARSON CO.	197.50
12988	*	006027	PENCHURA, LLC	233.00
12989	*	002852	QMI GROUP INC	78.75
12990		006729	QUENCH USA INC	438.00
12991	*	003554	RKA PETROLEUM	8,609.17
12992	*	001181	ROSE PEST SOLUTIONS	48.00
12993		005787	SOUTHEASTERN EQUIPMENT CO. INC	1,163.43
12994	*	002037	TOTAL ARMORED CAR SERVICE, INC.	303.97
12995		004887	TRUCK & TRAILER SPECIALTIES INC	15,145.00

Meeting of 04/07/2025

City of Birmingham
Warrant List Dated 04/03/2025

Check Number	Early Release	Vendor #	Vendor	Amount
12996	*	000969	VIGILANTE SECURITY INC	150.00
			SUBTOTAL ACH TRANSACTION	$101,125.39
			GRAND TOTAL	$282,336.70

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.

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Clerk's Office

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Alexandria Bingham, City Clerk

SUBJECT: Special Event Application: Pumpkin Patch

INTRODUCTION:
The City of Birmingham Department of Public Services has submitted a special event application to hold the Pumpkin Patch event on October 25, 2025. The event begins at 10:00 a.m. and concludes at 2:00 p.m. Set up for the event is scheduled for October 25, 2025 starting at 9:00 a.m. and teardown is scheduled from 2:00 p.m. until 4:00 p.m.

BACKGROUND:
Prior to application submission, the various departments reviewed the proposed event details for street closures and safety considerations. DPS, Planning, Building, Engineering, BSD, Police and Fire have indicated their approval. The Parking Department has been notified of the event for planning purposes.

The Pumpkin Patch event is sponsored by the City of Birmingham Department of Public Services. The event will take place in Shain Park. This free event offers an opportunity for families to participate in Halloween activities and games.

The following event occurs in October in Birmingham and does not pose a conflict for this event:

Farmer's Market	5/4/2025 – 10/26/2025	660 N Old Woodward

LEGAL REVIEW:
The City Attorney has reviewed the application and has no objection as to form or content.

FISCAL IMPACT:
All costs associated with this event will be paid by the applicant.

SUSTAINABILITY:
The Department of Public Services will place recycling containers in addition to the trash receptacles.

DESIGN CONSIDERATIONS:
There were no design considerations for this event.

PUBLIC COMMUNICATIONS:
The City of Birmingham Department of Public Services notified residents and businesses about the details of this event by letter mailed at least two weeks prior to the City Commission meeting. The addresses that were notified were within 300 feet of the event space.

SUMMARY:
The City Commission is being asked to approve a special event permit for the Pumpkin Patch event to be held October 25, 2025 from 10:00 a.m. to 2:00 p.m., with set up for the event scheduled for 9:00 a.m. and teardown from 2:00 p.m. until 4:00 p.m.

ATTACHMENTS:
- Special Event Application
- Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated March 5, 2025. Notification addresses are on file in the Clerk's Office
- Department approval page with comments and estimated costs

SUGGESTED COMMISSION ACTION:
To make a motion adopting a resolution to approve a special event permit as requested by the City of Birmingham Department of Public Services to hold the Pumpkin Patch event on October 25, 2025 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.

CLERK'S OFFICE
RECEIVED
FEB 17 2025
1:29 PM

CITY OF BIRMINGHAM
APPLICATION FOR SPECIAL EVENT PERMIT
PARKS AND PUBLIC SPACES

IMPORTANT: EVENTS UTILIZING CITY SIDEWALKS AND/OR STREETS MUST MEET WITH POLICE DEPARTMENT SPECIAL EVENT OFFICE TO REVIEW PROPOSED EVENT DETAILS PRIOR TO SUBMITTING APPLICATION.

Police Department acknowledgement: _____

I. EVENT DETAILS

- **Incomplete applications will not be accepted.**
- **Changes in this information must be submitted to the City Clerk, in writing, at least three weeks prior to the event**

FEES: **FIRST TIME EVENT:** **$200.00**
ANNUAL APPLICATION FEE: **$165.00**

***Additional fees may apply for: police, public services, fire, permits, etc.**

(Please print clearly or type)

Date of Application 2/14/25

Name of Event Pumpkin Patch

Detailed Description of Event (attach additional sheet if necessary) The pumpkin patch is an afternoon for families to partake in Halloween activities and games.

Location Shain Park

Date(s) of Event 10/25/2025 Hours of Event 10a m- 2pm

Date(s) of Set-up Day of event Hours of Set-up 9am-10am

NOTE: No set-up to begin before 7:00 AM, per city ordinance.

Date(s) of Tear-down Day after the event Hours of Tear-down 2pm-4pm

Organization Sponsoring Event City of Birmingham, Department of Public Services

Organization Address 851 South Eton, Birmingham, MI 48009

Organization Phone (248)530 1651

Contact Person Tricia Schultz, Recreation Coordinator

Contact Phone (248) 530-1651

Contact Email tschultz@bhamgov.org

Retention: Active +1 year

5D

II. EVENT INFORMATION

1. Organization Type City of Birmingham

   (city, non-profit, community group, etc.)

2. Additional sponsors or participants (Provide name, address, contact person, status, etc. for all additional organizations sponsoring your event.) TBD

3. The city encourages collaboration among nonprofit organizations to bring the greatest benefit to the community. Please explain your efforts to do so
   Nonprofit organizations and other community groups will be invited to host the kids' zone to gain exposure.

4. Are there any sustainability initiatives associated with this event? Please explain.
   We will have recycling containers in addition to the trash recepticles

5. Is the event a fundraiser? YES ☐ NO ☑
   List beneficiary _____
   List expected income _____ Attach information about the beneficiary.

6. First time event in Birmingham? YES ☑ NO ☐
   If no, describe _____

7. Total number of people expected to attend per day 200 Weather Permitting

8. The event will be held on the following city property: (Please list)
   ☐ Street(s) _____
   ☐ Sidewalk(s) _____
   ☑ Park(s) Shain Park

9. Will street closures be required? YES ☐ NO ☑

(Police Department acknowledgement prior to submission of application is required) (initial here) RK

What parking arrangements will be necessary to accommodate attendance?
Describe _____

_____

10. Will staff be provided to assist with safety, security and maintenance? YES ☑ NO ☐

If yes, please provide number of staff to be provided and any specialized training received.

Describe The department will have 4 DPS staff on-site during the event. There will also be community volunteers.

_____

11. Will the event require safety personnel (police, fire, paramedics)? YES ☐ NO ☑

(Police Department acknowledgement prior to submission of application i s required.) (initial here) RK

Describe On-duty officers will provide extra patrols.

_____

12. Will alcoholic beverages be served? YES ☐ NO ☑

If yes, additional approval by the City Commission is required, as well as the Michigan Liquor Control Commission.

13. Will music be provided? YES ☐ NO ☑

_____Live _____Amplification _____ _____Loudspeakers

Recorded Time music will begin _____

Time music will end _____

Location of live band, DJ, loudspeakers, equipment must be shown on the layout map.

14. Will there be signage in the area of the event? YES ☑ NO ☐

Number of signs/banners Sponsor Banner

Size of signs/banners 48" x 90"

Submit a photo/drawing of the sign(s). **A sign permit may be required.**

15. Will food/beverages/merchandise be sold? YES ☑ NO ☐

- Peddler/vendor permits must be submitted to the Clerk's Office, **at least two weeks prior to the event.**
- You must obtain approval from the Oakland County Health Department for all food/beverage sales/donations. Contact ehclerk@oakgov.com or 248-535-9612 to obtain Health Department approval.
- There is a $50.00 application fee for all vendors and peddlers, in addition to the $10.00 daily fee, per location.

LIST OF VENDORS/PEDDLERS
(attach additional sheet if necessary)

VENDOR NAME	GOODS TO BE SOLD	WATER HOOK-UP REQUIRED?	ELECTRIC REQUIRED?
TBD	Food/Beverages	No	No

Food Vendors must place some type of protection material under their food trucks to catch oil and food spills.

III. EVENT LAYOUT

- Include a map showing the park set up, street closures, and location of each item listed in this section.
- Include a map and written description of run/walk route and the start/finish area

1. Will the event require the use of any of the following municipal equipment? (show location of each on map)

EQUIPMENT	QUANTITY	COST	NOTES
Picnic Tables	4	6 for $800.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles	4	$10.00 each includes 1 bag For additional bags, the cost is $45 per case, 100 bags per case	Trash box placement and removal of trash is the responsibility of the event. Additional cost could occur if DPS is to perform this work.
Dumpsters		$400.00/per dumpster per day	Includes emptying the dumpster one time per day. The City may determine the need for additional dumpsters based on event requirements.
Utilities (electric)	# of vendors requiring utilities	Varies	Charges according to final requirements of event.
Water/Fire Hydrant		$224.75/per hydrant Includes the use of 5,000 gallons of water. Any additional water usage will be billed.	Applicant must supply their own means of disposal for all sanitary waste water. Waste water is NOT allowed to be poured into the street or on the grass.
Meter Bags / Traffic Cones / Barricades	# to be determined by the Police Department.		

2. Will the following be constructed or located in the area of the event? YES ☑ NO ☐

(show location of each on map) NOTE: Stakes are not allowed.

TYPE	QUANTITY	SIZE
Tents/Canopies/Awnings (A permit is required for tents over 400 square feet)		
Portable Toilets	2	(1) standard/(1) handicap
Rides		
Displays		
Vendors		
Temporary Structure (must attach a photo)		
Other (describe)		

FOR EVENTS IN SHAIN PARK ONLY:

3. Do you want the Fountain on? YES ☐ NO ☐ N/A ☑
   The fountain in on weather permitting June 1st through mid-October.

4. Umbrellas should be removed? YES ☐ NO ☐ N/A ☑
   Umbrellas are available June 1st through mid-October.

5. Bistro tables/chairs should be removed? YES ☐ NO ☐ N/A ☑
   Bistro tables/chairs are available June 1st through mid-October

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME Pumpkin Patch

EVENT DATE 10/25/2025

The Birmingham City Commission shall have sole and complete discretion in deciding whether to issue a permit. Nothing contained in the City Code shall be construed to require the City Commission to issue a permit to an applicant and no applicant shall have any interest or right to receive a permit merely because the applicant has received a permit in the past.

As the authorized agent of the sponsoring organization, I hereby agree that this organization shall abide by all conditions and restrictions specific to this special event as determined by the City administration and will comply with all local, state and federal rules, regulations and laws.

Tricia Schultz — 2/14/2025

Signature — Date

By providing your e-mail 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.

IV. SAMPLE LETTER TO NOTIFY ANY AFFECTED PROPERTY/BUSINESS OWNERS

V. Organizer must notify all potentially affected residential property and business owners of the date and time this application will be considered by the City Commission. (Sample letter attached to this application.)

VI. Attach a copy of the proposed letter to this application. The letter will be reviewed and approved by the Clerk's Office. The letter must be distributed at least two weeks prior to the commission meeting.

VII. A copy of the letter and the distribution list must be submitted to the Clerk's Office at least two weeks prior to the commission meeting.

VIII. If street closures are necessary, a map must be included with the letter to the affected property/business owners.

SPECIAL EVENT REQUEST NOTIFICATION LETTER ON LETTERHEAD

DATE: February 13, 2025

TO: _____
Residential Property or Business Owner

_____
Address

The Birmingham City Code requires that we receive approval from the Birmingham City Commission to hold the following special event. The code further requires that we notify any property owners or business owners that may be affected by the special event of the date and time that the City Commission will consider our request so that an opportunity exists for comments prior to this approval.

EVENT INFORMATION

NAME OF EVENT: Pumpkin Patch

LOCATION: Shain Park (Thomas M. Markus Pavilion)

DATE(S) OF EVENT 10/25/25 HOURS OF EVENT 10 am-2 pm

BRIEF DESCRIPTION OF EVENT/ACTIVITY: The pumpkin patch is an afternoon for families to partake in Halloween activities and games.

DATE(S) OF SET-UP 10/25/25 HOURS OF SET-UP 10 a m - 2 pm

DATE(S) OF TEAR-DOWN Day of event HOURS OF TEAR-DOWN 9 am -10am

DATE OF CITY COMMISSION MEETING: April 7, 2025
The City Commission meets in room 205 of the Municipal Building at 151 Martin at 7:30 p.m. You may also attend virtually through Zoom: https://zoom.us.com/j/655079760 Meeting ID: 655 079 760. **A complete copy of the application to hold this special event is available for your review at the City Clerk's Office (248/530-1880).** Log on to www.bhamgov.org/events for a complete list of special events.

EVENT ORGANIZER: City of Birmingham, Department of Public Services

ADDRESS: 851 South Eton, Birmingham, MI 48009

PHONE: 248-530-1651

FOR QUESTIONS ON DAY OF EVENT, CONTACT: Tricia Schultz, 248-530-1651

A map showing street closures must be attached.

The following language must be submitted **on the applicant's letterhead** and **signed** by an authorized representative of the organization.

HOLD-HARMLESS AGREEMENT

"To the fullest extent permitted by law, the **(applicant/organization name)** and any entity or person for whom the **(applicant/organization name)** 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 others working on behalf of the City of Birmingham against any and all claims, demands, suits, 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 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 activity/event. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of the City of Birmingham, its elected or appointed officials, employees, volunteers or others working on behalf of the City of Birmingham."

Tricia Schultz — 2/14/2025

Applicant's signature — Date

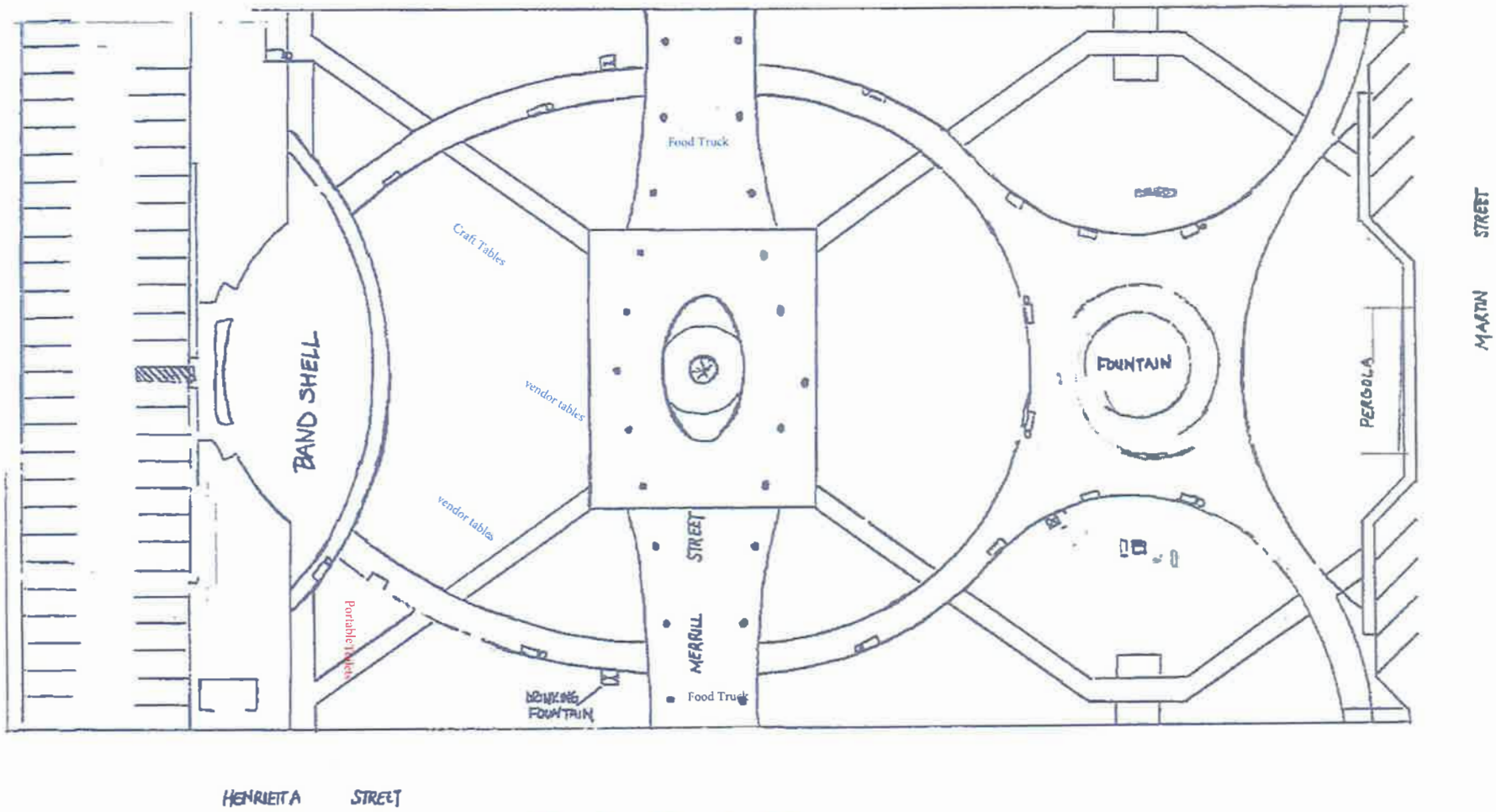
Pumpkin Patch

Saturday, October 25, 2025
Time: 10am-2pm

Sponsored by

BIRMINGHAM
A WALKABLE CITY





Shain Park Map

5D

Saint James Church
355 West Maple Road
Birmingham, MI 48009

Pinestone Properties, LLC
E & EJ Daskas
271 West Maple Road
Birmingham, MI 48009

Bates Group, LLC
PO Box 2230
Southfield, MI 48037

Lyle Howard Shuert Revoc Trust
Lyle Howard Shuert Trustee
250 Martin Street, Suite 301
Birmingham, MI 48009

Christine Beck
Dana Locniskar
250 Martin Street, Suite 501 W
Birmingham, MI 48009

Cristbrook Real Estate Holding, LLC
260 Martin Street
Birmingham, MI 48009

Martin Place CAC, LLC
360 North Crescent Drive
Beverly Hills, CA 90210

Ameritech
Law Dept - Taxes
221 North Washington Square # R-301
Lansing, MI 48933

Gerald L Byer
Rhonda A Byer
376 Townsend Street
Birmingham, MI 48009

Michael L Pettibone
Cindy Pettibone
373 Townsend Street
Birmingham, MI 48009

320 Investments, LLC
320 Martin Street, Suite 100
Birmingham, MI 48009

Patricia Fleming
1 Towne Square, Suite 1200
Southfield, MI 48076

Bates Group, LLC
PO Box 2230
Southfield, MI 48037

Osman Minkara
Ghalda Minkara
6741 Queen Anne Drive
West Bloomfield, MI 48322

Martin Place CAC, LLC Platinum Equity
360 North Crescent Drive
Beverly Hills, CA 90210

Karen W Davidson Living Trust
Karen W Davidson Trustee
250 Martin Street, Suite 201
Birmingham, MI 48009

Freund Investment II, LLC
3985 Torrey Hill Lane
San Diego, CA 92130

City of Birmingham
PO Box 3001
Birmingham, MI 48012

JJM Michigan Realty, LLC
640 Henley Street
Birmingham, MI 48009

Carole S Hofley Living Trust
Norman H Hofley Living Trust
PO Box 1447
Wilson, WY 83014

Maple Bates, LLC
124 West Allegan Street, Suite 2100
Lansing, MI 48933

Muffrey, LLC
185 NW Spanish River Boulevard
Suite 100
Boca Raton, FL 33431

Muffrey, LLC
Kim Properties
185 NW Spanish River Boulevard
Suite 100
Boca Raton, FL 33431

Martin Place CAC, LLC
360 North Crescent Drive
Beverly Hills, CA 90210

Cristbrook Real Estate Holdings, LLC
260 Martin Street
Birmingham, MI 48009

Shain Park Associates, LLC
201 West Big Beaver Road, Suite 1420
Troy, MI 48084

Sharer West Maple Properties, LLC
Richard Sharer
1431 West Lincoln Street
Birmingham, MI 48009

Community House
380 South Bates Street
Birmingham, MI 48009

Brian C Manoogian Revocable Trust
374 Townsend Street
Birmingham, MI 48009

City of Birmingham
PO Box 3001
Birmingham, MI 48012

THC Investors LP
David Sillman, VP
21 East Long Lake Road, Suite 110
Bloomfield Hills, MI 48304

Penny L Sage
355 Townsend Street
Birmingham, MI 48009

John C Mueller
Antonina M Mueller
339 Townsend Street
Birmingham, MI 48009

William Finnicum
25885 German Mill Road
Franklin, MI 48025

Michael James Belanger
Kristen Lynn Belanger
346 West Brown Street
Birmingham, MI 48009

Thomas M Rossiter
Jayme M Rossiter
324 West Brown Street
Birmingham, MI 48009

312 West Brown, LLC
312 West Brown Street
Birmingham, MI 48009

312 West Brown, LLC
312 West Brown Street
Birmingham, MI 48009

Shain Park Apartments, LLC
33717 Woodward Ave # 381
Birmingham, MI 48009

South Beach Finance, LLC
503 South Saginaw Street, Suite 600
Flint, MI 48502

William John Vlasic
William John Vlasic Revocable Trust
228 West Brown Street
Birmingham, MI 48009

Ann G Smallwood Trust
Ann G Smallwood Trustee
288 West Brown Street
Birmingham, MI 48009

Shalina Kumar
286 West Brown Street
Birmingham, MI 48009

Anita Plous Trustee
274 West Brown Street
Birmingham, MI 48009

Barbara Sbrocca Living Trust
272 West Brown Street
Birmingham, MI 48009

Eric F Conn
Sara Conn
268 West Brown Street
Birmingham, MI 48009

Susan C Miller
266 West Brown Street
Birmingham, MI 48009

Sherri Alinda Vandenberg
208 West Brown Street
Birmingham, MI 48009

Suzanne Kuecken Revoc Living Trust
Suzanne Kuecken Trustee
460 Henrietta Street
Birmingham, MI 48009

Suzanne Stone
237 Townsend Street
Birmingham, MI 48009

Townsend Properties Of Birmingham, LLC
2211 Woodward Ave, Suite 101
Detroit, MI 48201

Townsend Building Management Co
PO Box 668
Troy, MI 48099

EPM Investments, LLC
Colleen M Stevens
3830 Groveland Road
Ortonville, MI 48462

Townsend Street Company, LLC
800 West Long Lake Road, Suite 120
Bloomfield Hills, MI 48302

480 Pierce, LLC
260 East Brown Street, Suite 300
Birmingham, MI 48009

Occupant
299 West Maple Road
Birmingham, MI 48009

Occupant
247 West Maple Road
Birmingham, MI 48009

Occupant
211 West Maple Road
Birmingham, MI 48009

Occupant
151 South Bates Street
Birmingham, MI 48009

Occupant
250 Martin Street, Suite 302
Birmingham, MI 48009

Occupant
250 Martin Street, Suite 502 E
Birmingham, MI 48009

Occupant
242 Martin Street
Birmingham, MI 48009

Occupant
250 Martin Street, Suite 2
Birmingham, MI 48009

Occupant
250 Martin Street, Suite 401
Birmingham, MI 48009

Occupant
193 West Maple Road
Birmingham, MI 48009

Occupant
175 West Maple Road
Birmingham, MI 48009

Occupant
155 Henrietta Street
Birmingham, MI 48009

Occupant
155 Henrietta Street
Birmingham, MI 48009

Occupant
372 Townsend Street
Birmingham, MI 48009

Occupant
361 Townsend Street
Birmingham, MI 48009

Occupant
189 West Merrill Street
Birmingham, MI 48009

Occupant
100 Townsend Street
Birmingham, MI 48009

Occupant
404 South Bates Street
Birmingham, MI 48009

Occupant
245 Townsend Street
Birmingham, MI 48009

Occupant
211 Townsend Street
Birmingham, MI 48009

Occupant
235 Townsend Street
Birmingham, MI 48009

Occupant
191 Townsend Street
Birmingham, MI 48009

Occupant
161 Townsend Street
Birmingham, MI 48009

Occupant
101 Townsend Street
Birmingham, MI 48009

Occupant
480 Pierce Street, Suite 200
Birmingham, MI 48009

City of Birmingham
City Clerk's Office
151 Martin
Birmingham, MI 48009

BIRMINGHAM

SPECIAL EVENT NOTIFICATION

TO ALL PROPERTY/BUSINESS OWNERS

The Birmingham City Code requires that we receive approval from the Birmingham City Commission to hold the following special event. The code further requires that we notify any property owners or business owners that may be affected by the special event of the date and time that the City Commission will consider our request so that an opportunity exists for comments prior to this approval.

NAME OF EVENT: **Pumpkin Patch**
LOCATION: Shain Park
DATES/TIMES: **Sunday, October 25, 2025 10am-2pm**

DATE/TIME OF CITY COMMISSION MEETING:
Monday, April 7, 2025 at 7:30 PM

The City Commission meets in room 205 of the Municipal Building at 151 Martin. A complete copy of the application to hold this special event is available for your review at the City Clerk's office (248/530.1880).

EVENT ORGANIZER: City of Birmingham, DPS
851 South Eton, Birmingham, MI 48009
City Contact Person: Tricia Schultz, 248.530.1651, tschultz@bhamgov.org

TO BUILDING MANAGERS CONTAINING MORE THAN ONE UNIT:
PLEASE POST THIS NOTICE AT THE MAIN ENTRANCE TO YOUR BUILDING.

5D

BIRMINGHAM

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City of Birmingham – ITP Concerts
2300 E Lincoln St
Birmingham, MI 48009

METROPLEX MI 480
5 MAR 2025 PM 7 L

FIRST-CLASS



US POSTAGE PITNEY BOWES
ZIP 48009 $ 000.56⁰
02 7W
0008029208 MAR 05 2025

City of Birmingham
PO Box 3001
Birmingham, MI 48012



City of Birmingham – ITP Concerts
2300 E Lincoln St
Birmingham, MI 48009

METROPLEX MI 480
5 MAR 2025 PM 14 L

FIRST-CLASS



US POSTAGE PITNEY BOWES
ZIP 48009 $ 000.56⁰
02 7W
0008029208 MAR 05 2025

City of Birmingham
City Clerk's Office
151 Martin
Birmingham, MI 48009



DEPARTMENT APPROVALS

LICENSE NUMBER **# 25-00012852**
NOTE TO STAFF: **3/24/2025**

EVENT NAME: **Pumpkin Patch**
COMMISSION HEARING DATE: **4/7/2025**
DATE OF EVENT: **10/25/2025**

DEPARTMENT	APPROVED	COMMENTS	PERMITS REQUIRED (Must be obtained directly from individual departments)	ESTIMATED COSTS (Must be paid two weeks prior to the event. License will not be issued if unpaid.)	ACTUAL COSTS (Event will be invoiced by the Clerk's office after the event)
BUILDING **101.0-000.000.636.0005** 248.530.1850	MJM	No Department Involvement		$0	
FIRE **101.0-000.000-636.0004** 248.530.1900	JS	See attached City Event Bulletin regarding specific event requirements. Fire/ EMS will respond from stations if needed. Fire Inspector may perform walk through.		$0.00	
POLICE **101.0-000.000.636.0003** 248.530.1870	RK	On-duty officers will provide extra patrols.		$0	$0
PUBLIC SERVICES **101.0-000.000-636.0002** 248.530.1642	CL	Includes set-up and take down of tables and chairs and placement of trash receptacles and picnic tables for the event. (3) staff members on site for the event.		$2,000	
ENGINEERING **101.0-000.000.636.0002** 248.530.1839	MC	No permits required.	N/A	$0	$0
PARKING	AF	Guests pay the going rate at all meters and garages	None	0	0
INSURANCE 248.530.1807		Need to submit COI no less than 2 weeks prior to event Need to submit Hold Harmless Agreement	None	0	

CLERK **101.0-000.000-614.0000** 248.530.1803		Notification letters to be mailed by applicant no later than ___. Notification addresses on file in the Clerk's Office.	Applications for vendors license must be submitted no later than ____.	165	0
			TOTALS: Estimated and Actual Costs	**$2,165.00**	

FOR CLERK'S OFFICE USE

Deposit paid _____

Actual Cost _____

Due/Refund_____

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Department of Public Services

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Charles T. Markus, DPS Manager
Scott D. Zielinski, DPS Director

SUBJECT: Resolution for West Nile Virus Prevention Program

INTRODUCTION:
The City currently participates in Oakland County's West Nile Virus Prevention Program. The County provides reimbursement for eligible expenses to combat the West Nile Virus along with other mosquito carried viruses. In order to receive reimbursement from the County the City must submit documentation including a resolution from the Commission directing City staff to apply for reimbursement.

BACKGROUND:
The City has treated approximately 2,300 catch basins with larvicide for over 20 years. The application of the larvicide destroys the mosquito larvae and helps to prevent mosquito emergence, which in turn helps to protect residents from diseases carried by mosquitos such as West Nile Virus. The City Purchases twelve cases of larvicide briquettes each year and is eligible for reimbursement from the County by completing the following steps:

- Submission of a project plan, with a list of inventory from prior years and information about the planned purchase of materials for this year. The submission must include quote information and the historic and current distribution plans.

- The City Commission's adoption of a resolution directing staff to request reimbursement from the Oakland County West Nile Virus Fund Program.

- Submitting documentation of actual cost and proof of payment for the City's larvicide program.

The Department of Public Services has purchased lavicide for the 2025 program with authorization from the City Manager. The Commission is asked to approve the resolution directing the Director of Public Services to request reimbursement from Oakland County.

LEGAL REVIEW:
The resolution has been reviewed and approved by the City Attorney's office.

FISCAL IMPACT:
The City has purchased twelve cases of larvicide briquettes from Clarke Mosquito Control Products at a discounted rate of $1,022.46/ case ($12,269.52 total), due to its participation in the Oakland County West Nile Reimbursement Program. The City is eligible for an additional reimbursement of $2,705.23 upon the submittal of the required documents.

Funds were available in the 2024-2025 budget in the Sewer Fund-Operating Supplies Account #590.0-538.000-729.0000. The received reimbursement will be placed back into that account.

PUBLIC COMMUNICATIONS:
Information on West Nile is available on the City website.

SUMMARY:
The Department of Public Services (DPS) has completed the purchase of this material from Clarke Mosquito Control for a total price of $12,269.52. The money is budgeted in Account #590.0-538.000-729.0000 Sewer Fund-Operating Supplies for this purchase and was approved by the City Manager. Reimbursement from Oakland County for the program this year will be $2,705.23.

ATTACHMENTS:

- West Nile Virus Resolution
- Clarke quote for this material purchase
- Oakland County reimbursement requirements

SUGGESTED COMMISSION ACTION:
Make a motion adopting the provided resolution to receive reimbursement from Oakland County for the purchased larvicide materials from Clarke Mosquito Control.

BIRMINGHAM
A WALKABLE CITY

RESOLUTION AUTHORIZING WEST NILE VIRUS FUND EXPENSE REIMBURSEMENT REQUEST

WHEREAS, upon recommendation of the Oakland County Executive, the Oakland County Board of Commissioners has established a West Nile Virus Fund Program to assist Oakland County cities, villages and townships in addressing mosquito control activities; and

WHEREAS, Oakland County's West Nile Virus Fund Program authorizes Oakland County cities, villages and townships to apply for reimbursement of eligible expenses incurred in connection with personal mosquito protection measures/activity, mosquito habitat eradication, mosquito larvicide or focused adult mosquito insecticide spraying in designated community green areas; and

WHEREAS, the City of Birmingham, Oakland County, Michigan has incurred expenses in connection with mosquito control activities believed to be eligible for reimbursement under Oakland County's West Nile Virus Fund Program.

NOW THEREFORE, be it resolved that the Birmingham City Commission authorizes and directs its Director of Public Services, as agent for the City of Birmingham, in the manner and to the extent provided under Oakland County Board of Commissioners, to request reimbursement of eligible mosquito control activity under Oakland County's West Nile Virus Fund Program.

Moved By:_____ Seconded By:_____

PRESENT:
ABSENT:

Passed, adopted and approved this 7th day of April, 2025.

ROLL CALL VOTE: Ayes,

Nays,

CERTIFICATION

I, Alexandria Bingham, City Clerk, of the City of Birmingham, Michigan, do hereby certify that the foregoing is a true and correct copy of the resolution adopted by the Birmingham City Commission at its regular meeting held on April 7, 2025.

_____
Alexandria Bingham, City Clerk

Clarke Mosquito Control Products
675 Sidwell Ct.
St. Charles IL 60174
United States
Phone:(630) 894-2000
Fax:(630) 832 9344
www.clarke.com

QUOTATION

// COPY //

Quotation no	Order date	Date
0002035707	3/26/25	3/26/25
Salesperson	**Currency**	**Valid to**
1097 Tom Kessler	USD US Dollar	4/26/25

Customer	
004384	
Invoice address	
City of Birmingham-DPS PO Box 3001 Birmingham, MI 48012-3001 2485301800	
Customer PO#	**Your order date**
	3/26/25
Your reference	**Written by**
Ryan Ballard	Rebecca Matillano

Consignee	
004384	
Delivery Address	
City of Birmingham 851 S. Eton Street Public Services (#2552) Birmingham, MI 48009-6870 248-644-1800	
Delivery terms	**Delivery method**
Prepaid Freight	United Parcel Post
	Payment terms
	Net 30 Days

Line	Item number	Product Description	Quantity	U/M	Requested Date	Sales price	Extended Price
1	11850	NATULAR XRT TABLET	12	cs	3/26/25	1,022.46	12,269.52
	US EPA Current Label						

Subtotal	USD	12,269.52
Order total	USD	12,269.52
Total	**USD**	**12,269.52**

Helping make communities around the world more livable, safe and comfortable

5E

Kate Guzmán, Health Officer
(248) 858-1280 | health@oakgov.com

March 6, 2025

Dear Oakland County Municipality,

The 2025 West Nile (WNV) Prevention Reimbursement amount for the City of Birmingham is $2,705.23.

Requirements for reimbursement are as follows:

- Project Plan due **April 25, 2025**
- Resolution due **June 13, 2025**
- Invoices and Proof of Payment due **August 15, 2025**

Specifics regarding these requirements will be covered during the training event on March 25, and any further questions can be answered by Genessa Doolittle at doolittleg@oakgov.com or by phone at 248-496-4590.

Sincerely,

OAKLAND COUNTY HEALTH DIVISION
Department of Health and Human Services

Kate Guzmán, RN, BSN, MS
Health Officer

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Finance Department

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Mary Chavez, Finance Director

SUBJECT: Change to Retiree Health Care Fund Investment Policy Statement

INTRODUCTION:
The Retiree Health Care Investment Committee is requesting that the asset allocation table in the Investment Policy Statement be revised in order to allow a greater allocation of the portfolio to fixed income. The reason for the increase in the fixed income allocation is to reduce the risk in the portfolio and protect the assets that are currently in the fund.

BACKGROUND:
In December 2024, the Retiree Health Care Investment Committee reviewed the actuary valuation report from Gabriel, Roeder, Smith and Company for the period ended June 30, 2024. This report shows that the retiree health care plan is 131.9% funded. This overfunding was the result of many factors: 1) shifting the retiree health care plan to a Blue Cross Medicare Advantage plan (which most retirees are currently enrolled in); 2) switching the non-Medicare retirees to a Blue Cross insurance plan rather than a self-insured plan; and 3) funding above the actuarial required amount for several years. However, the actuaries did caution the City that this overfunded status may not last due to the increasing costs of medical care. They suggested that it would be prudent to continue funding the normal costs (the annual cost of members who are still working) and to continue investing the assets of the plan in a normal fashion.

The Plan's investment consultant, Captrust, reviewed the portfolio and recommended that a slightly more conservative allocation of the portfolio be implemented. This recommendation was reviewed and approved by the Retirement Investment and the Retiree Health Care Investment Committees. Currently, the Investment Policy Statement states that no more than 35% of the portfolio should be allocated to fixed income. The recommendation from Captrust is to increase this percentage to 40%. Per Public Act 149 of 1999, the governing body of the municipality must approve the investment policy statement of the Retiree Health Care Fund.

LEGAL REVIEW:
Not applicable.

FISCAL IMPACT:
The recommended shift to a 40% allocation in fixed income may reduce portfolio risk and volatility, providing more stability.

SUSTAINABILITY:
Not applicable.

DESIGN CONSIDERATIONS:
Not applicable.

PUBLIC COMMUNICATIONS:
The change in the asset allocation table in the Investment Policy Statement was discussed at the Retiree Health Care Investment Committee meeting on March 28, 2025.

SUMMARY:
The Retiree Health Care Investment Committee is recommending a change in the asset allocation table in the Investment Policy Statement which will allow a fixed income allocation of 40% and for changes in asset allocations of other asset classes as well.

ATTACHMENTS:
- Current Retiree Health Care Fund Investment Policy Statement asset allocation table
- Recommended change to asset allocation table in the Investment Policy Statement approved by the Retiree Health Care Investment Committee

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to amend the asset allocation table in the Retiree Health Care Fund Investment Policy Statement as recommended by the Retiree Health Care Investment Committee.

Asset Allocation				
Asset Class	Index	Minimum	Target	Maximum
Fixed Income	Bloomberg Barclays U.S. Aggregate Bond TR USD	5.0%	20.0%	35.0%
Large Cap Equities	S&P 500 TR USD	15.0%	30.0%	45.0%
Mid Cap Equities	Russell Mid Cap TR USD	0.0%	11.5%	27.0%
Small Cap Equities	Russell 2000 TR USD	0.0%	4.5%	20.0%
International Equities	MSCI EAFE GR USD	0.0%	15.0%	30.0%
Emerging Market Equities	MSCI EM GR USD	0.0%	4.0%	19.0%
Alternative Investments	HFRX Absolute Return	0.0%	15.0%	30.0%

*Alternative Investments may include managed futures, hedge funds, venture capital, real estate, and private equity.

The above represents the current asset allocation. However, the current strategy does not preclude the Plan Sponsor from investing in other asset classes in the future. Consequently, prudent and reasoned consideration must be given to use of other asset classes.

Re-balancing Among Asset Classes and Allocation of Net Contributions

Purpose: Because different asset classes will perform at different rates, the Committee, with the assistance of the Investment Consultant, will monitor the asset allocation shifts caused by performance. When allocations exceed the target allocation indicated in this section (IV), rebalancing may occur.

Method: By rebalancing in this manner, the Committee can be assured that portfolios will be managed to clear parameters. The portfolio will be analyzed on at least a quarterly basis and will be re-allocated as required.

Accordingly:

- The Committee, with the assistance of the Investment Consultant, will review the relative market values of the asset segments whenever there is material cash flow.

- To the extent that adequate re-balancing among asset categories cannot be affected via the allocation of contributions/distributions, the Committee may redirect monies from one Investment Manager to another, if necessary, to maintain the asset allocation strategy described in this section (IV) of this Investment Policy. However, the Committee recognizes that a rigid asset allocation would be both impractical and, to some extent, undesirable under various market conditions. Therefore, the allocation of the Investment Assets may vary from the allocation guidelines without being considered an exception to this Investment Policy.

VIII. ADDENDUM

The below represents the asset allocation.

Asset Allocation				
Asset Class	Index	Minimum	Target	Maximum
Fixed Income	Bloomberg US Agg Bond TR USD	30.00%	40.00%	50.00%
Large Cap Equities	S&P 500 TR USD	20.00%	32.50%	50.00%
Mid Cap Equities	Russell Mid Cap TR USD	5.00%	12.5%	25.00%
Small Cap Equities	Russell 2000 TR USD	0.00%	5.00%	16.00%
Alternatives	HFRX Absolute Return Index	0.00%	10.00%	12.00%

BIRMINGHAM
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MEMORANDUM

Engineering Department

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Melissa A. Coatta, City Engineer

SUBJECT: Bird Phase 1A Project, Contract #7-25(W)
Set Public Hearing Dates for Notice of Necessity and Confirmation of Roll for Sewer and Water Lateral Special Assessments District (SAD)

INTRODUCTION:
Bird Street from Pierce Street to Grant Street will receive water main replacement, sewer improvements, and installation of new concrete road. The City intends to replace private sewer and water laterals meeting "useful life" criteria in the right-of-way in an effort to protect the public investments being made with this project and create an Special Assessment District to collect the costs for this from the property owner.

BACKGROUND:
The City will replace the existing 4" water main on Bird Street, which was installed in 1931, with an 8" water main. The existing sewer ranges in size from 8" to 18" and will either be replaced or lined, and an additional storm sewer will be installed as part of the project.

By City policy established to protect the public investment being made with capital improvement projects, the City intends to replace all sewer laterals that are 50 years of age or older, are less than 6" in diameter, or are constructed of an unsuitable material. Water services that are 60 years of age or older, are less than one inch in diameter or are constructed of an unsuitable material will be replaced as part of the project. All unsuitable sewer laterals will be replaced with 6" schedule 40 PVC, and water services will be replaced with either a new 1-inch diameter service or match the existing diameter service if larger than 1 inch. As part of the project, only the lengths of sewer and/or water lateral within the road right-of-way will be replaced and assessed.

In accordance with the rule from the Michigan Department of Environmental, Great Lakes, and Energy (EGLE) requiring the complete removal of lead water service from the water main to the water meter on private property, such water services will also be replaced as part of this project. Per EGLE, the City is not allowed to charge a property owner for costs associated with the replacement of an existing lead water service.

The parcels located within the project area that may be potentially subject to the Sewer and Water Lateral SAD are highlighted on the attached map. The Engineering Department will provide

additional details confirming a final list of properties that the department plans to include in the assessment, along with estimated construction costs to be assessed at the Hearing of Necessity.

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.

FISCAL IMPACT:
Revenue generated from the Sewer and Water Lateral SAD for the Bird Phase 1A Project will cover the construction costs incurred by the City for the construction of these improvements.

SUSTAINABILITY:
Replacing sewer and laterals that do not meet the City's requirements during a construction project will protect the new road from disturbance of sewer and/or water lateral replacement in the future.

DESIGN CONSIDERATIONS:
N/A

PUBLIC COMMUNICATIONS:
Notice of the Hearing of Necessity and Confirmation of the Roll is to be distributed by the Clerk's Office. The Engineering Department will hold a property owners' meeting on Wednesday, April 16, 2025, from 5:30 pm to 6:30 pm to explain the associated work, the proposed assessment cost, and to answer questions.

SUMMARY:
The Engineering Department recommends that a Public Hearing of Necessity to form a Special Assessment District for the replacement of sewer and water laterals as part of the Bird Phase 1A Project be scheduled at the regularly scheduled City Commission meeting on April 21, 2025, followed by a Public Hearing for Confirmation of the Roll on May 5, 2025.

ATTACHMENTS:
- Map of Proposal Special Assessment District for Sewer and Water Laterals

SUGGESTED COMMISSION ACTION:
Make a motion adopting a 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 Bird Street from Pierce Street to Grant Street on Monday, April 21, 2025, at 7:30 P.M.; and

If necessity is determined on April 21, 2025, to meet on Monday, May 5, 2025, at 7:30 P.M., for all 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 Bird Street from Pierce Street to Grant Street.

Bird Phase 1A Project Area



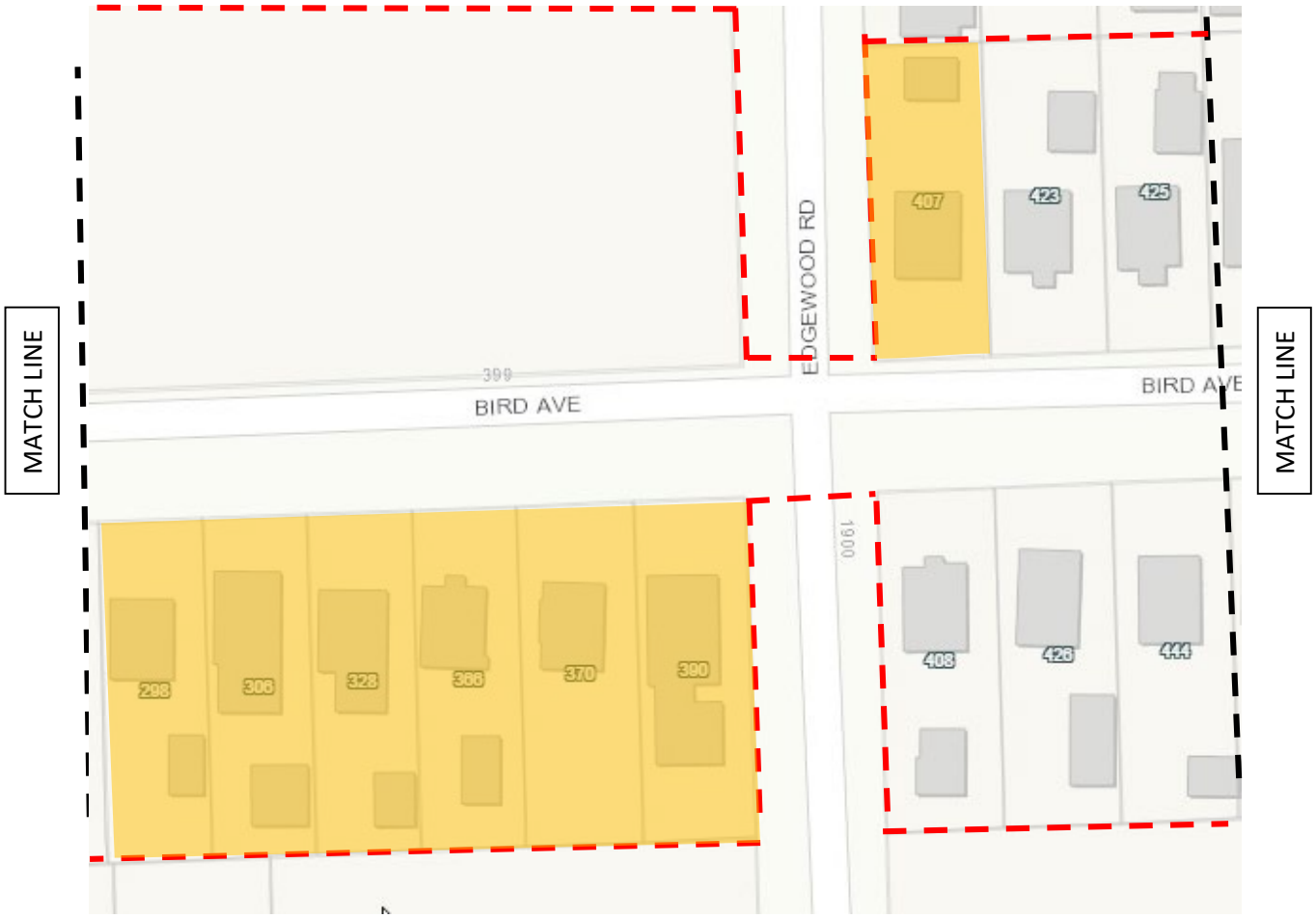
Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

Bird Phase 1A Project Area



Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

Bird Phase 1A Project Area

MATCH LINE



Limits of Projects

Properties Within Water Lateral SAD

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

BIRMINGHAM
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MEMORANDUM

Engineering Department

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Melissa A. Coatta, City Engineer

SUBJECT: Capital Improvements Project – Willits Street from Chester/Maple to N. Old Woodward and Bates Street from Maple to Willits

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INTRODUCTION:
Proposed design options for Willits and Bates were presented at the February 24, 2025, City Commission Meeting (Agenda – Minutes). At that meeting, the City Commission gave direction to City staff to bring forward Conceptual Recommendation A, Conceptual Recommendation B, and Conceptual Recommendation D to the Multi-Modal Transportation Board (MMTB) for further review. The Multi-Modal Transportation Board reviewed these concepts at the March 6, 2025 meeting (Agenda). City staff are now seeking approval of the Willits and Bates Project design to finalize construction plans.

BACKGROUND:
The Willits and Bates project includes replacing the water main on Bates Street from Maple to Willits and repaving both roads, with construction occurring this year. City staff identified improvements to traffic and pedestrian movements that could be made in the project area. The following was reviewed by MMTB at the March 6, 2025 meeting:

Conceptual Recommendation A is at the intersection of Willits and Chester. Currently, there is an island at the northwest corner of the intersection. The City Commission had concerns about speeding at Willits and Bates intersection and suggested a t-intersection. Fleis & Vandenbrink (F&V) reviewed the possibility of a t-intersection, Exhibit A2, at this location and has concerns regarding the existing driveway approaches for 380 Willits and 412 Willits. The MMTB also reviewed having a left-hand turn lane going northbound on Chester Street to turn westbound on Willits Street, Exhibit A1. The MMTB does not recommend it due to the low volume of vehicles making this turning movement and the lane configuration when traveling westbound on Willits and Chester. The Police Department collected speed data the week of March 3rd and the 85th percentile on Chester Street between Maple Road and Willits was 23 mph, while the 85th percentile on Willits Street from Chester to N. Old Woodward was 22 mph.

Conceptual Recommendation B is the installation of bump-outs at the intersection of Willits and Bates. The City Commission expressed concern about trucks' turning movements for deliveries in the downtown. An additional option discussed for this intersection is to increase the pedestrian

crossing time instead of installing bump-outs. Attached is an exhibit from our Engineering Consultant, Nowak and Fraus, showing the truck turning radius in relation to the proposed bump-outs. This intersection currently uses leading pedestrian interval (LPI), where the pedestrian is signaled to start walking into the intersection before the traffic signal turns green. F&V is obtaining traffic signal timing from the Road Commission for Oakland County to review to see if the pedestrian crossing time can be extended further than existing conditions.

Conceptual Recommendation D is the installation of a bump out at the southeast corner of the Willits and Chester intersection. There are concerns about the bump out and whether trucks would run over the curb and possibly damage it. The attached exhibit shows the turning movement of a truck traveling northbound on Chester Street with the proposed bump-out design. In this location, it is recommended to have a mountable curb, similar to the west side of Southfield Road south of W. Maple. Also, the Department of Public Services, Planning Department, and Engineering Department will be reviewing this area for possible landscape options because trees cannot grow along the south side of Willits due to the shade from the building.

LEGAL REVIEW:
The City Attorney has reviewed the proposed Commission action and has no objection.

FISCAL IMPACT:
The proposed enhancement for Willits Street from Chester/Maple to N. Old Woodward and Bates Street from Maple to Willits have been anticipated in the Capital Improvements Fund and budgeted for in the FY 2024-2025 budget under the Willits and Bates Project.

SUSTAINABILITY:
Removing some of the existing road pavement and converting it to a green space will decrease storm runoff entering the City's system.

DESIGN CONSIDERATIONS:
ADA design standards will be followed on this project.

PUBLIC COMMUNICATIONS:
The proposed design concepts were posted as agenda items for discussion during the December 4, 2024, Multi-Modal Transportation Board Meeting and March 6, 2025, Multi-Modal Transportation Board Meeting. No additional public comments are required for this agenda item.

SUMMARY:
The Multi-Modal Transportation Board reviewed and discussed the Willits and Bates project at the December 4, 2024 and March 6, 2025 meetings. City Staff and the MMTB recommend the City Commission consider the proposed design for the Willits and Bates Project by converting drive lanes Bates Street from Maple to Willits down to 2 lanes (Conceptual Recommendation C). The MMTB further recommends that the intersection of Willits and Chester be designed to remove the current island as indicated in Exhibit A, bump outs be installed at the intersection of Willits and Bates as shown in Exhibit B and have F&V review whether the pedestrian crossing time can be extended, and install a bump out at the southeast corner of Willits and Bates intersection with mountable curb as shown in Exhibit D.

ATTACHMENTS:

- Exhibit A – Redesign Island, Willits and Chester
- Exhibit A1 – Redesign Island, Willits and Chester
- Exhibit A2 – Redesign Interstation, Willits and Chester
- Exhibit B – Pedestrian Bumpouts
- Conceptual Recommendation C (from 2/24/2025 City Commission Meeting)
- Exhibit D – Willits & Chester Bump-out
- Truck Turning Movements Exhibit at Willits and Bates intersection and Willits and Chester intersection
- Speed Data for Chester Street between Maple and Willits
- Speed Date for Willits Street between Chester and N. Old Woodward
- Draft March 6, 2025, Multi-Modal Board Meeting

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to approve the proposed design for the Willits and Bates Project by converting Bates Street from Maple to Willits down to 2 lanes (Conceptual Recommendation C), to approve that the intersection of Willits and Chester to be designed to remove the current island as indicated in Exhibit A, bump outs to be installed at the intersection of Willits and Bates as shown in Exhibit B and have F&V review if the pedestrian crossing time can be extended further, and to install a bump out at the southeast corner of Willits and Bates intersection with a mountable curb as shown in Exhibit D.

Exhibit A-Redesigned Island, Willits & Chester



Exhibit A1-Redesigned Island, Willits & Chester

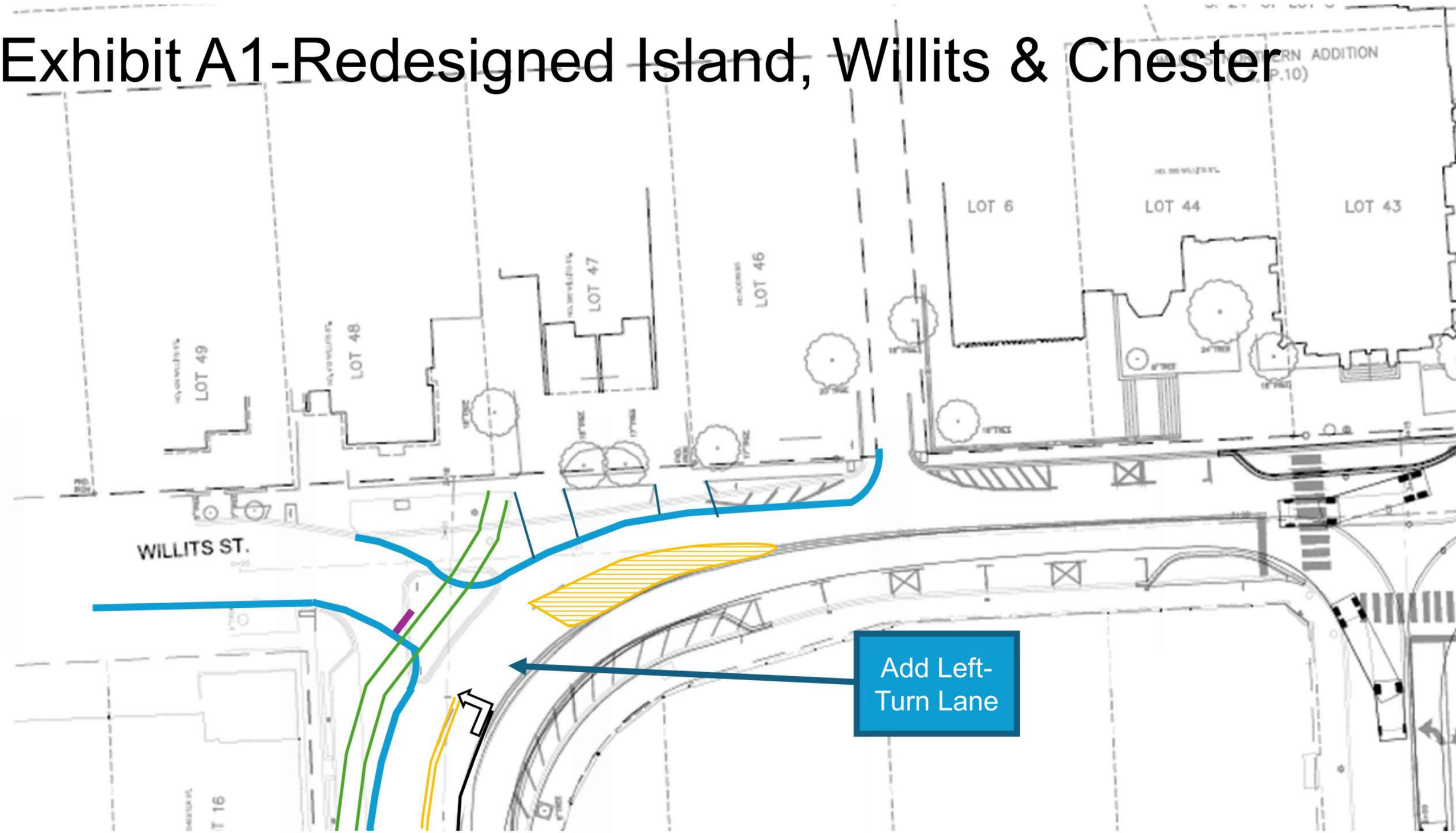


Exhibit A2-Redesigned Intersection, Willits & Chester

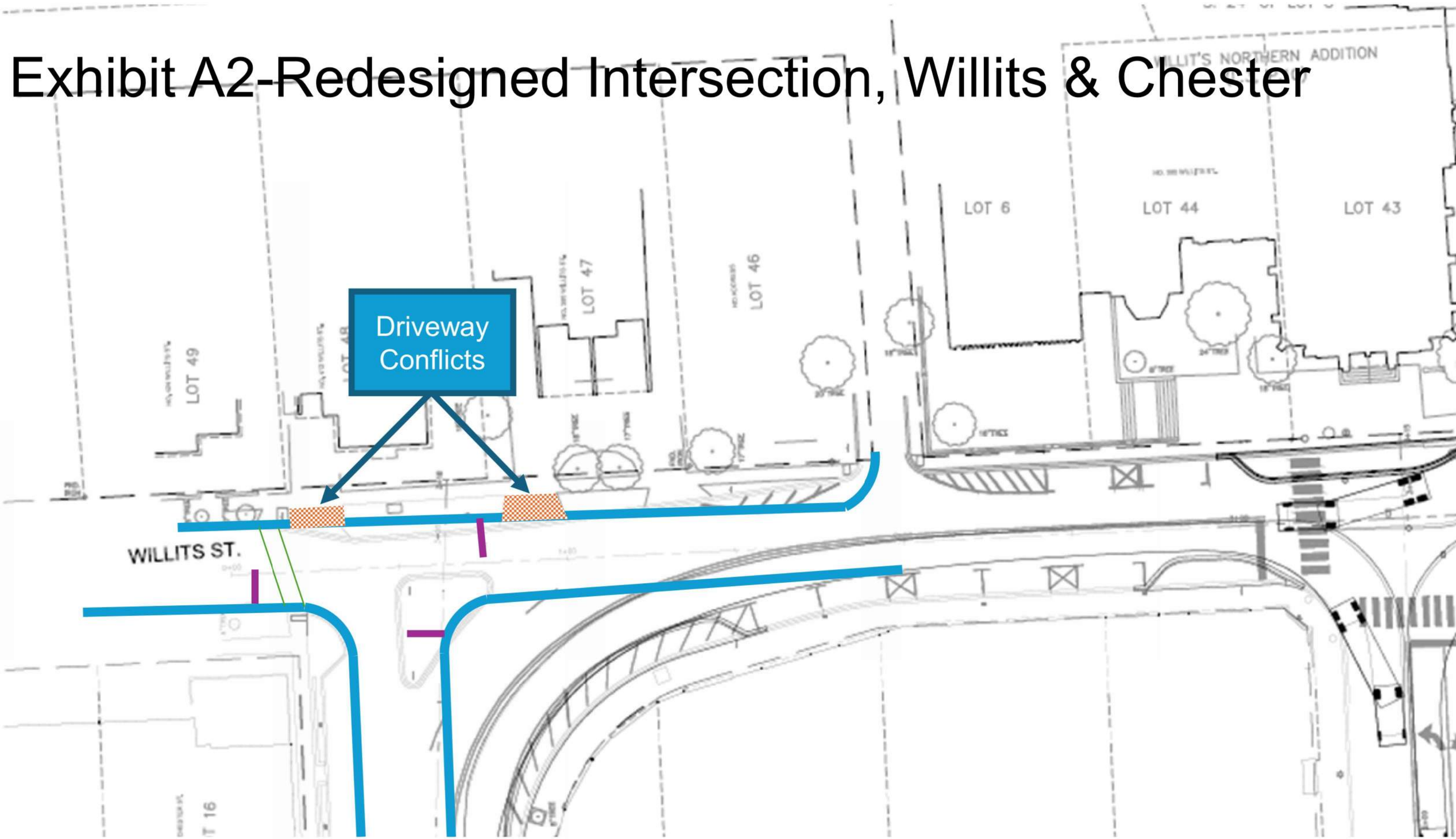
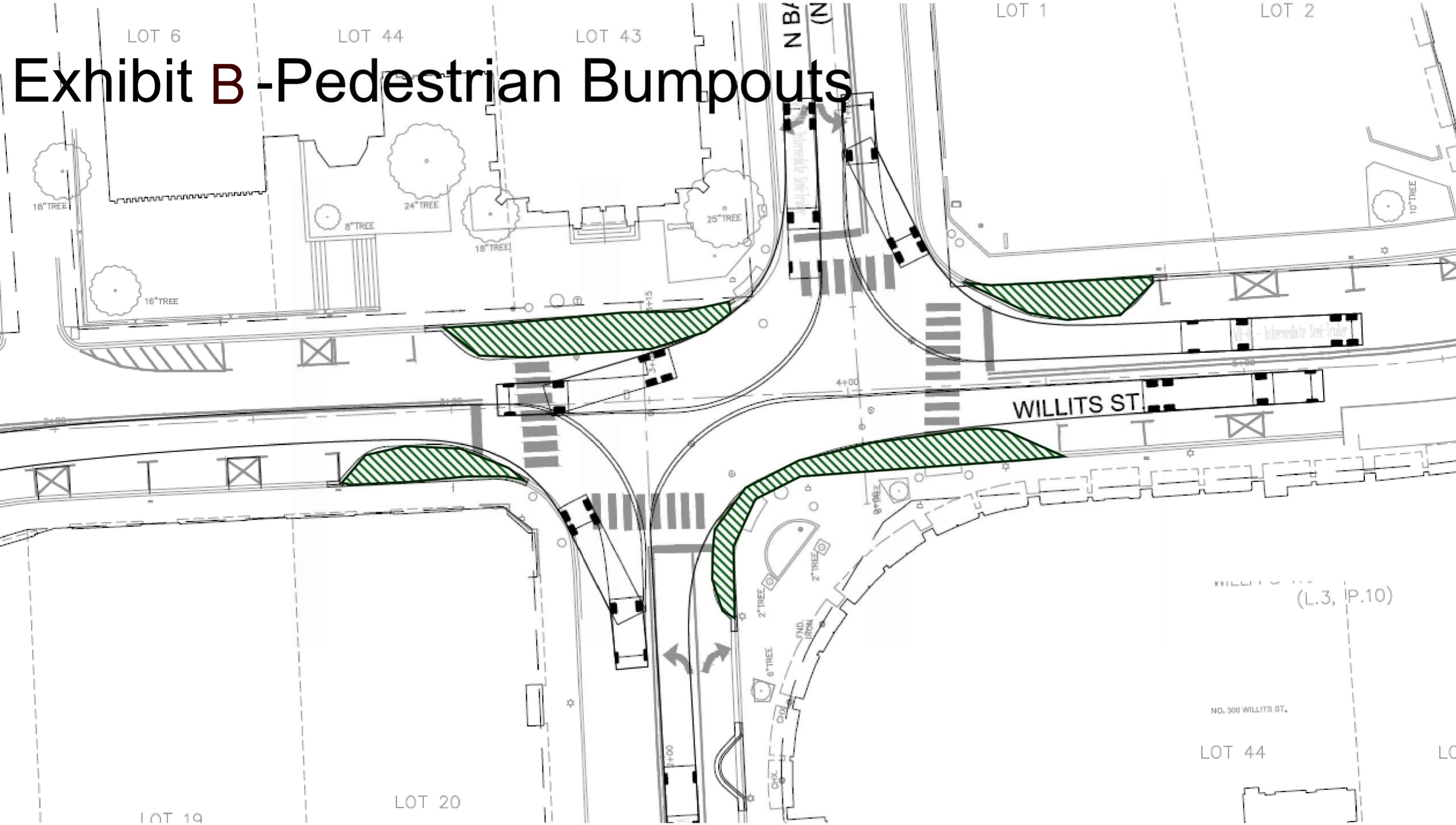


Exhibit B -Pedestrian Bumpouts



Convert Bates St to 2 lanes – convert the northbound traffic lane to 15-minute parking zone

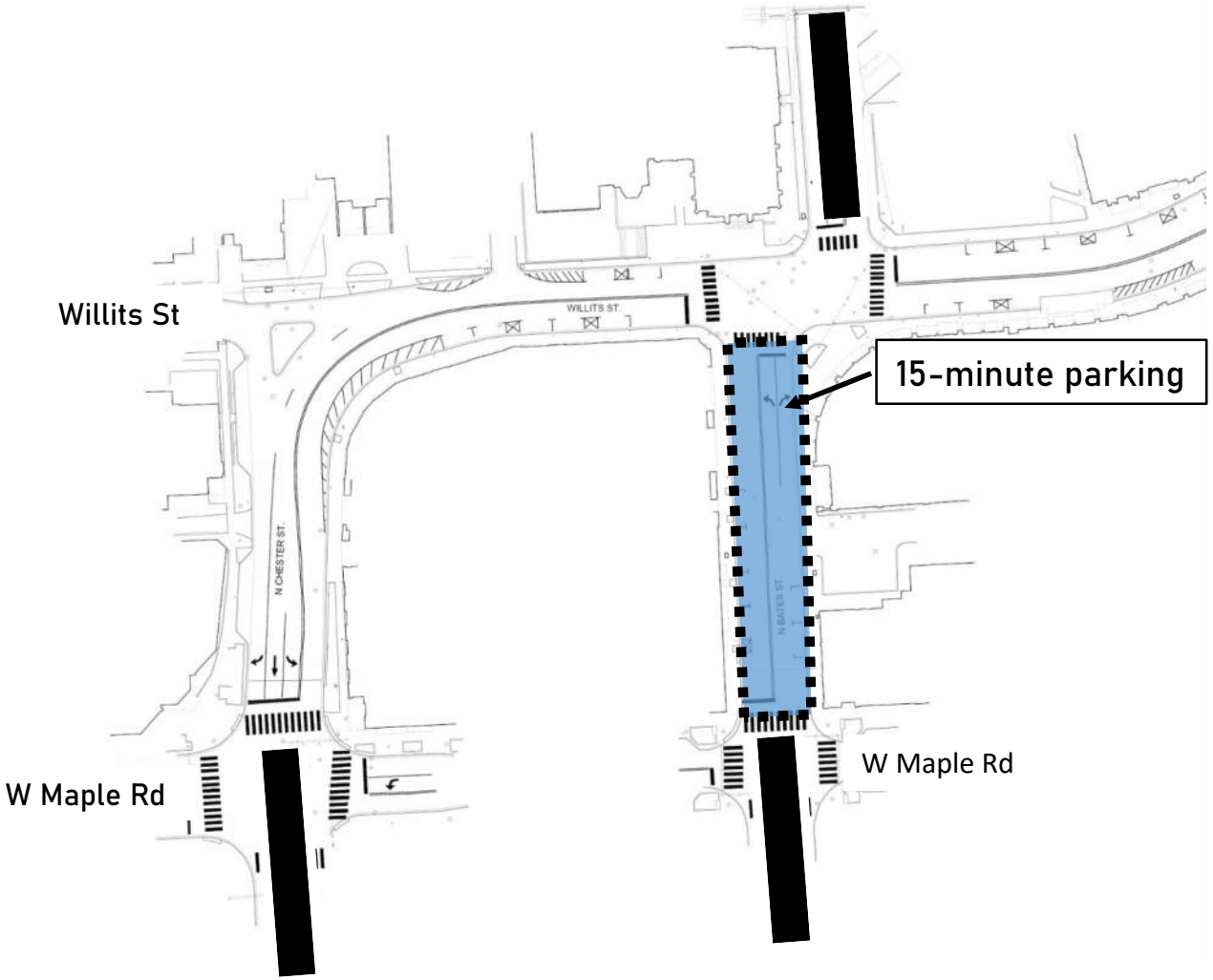
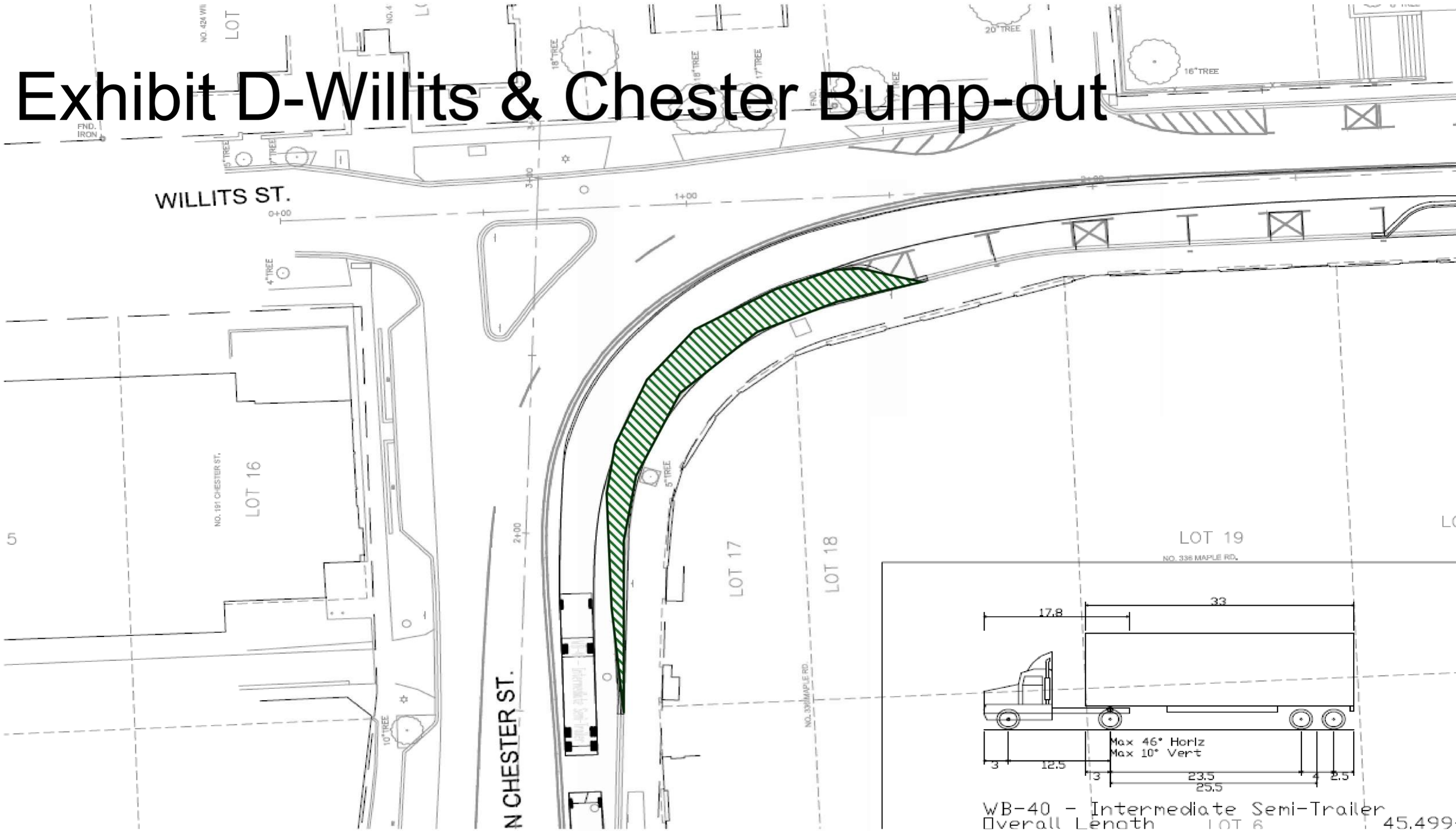


Exhibit C – Convert Bates Street into 2 Lanes and 15 minutes parking

Exhibit D-Willits & Chester Bump-out



WILLITS ST.

W MAPLE RD

N CHESTER ST.

N BATES ST. (NORTH)

N BATES ST. (SOUTH)

LOT 8 EXC. THE S. 24'

S. 24' OF LOT 8

WILLIT'S NORTHERN ADDITION (L.3, P.10)

PART OF LOT 3

LOT 1

LOT 2

LOT 6

LOT 44

LOT 43

LOT 7

LOT 19

LOT 20

LOT 17

LOT 18

LOT 8

LOT 9

LOT 16

LOT 49

LOT 48

LOT 47

LOT 46

WB-40 - Intermediate Semi-Trailer	
Overall Length	45.499ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	20.30°

1" = 40' MMTB Study

40 20 0 20 40 60

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SPEED DATA ANALYSIS

Location



Chester
Maple/Willits
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
3/4/2025	3/7/2025
7:37 AM	7:06 AM

Speed Limit



25

Vehicles Analyzed



13,425

Average Speed



20

85th Percentile Speed



23

Peak Time of Violations



3/5/2025
8:37 AM

Br P D r

Chester
Maple/Willits

Averaged Daily Totals

Combined

	<= 10	>10 to 12	>12 to 14	>14 to 16	>16 to 18	>18 to 20	>20 to 22	>22 to 24	>24 to 26	>26 to 28	>28 to 30	>30 to 32	>32 to 34	>34 to 36	>36 to 38	>38 to 40	>40 to 42	>42 to 44	>44 to 46	>46 to 48	>48 to 50	>50 to 52	>52 to 54	>54 to 56	>56 to 58	>58 to 60	>60 to 62	>62 to 64	>64 to 66	> 66	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	21	48	153	473	1,033	1,589	1,419	806	286	62	19	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,912
Wednesday	41	75	216	541	1,191	1,739	1,463	772	322	76	34	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,474
Thursday	4	7	34	93	196	249	232	109	54	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	994
Friday	0	0	1	2	9	12	15	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	66	130	404	1,109	2,429	3,589	3,129	1,691	664	151	56	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,425

South, 1

	<= 10	>10 to 12	>12 to 14	>14 to 16	>16 to 18	>18 to 20	>20 to 22	>22 to 24	>24 to 26	>26 to 28	>28 to 30	>30 to 32	>32 to 34	>34 to 36	>36 to 38	>38 to 40	>40 to 42	>42 to 44	>44 to 46	>46 to 48	>48 to 50	>50 to 52	>52 to 54	>54 to 56	>56 to 58	>58 to 60	>60 to 62	>62 to 64	>64 to 66	> 66	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	21	37	118	276	557	855	692	344	102	20	8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,032
Wednesday	38	63	156	333	687	997	735	317	106	26	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,465
Thursday	3	5	20	46	109	138	111	40	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	497
Friday	0	0	0	0	4	5	13	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Br P D r

Chester
Maple/Willits

Averaged Daily Totals

Total	62	105	294	655	1,357	1,995	1,551	704	231	50	14	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,021

North, 2

	<= 10	>10 to 12	>12 to 14	>14 to 16	>16 to 18	>18 to 20	>20 to 22	>22 to 24	>24 to 26	>26 to 28	>28 to 30	>30 to 32	>32 to 34	>34 to 36	>36 to 38	>38 to 40	>40 to 42	>42 to 44	>44 to 46	>46 to 48	>48 to 50	>50 to 52	>52 to 54	>54 to 56	>56 to 58	>58 to 60	>60 to 62	>62 to 64	>64 to 66	> 66	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	0	11	35	197	476	734	727	462	184	42	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,880
Wednesday	3	12	60	208	504	742	728	455	216	50	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,009
Thursday	1	2	14	47	87	111	121	69	33	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	497
Friday	0	0	1	2	5	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	25	110	454	1,072	1,594	1,578	987	433	101	42	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,404

Br P D r

SPEED DATA ANALYSIS

Location



Willits
Chester/N. Old Woodward
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
3/4/2025	3/7/2025
7:17 AM	7:46 AM

Speed Limit



25

Vehicles Analyzed



8,399

Average Speed



18

85th Percentile Speed



22

Peak Time of Violations



3/5/2025
7:17 AM

B r P D r

Willits
Chester/N. Old
Woodward

Averaged Daily Totals

Combined

	<= 10	>10 to 12	>12 to 14	>14 to 16	>16 to 18	>18 to 20	>20 to 22	>22 to 24	>24 to 26	>26 to 28	>28 to 30	>30 to 32	>32 to 34	>34 to 36	>36 to 38	>38 to 40	>40 to 42	>42 to 44	>44 to 46	>46 to 48	>48 to 50	>50 to 52	>52 to 54	>54 to 56	>56 to 58	>58 to 60	>60 to 62	>62 to 64	>64 to 66	> 66	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	70	125	183	249	280	246	192	85	45	19	12	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,511
Wednesday	142	225	362	558	653	549	413	233	95	40	20	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,298
Thursday	106	165	319	507	668	609	393	198	97	23	8	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,101
Friday	13	20	39	54	68	76	88	67	36	15	9	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	489
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	331	535	903	1,368	1,669	1,480	1,086	583	273	97	49	12	8	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	8,399

West, 1

	<= 10	>10 to 12	>12 to 14	>14 to 16	>16 to 18	>18 to 20	>20 to 22	>22 to 24	>24 to 26	>26 to 28	>28 to 30	>30 to 32	>32 to 34	>34 to 36	>36 to 38	>38 to 40	>40 to 42	>42 to 44	>44 to 46	>46 to 48	>48 to 50	>50 to 52	>52 to 54	>54 to 56	>56 to 58	>58 to 60	>60 to 62	>62 to 64	>64 to 66	> 66	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	67	94	119	131	140	97	73	41	29	8	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	805
Wednesday	133	189	242	301	321	246	159	95	41	21	13	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,769
Thursday	97	129	216	258	313	240	150	92	52	17	6	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,576
Friday	13	15	28	37	46	47	47	46	23	9	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B r P D r

Willits
Chester/N. Old Woodward

Averaged Daily Totals

Total	310	427	605	727	820	630	429	274	145	55	28	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,468

East, 2

	<= 10	>10 to 12	>12 to 14	>14 to 16	>16 to 18	>18 to 20	>20 to 22	>22 to 24	>24 to 26	>26 to 28	>28 to 30	>30 to 32	>32 to 34	>34 to 36	>36 to 38	>38 to 40	>40 to 42	>42 to 44	>44 to 46	>46 to 48	>48 to 50	>50 to 52	>52 to 54	>54 to 56	>56 to 58	>58 to 60	>60 to 62	>62 to 64	>64 to 66	> 66	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	3	31	64	118	140	149	119	44	16	11	9	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	706
Wednesday	9	36	120	257	332	303	254	138	54	19	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,529
Thursday	9	36	103	249	355	369	243	106	45	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,525
Friday	0	5	11	17	22	29	41	21	13	6	3	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	171
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	21	108	298	641	849	850	657	309	128	42	21	3	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3,931

City Of Birmingham Multi-Modal Transportation Board
March 6, 2025
151 Martin Street, City Commission Room 205, Birmingham, MI

Minutes of the regular meeting of the City of Birmingham Multi-Modal Transportation Board held March 6, 2025. The meeting was convened at 6:00 p.m.

A. Rollcall

Present: Chair Mark Doolittle (arrived 6:03 p.m.), Vice Chair Tom Peard; Board Members Laura Engelland, Gordon Davies (arrived 6:03 p.m.), David Hocker, Z. Rosie Koul

Absent: Board Member Patrick Hillberg; Alternate Board Member Timothy Kennedy

Staff: City Planner Blizinski; City Engineer Coatta, Planning Director Dupuis, City Transcriptionist Eichenhorn, Police Captain Kearney

C2G: Brad Strader

F&V: Julie Kroll

B. Introductions & Chair Comments
C. Review of the Agenda
D. Approval of MMTB Minutes of February 6, 2025

Motion by Koul
Seconded by Engelland to approve the meeting minutes from February 6th as written in the agenda packet.

Motion carried, 6-0.

VOICE VOTE
Yeas: Davies, Koul, Hocker, Peard, Doolittle, Engelland
Nays: None

E. Unfinished Business
F. New Business

1. **Shirley & Arlington Speed Mitigation**

CP Blizinski provided a summary of the item. Ms. Kroll, Mr. Strader, and staff provided updates. Staff, Ms. Kroll, and Mr. Strader answered informational questions from the Board.

Board members raised the following points during discussion:

- While painting along the sides of the road could help reduce vehicle speeds, the Commission tasked the MMTB to re-evaluate all of these options through the lens of improved pedestrian safety. The Commission seems to be more concerned with pedestrian safety along Arlington and Shirley than it is with speed mitigation.
- Few instances of speeding have been detected along Shirley and Arlington thus far.

- To clarify for the public and as Commissioner Schafer has noted, the MMTB recommended reducing the width of Arlington and Shirley and adding sidewalks during the road improvements in order to improve pedestrian safety.
- It is challenging to improve the pedestrian experience in this area without sidewalks. If pedestrian safety were the first priority, sidewalks would have been installed as part of the road improvements.
- This process feels somewhat like a poor use of resources, since the road has already been built and sidewalks were not implemented.
- Any option short of sidewalks for improving the pedestrian experience on Arlington and Shirley would be a compromise.
- The sides of the road cannot now accommodate sidewalks because the roads are designed for drainage, and sidewalks have different slopes in order to be ADA compliant that cannot be easily implemented post hoc.
- Traffic calming islands would reduce vehicle speeds while having less impact on the pedestrian experience.
- There was some concern that bike lanes with bollards or two center yellow lines would be perceived as less aesthetically pleasing by neighborhood residents.
- A bike lane in this area would not presently connect to other bike trails within the City.
- Option two would narrow the driving lanes and permit on-street parking. The painted areas may also result in some multimodal use, and the slowed vehicle traffic could benefit that use.
- Options two, three, and four slow traffic. The road remains level, and the same width, with the exception of the potential islands in option three. These options do not particularly impact the pedestrian experience beyond the speed reduction.
- The painted lines on the road would only result in a reduction of one to three mph per foot of lane narrowing. This may not meaningfully impact the very few drivers the data captured traveling at excess speeds.
- Option three should be eliminated as it would leave less room for pedestrians walking along the roads.
- Options with bike lanes would eliminate on-street parking. Complete elimination of on-street parking would likely be inconvenient for the neighborhood residents.
- Beverly Hills, Michigan has had no concerns with the speed bumps installed along Saxon Drive thus far.
- If the City were to install speed bumps or humps along Shirley and Arlington, more than one would need to be installed.
- Speed humps or cushions are usually reserved for areas near schools when speeds must be intensively limited, especially since they create noise. Shirley and Arlington may not need speeds limited to that extent, and it may not improve the pedestrian experience.
- Speed humps, bumps, and cushions are unsightly.
- While Shirley and Arlington have a perceived problem with speed, the data do not reflect that. The average speed in the area is approximately the speed limit. It is difficult to justify road changes for speed mitigation under the present conditions.
- Concerns about pedestrian safety along Shirley and Arlington may be more accurate.
- Alternatively, the data may not reflect present conditions. The study was conducted soon after the road was completed, and individuals who normally drive Arlington and Shirley may not have returned yet. It may be appropriate to resume this conversation once normal traffic conditions have returned.
- The Board seems to have the following options since the pedestrian experience cannot be

meaningfully improved. The Board could:
    - Attempt to reduce speeds presently;
    - Determine there is no need to reduce speeds; or,
    - Conduct another study once normal traffic flows have returned, and speed mitigation would be implemented only if speeds have increased since the prior study.
- Of the presented options, option two seems the most appropriate.
- Additional actions such as increased speed enforcement or speed boards could also be considered.
- It might be appropriate to present the Commission with two options, with pros and cons explained, and with meaningful opportunity for resident feedback.
- It might be appropriate to explain to the Commission that if they are trying to resolve a speed issue, there is no data to suggest there is a problem. If they are trying to resolve a pedestrian experience issue, option two is the best of the available options.

Motion by Engelland
Seconded by Peard to make a recommendation to the City Commission: if we are evaluating Shirley and Arlington on the basis of speed mitigation, we recommend taking no action at this time, because based on the data, we do not see a problem to be addressed. However, if we are evaluating the situation post-construction of the new road for ways to enhance pedestrian experience and safety, then we would recommend implementing option number two. In the scenario of option two, we recommend that this is fully vetted with the residents for their input before a final decision.

Motion carried, 6-0.

VOICE VOTE
Yeas: Davies, Koul, Hocker, Peard, Doolittle, Engelland
Nays: None

2. Woodward Ave Service Drive Parking Restrictions

PC Kearney presented the item and answered informational questions from the Board.

Board members made the following comments during discussion:
- This proposal was creative, worthwhile, and effective.
- Residents were previously very distressed about the noise and speeds on Woodward.
- This was an example of how government should work for its citizens at its best. The level of partnership the City had to do with businesses, and the practicality of it, required forward thinking and implementation.
- Staff provided appropriate data to demonstrate the decrease in complaints and tickets after implementation.
- The City should publicize this success as widely as possible.

Motion by Doolittle
Seconded by Engelland to make a motion to the City Commission to permanently enact the following Woodward Ave Service Drive Parking Restrictions: 1. 15-Minute

Parking, 7 PM to 6 AM, Friday through Sunday: Southbound Woodward • Oakland to Brown • Lincoln to Davis • North edge of 33301 Woodward to Bird Northbound Woodward • Elm to Maple • Emmons to S. Adams • S. Worth to the south edge of 34164 Woodward • North edge of 35032 Woodward to Lawndale 2. 15-Minute Parking, 7 PM to 10 PM, Friday through Sunday: Northbound Woodward from Sheffield to Emmons 3. 30-minute parking: Southbound Woodward from Brown to Hazel.

Motion carried, 6-0.

VOICE VOTE
Yeas: Davies, Koul, Hocker, Peard, Doolittle, Engelland
Nays: None

3. Willits: N. Old Woodward to Maple and Bates: Maple to Willits

CE Coatta introduced the item and Ms. Kroll presented the item. Both answered informational questions from the Board.

Board member comment was as follows:

- A left turn lane onto Willits was not likely necessary because there are easier ways to access most of the nearby neighborhoods or busier streets than turning onto Willits.

Motion by Doolittle
Seconded by Hocker to recommend to the City Commission that the intersection of Willits and Chester be designed to remove the current island as indicated in Conceptual Recommendations A, bump outs be installed at the intersection of Willits and Bates as shown in the Truck Turning Movement Exhibit and have F&V review if the pedestrian crossing time can be extended further, and install a bump out at the southeast corner of Willits and Bates intersection with mountable curb as shown in the Truck Turning Movement Exhibit.

Motion carried, 6-0.

VOICE VOTE
Yeas: Davies, Koul, Hocker, Peard, Doolittle, Engelland
Nays: None

G. Communications

Communications can be found in the evening's agenda packet.

1. Road Safety Audit – Maple & S. Eton

Staff and Ms. Kroll reviewed this communication and answered informational questions from the Board.

Board members' comments were as follows:

- It seemed that this item would not require action since it was under 'Communications' on the agenda.
- Staff was seeking an action from the Board.
- This intersection is very challenging from a multimodal perspective.
- A high volume of crashes still occurs in this area even though data indicated a decrease in traffic since 2019.

Motion by Peard
Seconded by Hocker to install the followings signs: - R-10 "No Turn on Red" sign at southbound N. Eton at Maple and northbound S. Eton at Maple. - Remove the Existing "Watch for Pedestrians While Turning" sign and replace it with the R10-15 "Turning Vehicle Yield to Pedestrians" sign. - R3-24 "No Straight Through" sign west of the westerly Whole Food Approach. - W12-2 "Low Clearance Symbol and Height (13'-2")" sign, and W16-aP "1 Mile" sign east of the intersection of Maplelawn and Coolidge in the City of Troy.

Motion carried, 6-0.

VOICE VOTE
Yeas: Davies, Koul, Hocker, Peard, Doolittle, Engelland
Nays: None

2. Lincoln & Floyd

Staff and Ms. Kroll reviewed this communication and answered informational questions from the Board.

Board members' comments were as follows:

- The letter writer's concern was understandable given the vehicle collision that occurred outside their home.
- This is a challenging crosswalk for a pedestrian.
- It was important that staff and City consultants spoke with the bus driver and school district staff in order to follow up on the letter writer's concerns about school bus stop violations.

H. Meeting Open to the Public for items not on the Agenda
I. Adjournment

No further business being evident, the Board adjourned at 8:07 p.m.

Leah Blizinski, City Planner

Laura Eichenhorn, City Transcriptionist

DRAFT

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Engineering Department

DATE: April 7, 2024

TO: Jana L. Ecker, City Manager

FROM: Melissa A. Coatta, City Engineer

SUBJECT: Wimbleton Phase 1 Project, Contract #6-25(W)
Hearing of Necessity for Sewer and Water Lateral Special Assessment District (SAD)

INTRODUCTION:
Several water and sewer laterals will be replaced as part of the Engineering Department's planned project for the sewer and water main improvements on Wimbleton Drive from Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end. The City intends to replace private sewer and water laterals that do not meet "useful life" criteria within the City's right-of-way (ROW) in an effort to protect public investments.

BACKGROUND:
At the October 28, 2024, City Commission Meeting (Agenda – Video), a resolution was approved for the Wimbleton Phase 1 Project to receive water main replacement, sewer improvements and concrete curb and gutter with cape seal treatment of the road surfaces within the project area, and to install sidewalk sections where none exist on Wimbleton.

The existing 6" water main was originally installed on Abbey Street in 1925 and on Wimbleton Drive in 1927. There is an existing 2" water main on Twin Oaks but the date is unknown. The new water main on Wimbleton Drive will be 12". Abbey Street and Twin Oaks will recieve an 8" water main.

Wimbleton Drive has both sanitary sewer and combined sewer ranging from 8" to 12" in size which were originally installed in 1926. Also, the Oakland County Water Resource Commission (OCWRC) has a 42" sewer from Woodward Ave to Abbey. Abbey Street has an 8" sanitary sewer that was installed in 1926. Twin Oaks Street also has an 8" sanitary sewer with an unknown installation date. The City will be replacing the existing sanitary sewer and installing a new storm sewer and draining it directly to the Rouge River which is located north of Wimbleton Drive and east of Woodward Ave.

In accordance with the current City policy established to protect the public investment being made with capital improvement projects in the public roadway, the following is proposed:

- Replacement of all sewer laterals that are 50 years of age or older, are less than 6" diameter, or are constructed of unsuitable material. All unsuitable sewer laterals will be replaced with 6" schedule 40 PVC.
- Replacement of all water services that are 60 years of age or older, are less than one inch in diameter, or are constructed of unsuitable material. All unsuitable water services will be replaced with a new 1-inch diameter service, or be replaced to match the existing diameter if greater than 1 inch.

The lengths of sewer and/or water laterals replacement will be within the road right-of-way. The parcels within the project zone that are subject to sewer and water lateral special assessment are highlighted on the attached map. Appended to this report is a list of properties that are included in the Assessment district, along with the estimated construction costs to be assessed.

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 SAD for the Wimbleton Phase 1 project will defray the costs incurred by the City for the construction of these improvements. One hundred percent of the costs for laterals within the ROW will be paid by the property owners. The cost can be paid 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 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 28, 2024 meeting, this project will receive concrete curb and gutter with cape seal treatment of the road surfaces within the project area, and the installation of sidewalk sections where none exist on Wimbleton.

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 2, 2025.

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 1 project. 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 April 21, 2025.

ATTACHMENTS:
- Map of proposed special assessment district of sewer and water lateral replacement
- Wimbleton Phase 1 project plans

- Spreadsheet with estimated cost of lateral replacement
- Clerk's confirmation of the public hearing notice

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 Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end; 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 1 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 1 Project (Contract #6-25(W)):

Wimbleton Drive - Woodward Ave. to Oxford Road
Abbey Street - Wimbleton south to the dead end
Twin Oaks - Wimbleton north to the dead end

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 $100.00 per foot of 6" diameter sewer service pipe, $90.00 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 April 21, 2025 and give notice of same.

Sewer and/or Water Lateral

Sidwell Number	Street Address	Estimated Sewer SAD Costs	Estimated Water SAD Costs
1925251022	175 ABBEY RD	$3,500.00	-
1925255006	519 WIMBLETON DR	$3,100.00	-
1925256002	111 ABBEY RD	$2,400.00	-
1925177022	999 TWIN OAKS LN	$1,900.00	$0.00 *
1925177023	951 TWIN OAKS LN	$1,000.00	$0.00 *
1925177024	187 WIMBLETON DR	-	-
1925177025	175 WIMBLETON DR	$3,450.00	$4,230.00
1925177026	165 WIMBLETON DR	$3,500.00	$4,140.00
1925177027	155 WIMBLETON DR	$2,800.00	$0.00 *
1925177028	139 WIMBLETON DR	$3,600.00	$5,760.00
1925180003	176 WIMBLETON DR	$2,700.00	-
1925180004	144 WIMBLETON DR	$3,500.00	-
1925251023	147 ABBEY RD	$2,400.00	-
1925254008	205 WIMBLETON DR	$3,100.00	$1,890.00
1925254011	287 WIMBLETON DR	$3,100.00	$1,890.00
1925254012	323 WIMBLETON DR	$3,100.00	$1,890.00
1925254013	341 WIMBLETON DR	$3,100.00	$1,890.00
1925254014	355 WIMBLETON DR	$3,100.00	$1,890.00
1925254015	379 WIMBLETON DR	$3,100.00	$1,890.00
1925254016	421 WIMBLETON DR	$3,100.00	-
1925254017	463 WIMBLETON DR	$3,100.00	-
1925254019	245 WIMBLETON DR	-	-
1925254020	269 WIMBLETON DR	$3,100.00	-
1925256001	129 ABBEY RD	$2,400.00	-
1925257001	202 WIMBLETON DR	-	-
1925257002	244 WIMBLETON DR	$3,000.00	-
1925257003	266 WIMBLETON DR	$3,000.00	-
1925257004	282 WIMBLETON DR	$3,000.00	$3,600.00
1925257005	322 WIMBLETON DR	$3,000.00	$3,600.00
1925257008	380 WIMBLETON DR	$3,000.00	$3,600.00
1925257012	498 WIMBLETON DR	$3,000.00	$3,600.00
1925257018	460 WIMBLETON DR	$3,000.00	-
1925257019	420 WIMBLETON DR	$6,000.00	-
1925257020	444 WIMBLETON DR	$3,000.00	-
1925257023	340 WIMBLETON DR	$3,000.00	-

1925401001	N/A POPPLETON PARK	-	-
1925255007	541 WIMBLETON DR	$3,800.00	$2,430.00
1925258001	520 WIMBLETON DR	$3,000.00	$3,600.00

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

Wimbleton Drive Project Area



Limits of Projects

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

Wimbleton Drive Project Area



Limits of Projects

Properties Within Sewer Lateral SAD

Properties Within Sewer and Water Lateral SAD

8A

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

WIMBLETON DRIVE PAVING PROJECT

CONTRACT #6-25(W)

SHEET INDEX

COVER SHEET (WIMBLETON DRIVE PAVING PROJECT)
C01 Utility Plan - Wimbleton Drive - P.O.B. to Sta. 4+50
C02 Utility Plan - Wimbleton Drive - Sta. 4+50 to 9+00
C03 Utility Plan - Wimbleton Drive - Sta. 9+00 to 13+00
C04 Utility Plan - Wimbleton Drive - Sta. 13+00 to P.O.E.
C05 Utility Plan - Twin Oaks Lane - P.O.B. to P.O.E.
C06 Utility Plan - Abbey Street - P.O.B. to P.O.E.
C07 Watermain Hydrant Profiles
C08 Sewer Profiles (1 of 2)
C09 Sewer Profiles (2 of 2)
C10 Utility Service Plan - P.O.B. to Sta. 9+00
C11 Utility Service Plan - Sta. 9+00 to P.O.E.
C12 Utility Service Plan - Twin Oaks Lane & Abbey Street
C13 Paving and Grading - Wimbleton - P.O.B. to Sta. 4+50
C14 Paving and Grading - Wimbleton - Sta. 4+50 to Sta. 9+00
C15 Paving and Grading - Wimbleton - Sta. 9+00 to Sta. 13+00
C16 Paving and Grading - Wimbleton - Sta. 13+00 to P.O.E.
C17 Paving and Grading - Twin Oaks Lane - P.O.B. to P.O.E.
C18 Paving and Grading - Abbey Street - P.O.B. to P.O.E.
C19 Intersection and Sidewalk Grading Details
C20 Existing and Proposed Road Cross-Sections
C21 Advanced Warning Signage (AWS) Traffic Diagram
C22 Notes and Details
C23 Notes and Details
Q1 Quantities

CITY OF BIRMINGHAM - WATER MAIN STANDARD DETAILS
CITY OF BIRMINGHAM - SEWER STANDARD DETAILS

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.

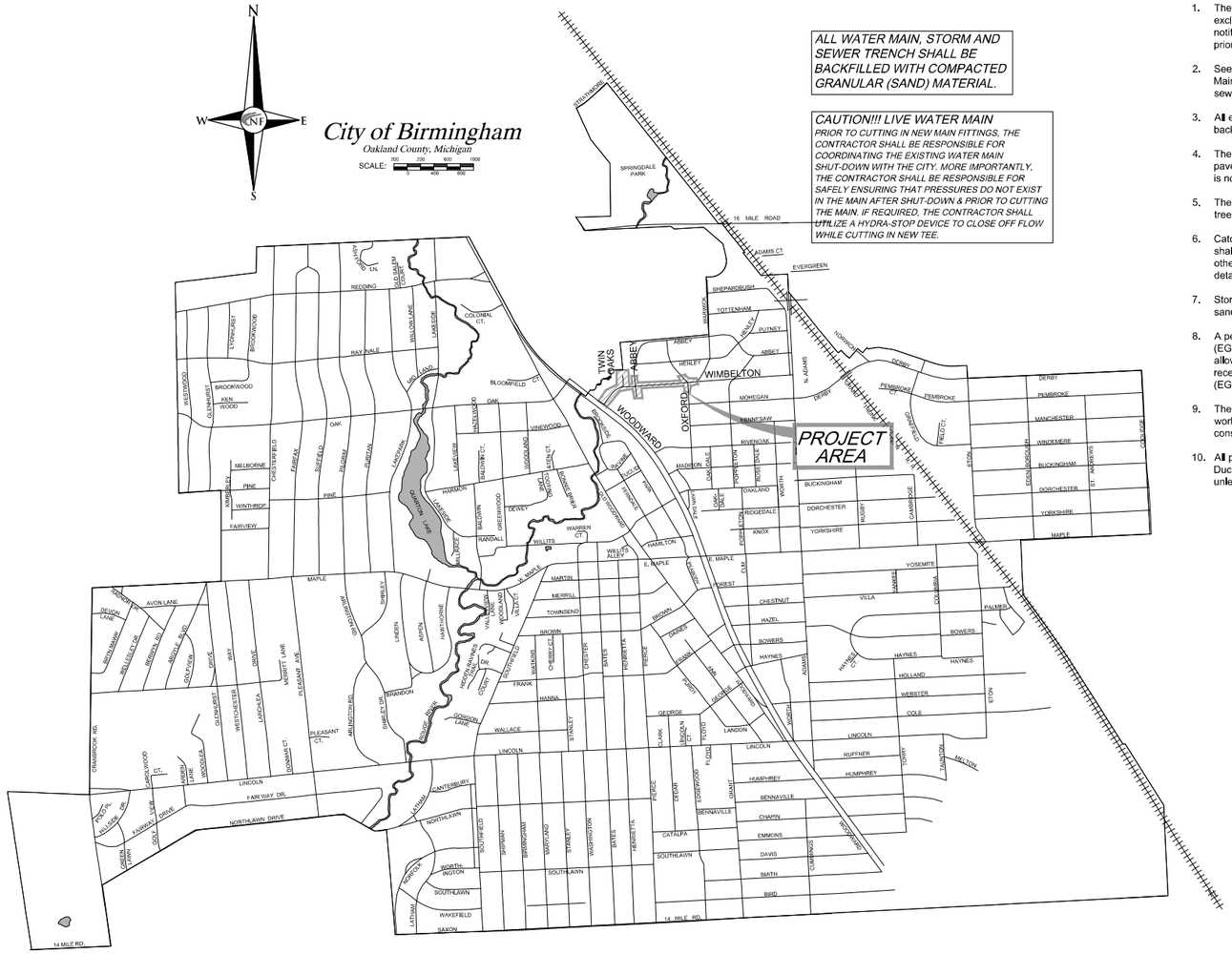
Know what's below Call before you dig.

BENCHMARK NOTE

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

N W CNT E S

City of Birmingham
Oakland County, Michigan
SCALE: 0 400 800 1000



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 THE EXISTING WATER MAIN SHUT-DOWN WITH THE CITY. 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.

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 drawings "Sewer Standard Details" and "Water Main Standard Details" for details of manholes, catch basins, inlets, and related sewer and water main 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. Storm, sewer and water main trench shall be backfilled with MDOT Class II sand and properly compacted to 95% of modified proctor density.
8. A permit from the Michigan Department of Environment, Great Lakes & Energy (EGLE) is required for all new water main installations. Also, no work shall be allowed on the combined sewer system until appropriate permits have been received by the Michigan Department of Environment, Great Lakes & Energy (EGLE).
9. 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.
10. 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.

WIMBLETON DRIVE PAVING PROJECT
CONTRACT #6-25(W)

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

APPROVED DATE

03-04-25 ADDENDUM #2

UTILITY CROSSING SCHEDULE

01A EX. 3" GAS B/P 757.40
PR. 42" STM T/P 752.43
VERTICAL CLEARANCE=4.97' FT

01B PR. 12" W.M. B/P 758.53
EX. 42" COMB. T/P 756.10
VERTICAL CLEARANCE=2.43 FT
*UTILIZE VERT. BENDS AS REQ. TO CROSS EX. COMB.

01C PR. 42" STM B/P 757.75
EX. 42" COMB. T/P 754.22
VERTICAL CLEARANCE=1.53 FT

01D PR. 42" STM B/P 757.61
PR. 12" W.M. T/P 756.08
VERTICAL CLEARANCE=1.53 FT
*UTILIZE VERT. DUPRE AS REQ. TO CROSS PR. STM

01E PR. 12" W.M. B/P 760.97
PR. 10" COMB. T/P 756.37
EX. 2" W.M. VLV. (ABANDON)
EX. 12" COMB. T/P 757.02 (ABANDON)
VERTICAL CLEARANCE=4.40 FT

01F PR. 24" STM B/P 750.54
EX. 42" COMB T/P 750.24
(INSTALL CONC. SADDLE ABOVE EX. COMB. SEWER PER DETAIL)
VERTICAL CLEARANCE=0.30 FT

01G EX. 16" W.M. B/P 754.98
PR. 24" STM T/P 753.00
VERTICAL CLEARANCE=1.98 FT

01H EX. 3" GAS B/P 756.93
PR. 24" STM T/P 752.64
VERTICAL CLEARANCE=4.29 FT

05A (SEE SHEET C05)
05B (SEE SHEET C05)
05C (SEE SHEET C05)
05F (SEE SHEET C05)
05G (SEE SHEET C05)

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.

DE-WATERING NOTE:

BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

SEWER STRUCTURE SCHEDULE

206 MAINTAIN
0+20.71 28.15'N
COMB. MH 206
RIM 758.58
42" INV NE 737.23 (MAINTAIN)
60" INV W 737.23 (MAINTAIN)
7" INV 737.23 (MAINTAIN)

122 4+04.83 0.90'S
COMB. MH 122
RIM 769.00
12" INV N 755.50
42" INV E 753.90
42" INV W 753.70
(SEE SHEET C05)

30A 4+04.57 60.44' N
SANITARY MH 30A
RIM 768.93
8" INV N 758.93
10" INV SE 758.73
8" INV SW 758.93
(SEE SHEET C05)

29A 4+01.11 177.27'N
SANITARY MH 29A
RIM 767.64
8" INV N 759.64
8" INV S 759.34
(SEE SHEET C05)

206A REMOVE
0+36.57 19.21' N
COMB. MH 206A
RIM 758.54
PR. RIM XXX
42" INV NE 746.34 (DROP) (MAINTAIN)
24" INV NE 739.84 (DROP) (MAINTAIN)
36" INV SE 739.94 (MAINTAIN)
42" INV SW 739.14 (MAINTAIN)

30 4+12.08 51.64' N
COMB. MH 30
RIM 769.48
8" INV N 758.78
12" INV S 758.63
10" INV NW 758.63
(SEE SHEET C05)

29 4+08.41 175.27'N
COMB. MH 29
RIM 767.74
8" INV S. 762.64
8" INV S. 759.34
(BOTTOM)
(SEE SHEET C05)

WATER MAIN SCHEDULE

66 MAINTAIN
0+17.94 41.68'S
GATE VALVE 66
RIM 759.68
16" T/PIPE 754.38 (MAINTAIN)

26 ADJUST & CONNECT EAST OF VALVE
1+53.45 4.87'S
GATE VALVE 26
RIM 760.76
T/PIPE E-W 756.36

HYDRANT & ASSEMBLY
STA. 1+78.77' 7.65' S
F.G. 761.70
PR. T/PIPE 756.20

4 REMOVE
1+47.33 18.02'S
HYDRANT 4 761.35'

PR. 12" GATE VALVE IN WELL
PR. STA. 4+26.80' 9.50' N
PR. RIM. 768.45
PR. T/PIPE 763.05

HYDRANT & ASSEMBLY
STA. 4+36.36' 9.50' N
PR. F.G. 769.25
PR. T/PIPE 763.25

(SEE SHEET C06)

STORM STRUCTURE SCHEDULE

31 REMOVE
0+95.53 26.16'N
STORM MH 31(R)
NOT SHOT

31a REMOVE
0+93.27 31.77' N
CATCH BASIN 31a
RIM 759.00
10" INV SE 753.90 (REMOVE)

29a 4+09.51 160.29' N
C.B. BEEHIVE 29a
RIM 767.20
8" INV W 764.60
8" INV N 763.95
(SEE SHEET C05)

29b 3+98.21 160.52'N
STORM MH 29b
RIM 767.14
T/DIRT 764.94
(SEE SHEET C05)

Storm Drainage Structure Schedule

Structure Name	Structure Details
#30 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 768.20 PR. 42" NW. INV. 758.20 PR. 42" E. INV. 758.20
#31 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 758.10 PR. 42" W. INV. 749.00 PR. 42" NE. INV. 750.70
#31A PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 760.92 PR. 42" SW. INV. 752.40 PR. 42" NE. INV. 753.10
#31B PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 765.05 PR. 42" SW. INV. 754.90 PR. 42" E. INV. 755.70
#31C PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 766.95 PR. 12" NE. INV. 761.90 PR. 42" W. INV. 756.35 PR. 42" SE. INV. 757.90
#32A PR. 6' STORM MANHOLE	PR. RIM 758.38 PR. 36" E. INV. 752.00 PR. 24" S. INV. 748.00 PR. 42" W. INV. 748.00
#32B PR. 6' STORM MANHOLE TEMP. BULKHEAD FOR 24" (SE.) (INC.)	PR. RIM 758.67 PR. 24" N. INV. 748.25 PR. 24" SE. INV. 750.50 PR. 18" NE. INV. 748.25
#32C PR. 10' CONTECH SCX-10 WATER QUALITY STRUCTURE (OR APPROVED EQUAL)	PR. RIM 758.61 PR. 18" SW. INV. 748.45 PR. 18" N. INV. 748.45
#32D PR. 6' STORM MANHOLE W/ 2' SUMP & ELEVATED 36" DIA. OVERFLOW	PR. RIM 759.01 PR. 18" S. INV. 748.65 PR. 42" E. INV. 748.65 PR. 36" W. INV. 752.31

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. BITUMINOUS CAPESEAL
PR. 18" MD. CONC. CURB & GUTTER
SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

WIMBLETON DRIVE PROFILE

SCALE: H 1" = 20' V 1"=2'

MATCHLINE 4+50

TWIN OAKS LANE

(25' ROW)

8A

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
Paving Project
Contract #6-25(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 - P.O.B. to Sta. 4+50

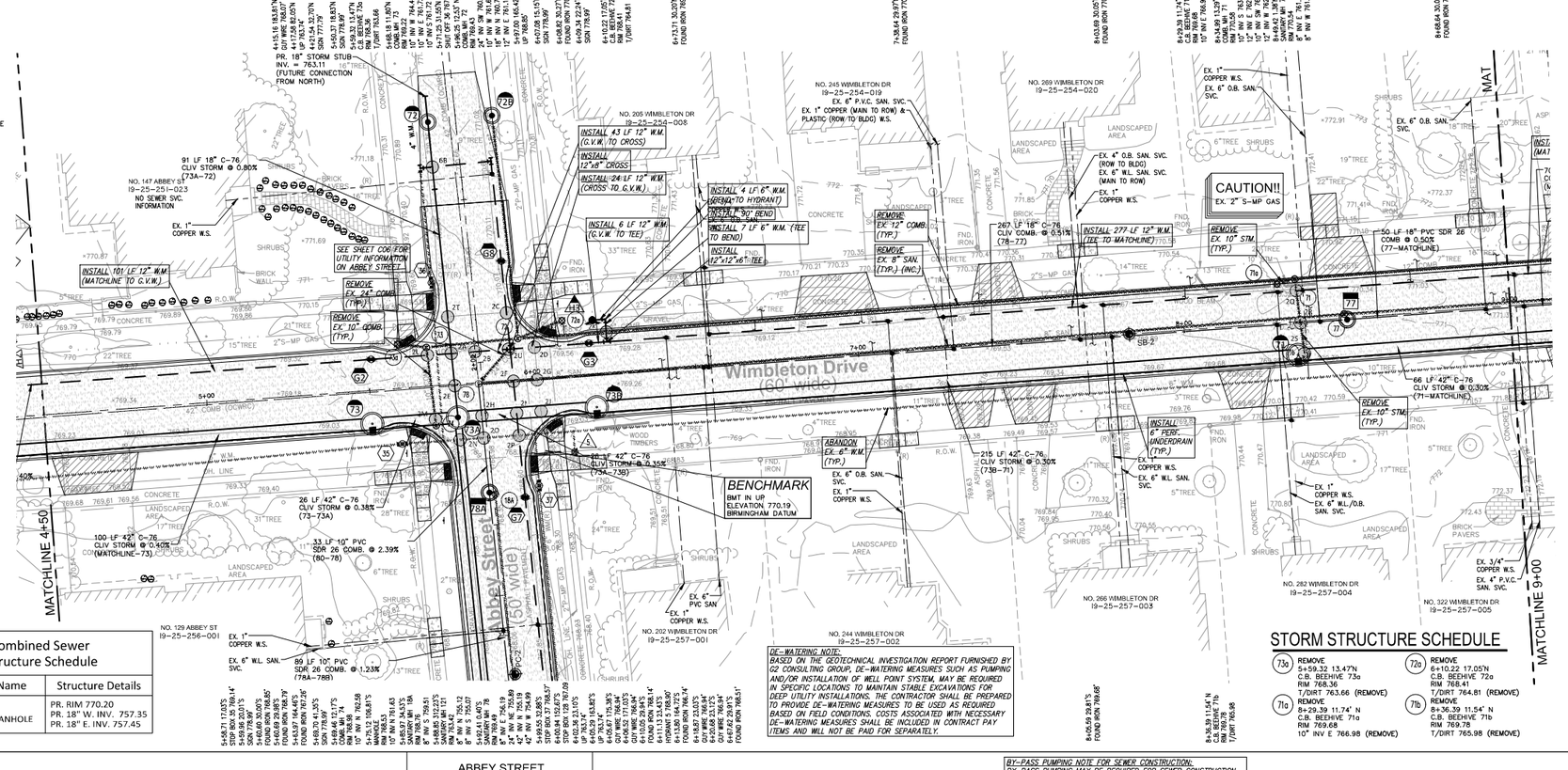
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C01

\2000-2000 Files\2000-FILES\0310\Office\Construction Documents\0310_UTL.dwg 3/5/2025 8:42 AM



SEWER STRUCTURE SCHEDULE

(73) REMOVE
5+68.18 11.80'N
COMB. MH 73
RIM 769.22
10" INV W 764.42 (REMOVE)
10" INV E 761.72 (REMOVE)
10" INV S 761.72 (CALC.) (REMOVE)

(18A) REMOVE
5+85.97 34.53'S
SANITARY MH 18A
RIM 768.76
8" INV S 759.51 (ABANDONED)

(72) REMOVE
5+96.25 12.53' N
COMB. MH 72
RIM 769.43
24" INV SW 760.33 (REMOVE)
10" INV W 761.63 (REMOVE)
18" INV N 760.73 (REMOVE)
12" INV E 761.13 (REMOVE)
8" INV NE V.I.F. (REMOVE)

(77) REMOVE
8+49.42 1.38'N
SANITARY MH 77
RIM 770.54
8" INV E 761.34 (REMOVE)
8" INV W 761.24 (REMOVE)

(74) REMOVE
5+69.46 12.17'S
COMB. MH 74
RIM 768.98
10" INV N 762.58 (REMOVE)

(78) TAP & ADJUST
5+92.41 0.40'S
SANITARY MH 78
RIM 769.49
PR. RIM XXX
8" INV E 756.19 (REMOVE)
24" INV NE 755.89 (MAINTAIN)
42" INV N 755.19 (MAINTAIN)
42" INV W 754.99 (MAINTAIN)
PR. 18" INV E XXXX (TAP)
PR. 10" INV S XXXX (TAP)

(71) REMOVE
8+34.99 13.29'N
COMB. MH 71
RIM 770.58
10" INV S 763.48 (REMOVE)
12" INV E 762.38 (REMOVE)
10" INV SW 765.78 (REMOVE)
12" INV W 762.38 (REMOVE)

WATER MAIN SCHEDULE

(35) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
5+58.71 17.03'S
STOP BOX 35 769.14'

(37) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
5+99.55 32.88'S
STOP BOX 37 768.57'

(62) PR. 12" GATE VALVE IN WELL
PR. STA. 5+51.09' 8.55' N
PR. RIM 769.35
PR. T/PIPE 761.25

(63) PR. 12" GATE VALVE IN WELL
PR. STA. 6+17.91' 9.50' N
PR. RIM 768.65
PR. T/PIPE 761.90

(36) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
5+71.25 31.55'N
SHUT OFF 36 767.09'

(5) REMOVE
6+11.13 23.43'S
HYDRANT 5 768.90'

(61) HYDRANT & ASSEMBLY
STA. 6+18.50' 6.15' N
PR. F.G. 769.45
PR. T/PIPE 763.45

(67) (SEE SHEET C06)

(69) (SEE SHEET C06)

UTILITY CROSSING SCHEDULE

02A PR. 18" STM B/P 762.48
PR. 12" W.M. T/P 760.80
VERTICAL CLEARANCE:1.68 FT

02B PR. 12" W.M. B/P 760.25
EX. 42" COMB. T/P 758.72
VERTICAL CLEARANCE:1.53 FT

02C EX. 3" GAS B/P 767.51
PR. 8" W.M. T/P 761.72
VERTICAL CLEARANCE:5.79 FT

02D EX. 2" GAS B/P 767.22
PR. 12" W.M. T/P 761.56
VERTICAL CLEARANCE:5.66 FT

02E PR. 18" STM B/P 762.40
EX. 42" COMB. T/P 756.45
VERTICAL CLEARANCE:3.95 FT

02F PR. 8" SAN. B/P 759.34
PR. 18" COMB. T/P 757.55
*UTILIZE VERT. BENDS AS REQ. TO CROSS PR. COMB. SEWER
EX. 8" COMB. T/P 757.06 (REMOVE)
VERTICAL CLEARANCE:1.79 FT

02G EX. 2" GAS B/P 767.22
PR. 18" COMB. T/P 757.59
VERTICAL CLEARANCE:9.63 FT

02H PR. 42" STM B/P 760.28
PR. 10" COMB. T/P 757.57
VERTICAL CLEARANCE:2.71 FT

02I PR. 42" STM B/P 760.31
PR. 8" W.M. T/P 758.43
*UTILIZE VERT. BENDS AS REQ. TO CROSS PR. STM SEWER
VERTICAL CLEARANCE:1.88 FT

02J EX. 2" GAS B/P 767.18
PR. 42" STM T/P 763.84
VERTICAL CLEARANCE:3.34 FT

02K EX. 12" COMB. B/P 761.27 (REMOVE)
PR. 8" W.M. T/P 761.50
VERTICAL CLEARANCE:0.00 FT

02L PR. 12" W.M. B/P 760.00
EX. 10" COMB. T/P V.I.F. (REMOVE)

EX. 4" W.M. T/P V.I.F. (ABANDON)

02M EX. 10" COMB. B/P V.I.F. (REMOVE)
EX. 4" W.M. B/P V.I.F. (ABANDON)
PR. 42" STM B/P 764.10

02N EX. 6" W.M. B/P V.I.F. (ABANDON)
PR. 24" STM T/P 763.71

02O EX. 6" W.M. B/P V.I.F. (ABANDON)
EX. 10" COMB. T/P 757.71
VERTICAL CLEARANCE:5.79 FT

02P EX. 6" W.M. B/P V.I.F. (ABANDON)
PR. 8" W.M. T/P 758.27

02Q PR. 12" W.M. B/P 763.59
EX. 10" STM T/P V.I.F. (REMOVE)

02R EX. 10" STM B/P V.I.F. (REMOVE)
PR. 42" STM T/P 764.54

02S EX. 2" GAS B/P 767.53
PR. 18" STM T/P 764.07
VERTICAL CLEARANCE:3.46 FT

02T PR. 12" W.M. B/P 760.41
EX. 24" COMB. T/P 758.84 (REMOVE)
VERTICAL CLEARANCE:1.47 FT

02U PR. 12" W.M. B/P 760.41

06B (SEE SHEET C06)

STORM STRUCTURE SCHEDULE

(73a) REMOVE
5+59.32 13.47'N
C.B. BEEHIVE 73a
RIM 768.36
T/DIRT 763.66 (REMOVE)

(71a) REMOVE
8+29.39 11.74' N
C.B. BEEHIVE 71a
RIM 769.68
10" INV E 766.98 (REMOVE)

(72a) REMOVE
6+10.22 17.05'N
C.B. BEEHIVE 72a
RIM 768.41
T/DIRT 764.81 (REMOVE)

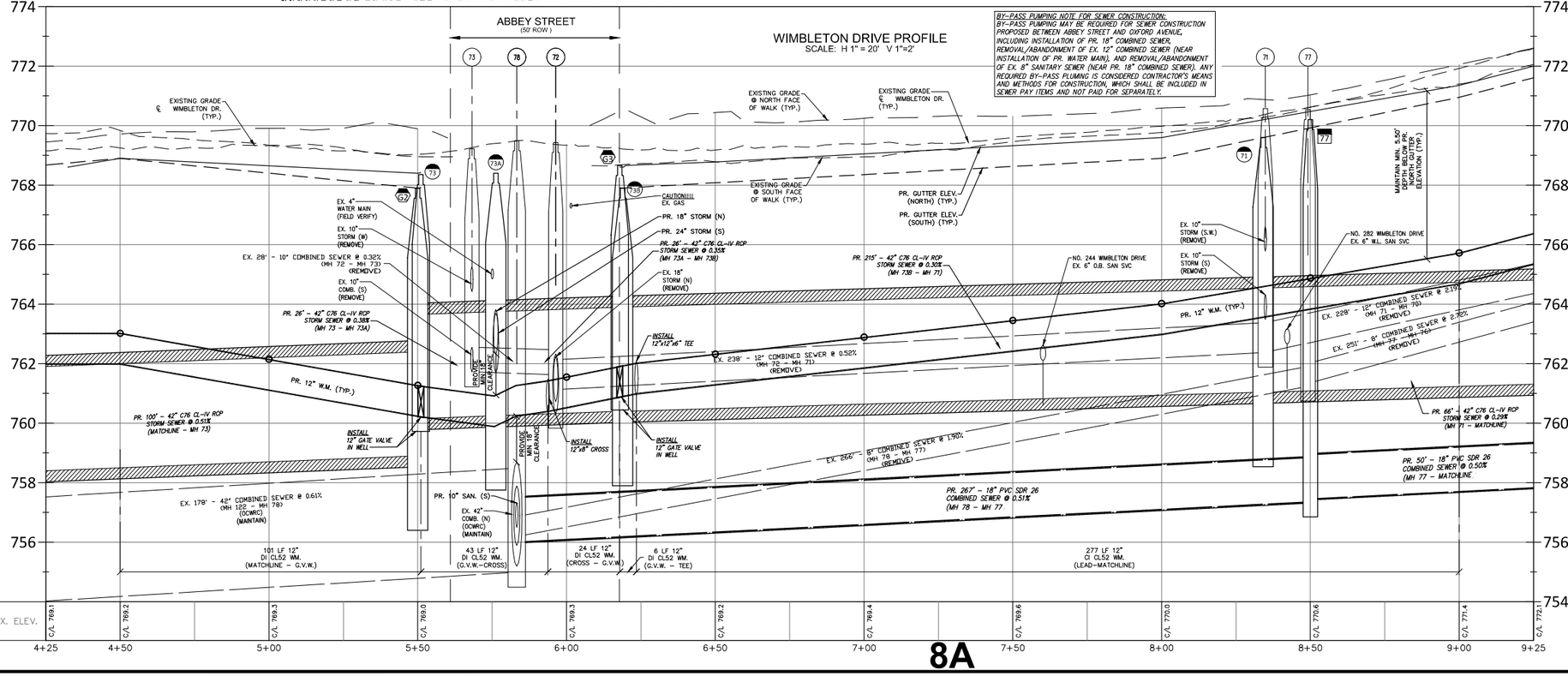
(71b) REMOVE
8+36.39 11.54' N
C.B. BEEHIVE 71b
RIM 769.78
T/DIRT 765.98 (REMOVE)

Combined Sewer Structure Schedule

Structure Name	Structure Details
#77 PR. 4' COMB. MANHOLE	PR. RIM 770.20 PR. 18" W. INV. 757.35 PR. 18" E. INV. 757.45

Storm Drainage Structure Schedule

Structure Name	Structure Details
#71 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 769.60 PR. 42" W. INV. 761.04 PR. 42" E. INV. 761.04
#73 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 767.90 PR. 42" W. INV. 758.90 PR. 42" E. INV. 760.15
#73A PR. 6' STORM MANHOLE	PR. RIM 768.40 PR. 42" W. INV. 760.25 PR. 42" E. INV. 760.25 PR. 24" S. INV. 761.70 PR. 18" N. INV. 762.32
#73B PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 767.90 PR. 42" W. INV. 760.40 PR. 42" E. INV. 760.40
#75 PR. 5' STORM MANHOLE W/ 2' SUMP	PR. RIM 767.16 PR. 24" N. INV. 762.00 PR. 12" E. INV. 762.25 PR. 24" S. INV. 762.10
#75a PR. 2' STORM INLET	PR. RIM 766.50 PR. 12" W. INV. 762.50



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. (3" HMA ON 8" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

CLEAN-OUT; SWR. SVC. (PER VIDEO INSP.); MANHOLE SAN COMB; CMB CMB HYDRANT; RYCB MANHOLE CB END SECTION; ELEC. METER; ELECTRIC MANHOLE; TELEPHONE MANHOLE; GAS MARKER; GAS VALVE; UTILITY POLE; LIGHT POLE; STRAIN POLE; GUY WIRE; (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; x000.00 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
Paving Project
Contract #6-25(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+50 to 9+00

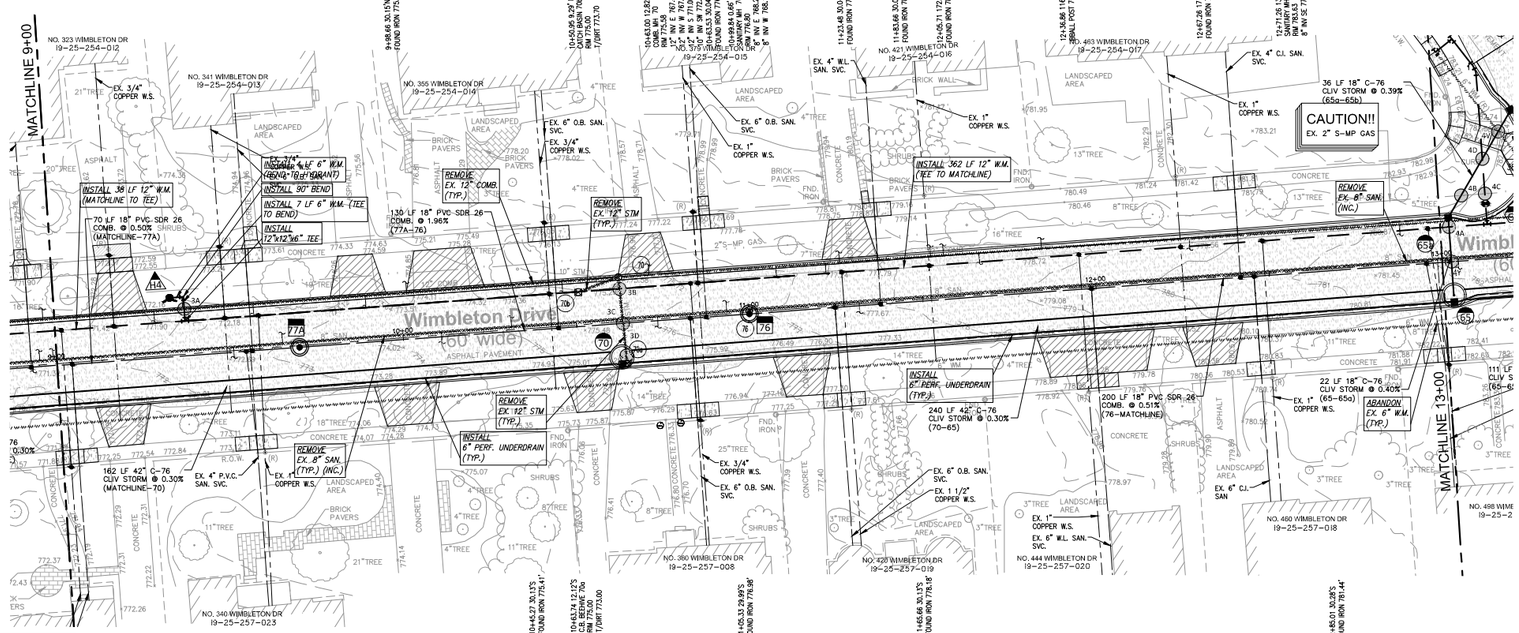
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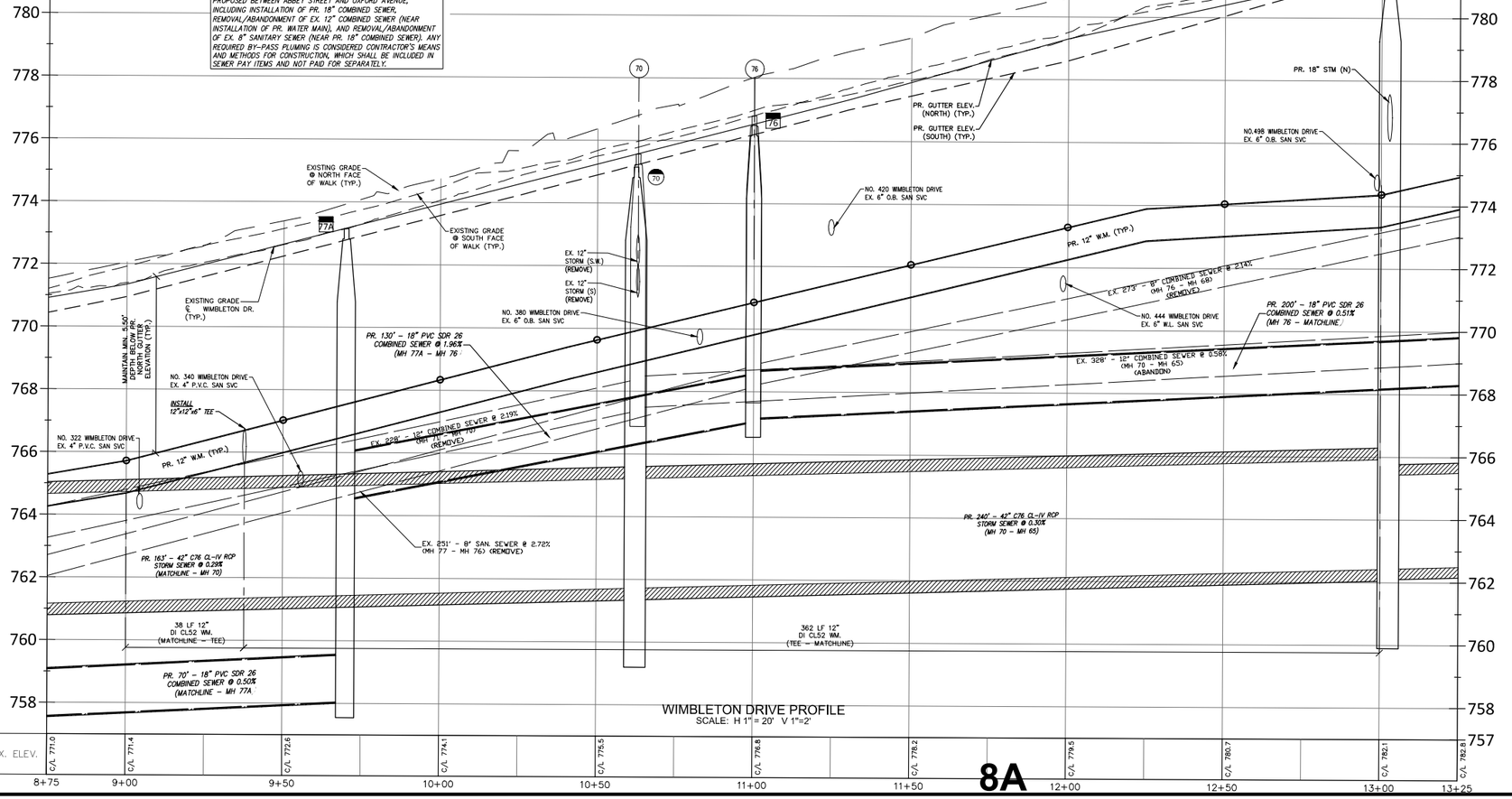
DATE	ISSUED/REVISED
10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
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NFE JOB NO. O310
SHEET NO. C02

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CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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PONTIAC, MI 48342-5032
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SEAL

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

DE–WATERING NOTE:
BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE–WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE–WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE–WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

WATER MAIN SCHEDULE

(8) HYDRANT & ASSEMBLY
STA. 9+33.85 16.59' N
PR. F.G. 772.90
PR. T/PIPE 767.40

SEWER STRUCTURE SCHEDULE

(70) REMOVE
10+63.00 12.82' N
COMB. MH 70
RIM 775.58
12" INV E 767.48 (ABANDON)
12" INV W 767.38 (REMOVE)
12" INV S 771.00 (CALC) (REMOVE)
10" INV SW 772.0 (CALC) (REMOVE)

(76) REMOVE
10+99.84 0.66' N
SANITARY MH 76
RIM 776.80
8" INV E 768.20 (REMOVE)
8" INV W 768.15 (REMOVE)

STORM STRUCTURE SCHEDULE

(70b) REMOVE
10+50.95 9.29' N
CATCH BASIN 70b
RIM 775.00
T/DIRT 773.70 (REMOVE)

(70a) REMOVE
10+63.74 12.12'S
C.B. BEEHIVE 70a
RIM 775.00
T/DIRT 773.00 (REMOVE)

(00) Storm Drainage Structure Schedule

Structure Name	Structure Details
#70 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 775.15 PR. 42" W. INV. 761.72 PR. 42" E. INV. 761.72

(00) Combined Sewer Structure Schedule

Structure Name	Structure Details
#76 PR. 4' COMB. MANHOLE	PR. RIM 776.50 PR. 18" W. INV. 767.05 PR. 18" E. INV. 767.15
#77A PR. 5' COMB. MANHOLE W/ INT. DROP CONNECTION	PR. RIM 773.15 PR. 18" W. INV. 758.05 PR. 18" E. INV. 764.50

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. (3" HMA ON 8" 21AA)
- PR. BITUMINOUS CAPSEAL
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

UTILITY CROSSING SCHEDULE

03A PR. 6" W.M. B/P 765.93
EX. 12" COMB. T/P 765.63 (REMOVE)
VERTICAL CLEARANCE=0.30 FT

03B PR. 12" W.M. B/P 769.93
EX. 12" STM T/P V.I.F. (REMOVE)

03C EX. 12" STM B/P V.I.F. (REMOVE)
PR. 18" COMB. T/P 767.83

03D EX. 12" STM. B/P V.I.F. (REMOVE)
PR 42" STM T/P 765.02

PROJECT
City of Birmingham
Wimbleton Drive
Paving Project
Contract #6-25(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 13+00

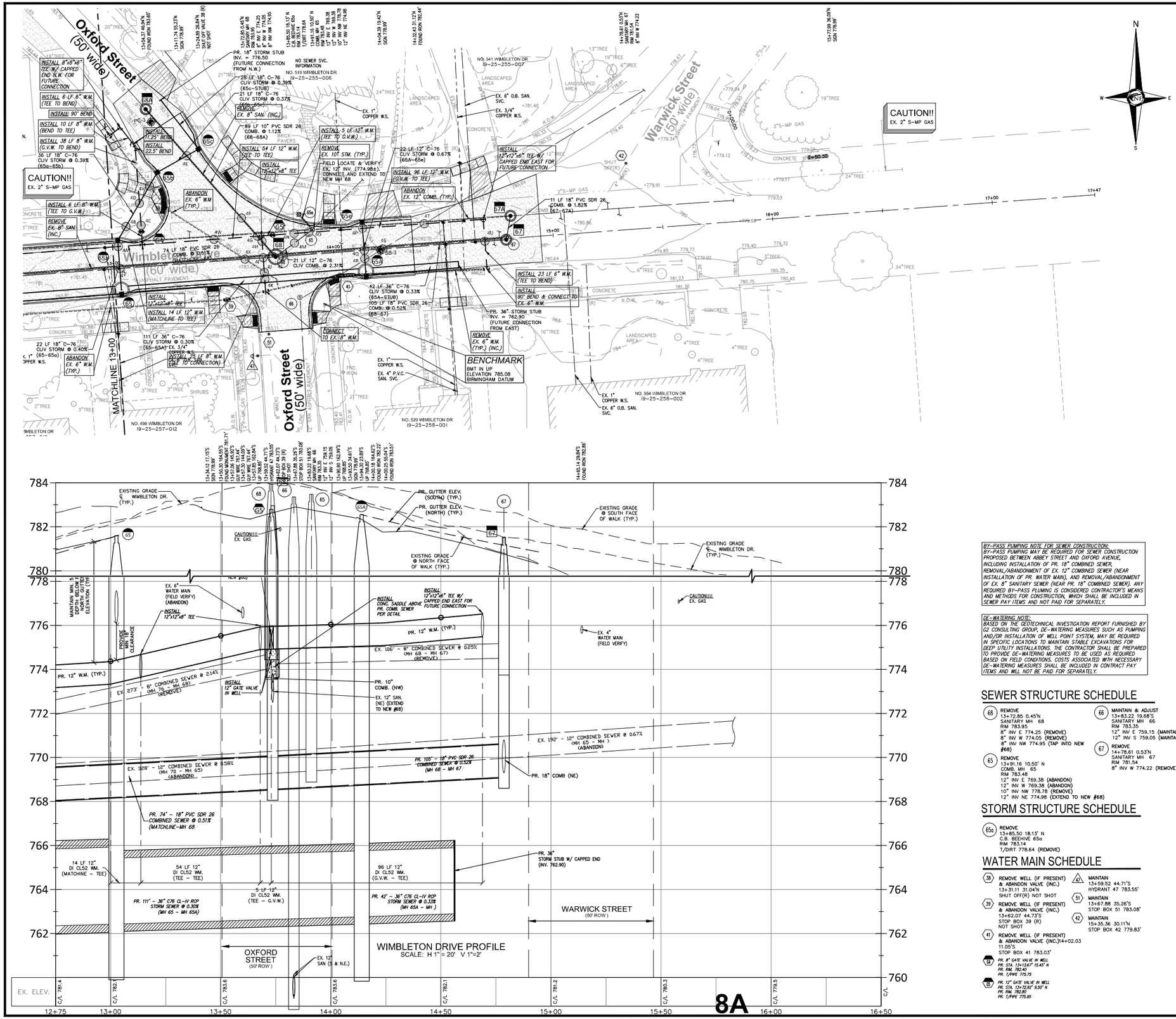
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DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. 0310
SHEET NO. C03

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UTILITY CROSSING SCHEDULE

04A PR. 12" STM B/P 776.17 PR. 12" W.M. T/P 774.41 VERTICAL CLEARANCE:1.76 FT

04B EX. 2" GAS B/P 780.29 PR. 18" STM T/P 777.70 VERTICAL CLEARANCE:2.59 FT

04C EX. 2" GAS B/P 780.50 PR. 8" W.M. T/P 774.45 VERTICAL CLEARANCE:6.05 FT

04D PR. 18" STM B/P 778.25 PR. 8" W.M. T/P 774.72 VERTICAL CLEARANCE:3.53 FT

04E PR. 18" STM B/P 776.37 PR. 10" COMB. T/P 774.50 VERTICAL CLEARANCE:1.87 FT

04F EX. 2" GAS B/P 781.70 PR. 10" COMB. T/P 773.97 VERTICAL CLEARANCE:7.40 FT

04G PR. 12" W.M. B/P 774.90 PR. 10" COMB. T/P 773.97 (INSTALL CONC. SADDLE ABOVE PR. COMB. SEWER PER DETAIL) EX. 12" COMB. T/P V.I.F. (ABANDON) EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:0.95 FT

04H PR. 8" W.M. B/P 774.92 PR. 10" COMB. T/P 773.94 (INSTALL CONC. SADDLE ABOVE PR. COMB. SEWER PER DETAIL) EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:0.98 FT

04I PR. 8" W.M. B/P 774.92 PR. 18" COMB. T/P 770.02 EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:4.90 FT

04J EX. 2" GAS B/P 781.71 PR. 8" W.M. T/P 775.09 EX. 6" W.M. T/P V.I.F. (ABANDON) VERTICAL CLEARANCE:6.12 FT

04K PR. 8" W.M. B/P 774.92 PR. 42" STM T/P 763.62 VERTICAL CLEARANCE:11.30 FT

04L EX. 2" GAS B/P 781.06 PR. 18" COMB. T/P 770.05 EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:11.01 FT

04M EX. 2" GAS B/P 781.80 PR. 12" W.M. T/P 775.76 VERTICAL CLEARANCE:6.04 FT

04N EX. 2" GAS B/P 781.61 PR. 12" W.M. T/P 775.97 VERTICAL CLEARANCE:5.64 FT

04O PR. 12" W.M. B/P 774.99 PR. 12" SAN. T/P 772.01 V.I.F. VERTICAL CLEARANCE:2.01 FT

04P PR. 12" STM B/P 778.35 PR. 12" W.M. T/P 776.07 VERTICAL CLEARANCE:2.28 FT

04Q PR. 12" STM B/P 778.27 PR. 18" COMB. T/P 770.26 EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:8.01 FT

04R PR. 12" STM B/P 778.25 EX. 12" SAN. T/P 760.13 VERTICAL CLEARANCE:18.12 FT

04S PR. 18" COMB. B/P 768.79 EX. 12" SAN. T/P 760.13 VERTICAL CLEARANCE:8.66 FT

04T PR. 12" W.M. B/P 775.28 EX. 12" SAN. T/P 760.13 VERTICAL CLEARANCE:15.15 FT

04U PR. 6" W.M. B/P 776.03 PR. 18" COMB. T/P 770.54 EX. 12" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:5.49 FT

04V PR. 18" STM B/P 775.19 EX. 6" W.M. T/P V.I.F. (ABANDON)

04W PR. 12" W.M. B/P 774.42 EX. 6" W.M. T/P V.I.F. (ABANDON)

04X EX. 6" W.M. B/P V.I.F. (ABANDON) PR. 18" COMB. T/P 769.98

04Y PR. 18" STM B/P 778.12 PR. 18" COMB. T/P 769.69 EX. 8" SAN. T/P V.I.F. (REMOVE)

Storm Drainage Structure Schedule (00)

Structure Name	Structure Details
#65 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 781.59 PR. 42" W. INV. 762.43 PR. 36" E. INV. 762.43 PR. 18" N. INV. 776.08
#65a PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 781.59 PR. 18" S. INV. 776.17 PR. 18" NE. INV. 776.17
#65A PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 782.55 PR. 36" W. INV. 762.76 PR. 36" E. INV. 762.76 PR. 12" N. INV. 778.20
#65b PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 782.45 PR. 18" SW. INV. 776.31 PR. 18" NE. INV. 776.31
#65c PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 782.65 PR. 18" SW. INV. 776.39 PR. 18" NW. INV. 776.39
#65e PR. 2' STORM INLET	PR. RIM 782.35 PR. 12" S. INV. 778.35

Combined Sewer Structure Schedule (00)

Structure Name	Structure Details
#67 PR. 4' COMB. MANHOLE	PR. RIM 781.50 PR. 18" W. INV. 769.10 PR. 18" N. INV. 769.30
#67A PR. 4' DIA. COMB. MANHOLE (CONSTRUCT ONLINE & RECONNECT EX. 12" COMB EAST INV. 770.00, V.I.F.)	PR. RIM 781.18 PR. 18" S. INV. 769.50
#68 PR. 6' COMB. MANHOLE W/ TWO INT. DROP CONNECTIONS	PR. RIM 782.96 PR. 18" W. INV. 768.55 PR. 18" E. INV. 768.55 PR. 12" NE. INV. 772.50 PR. 10" NW. INV. 773.00
#68A PR. 4' DIA. COMB. MANHOLE (CONSTRUCT ONLINE & RECONNECT EX. 8" COMB N.W. INV. 775.40, V.I.F.)	PR. RIM 783.04 PR. 10" SE. INV. 774.00

BY-PASS PUMPING NOTE FOR SEWER CONSTRUCTION:
BY-PASS PUMPING MAY BE REQUIRED FOR SEWER CONSTRUCTION PROPOSED BETWEEN ABBEY STREET AND OXFORD AVENUE, INCLUDING INSTALLATION OF PR. 18" COMBINED SEWER, REMOVAL/ABANDONMENT OF EX. 12" COMBINED SEWER (NEAR INSTALLATION OF PR. WATER MAIN), AND REMOVAL/ABANDONMENT OF EX. 8" SANITARY SEWER (NEAR PR. 18" COMBINED SEWER). ANY REQUIRED BY-PASS PLUMING IS CONSIDERED CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION, WHICH SHALL BE INCLUDED IN SEWER PAY ITEMS AND NOT PAID FOR SEPARATELY.

DE-WATERING NOTE:
BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

SEWER STRUCTURE SCHEDULE

(68) REMOVE
13+72.85 0.45'N
SANITARY MH 68
RIM 783.95
8" INV E 774.25 (REMOVE)
8" INV W 774.05 (REMOVE)
8" INV NW 774.95 (TAP INTO NEW #68)

(65) REMOVE
13+91.16 10.50' N
COMB. MH 65
RIM 783.48
12" INV E 769.38 (ABANDON)
12" INV W 769.38 (ABANDON)
10" INV NW 778.78 (REMOVE)
12" INV NE 774.98 (EXTEND TO NEW #68)

(66) MAINTAIN & ADJUST
13+83.22 19.68'S
SANITARY MH 66
RIM 783.35
12" INV E 759.15 (MAINTAIN)
12" INV S 759.05 (MAINTAIN)

(67) REMOVE
14+78.61 0.53'N
SANITARY MH 67
RIM 781.54
8" INV W 774.22 (REMOVE)

STORM STRUCTURE SCHEDULE

(65a) REMOVE
13+85.50 18.13' N
C.B. BEEHIVE 65a
RIM 783.14
T/DIRT 778.64 (REMOVE)

WATER MAIN SCHEDULE

(38) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
13+31.11 31.04'N
SHUT OFF(R) NOT SHOT

(39) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
13+62.07 44.73'S
STOP BOX 39 (R)
NOT SHOT

(41) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)14+02.03
11.05'S
STOP BOX 41 783.03'

(47) MAINTAIN
13+59.52 44.71'S
HYDRANT 47 783.55'

(51) MAINTAIN
13+67.88 35.26'S
STOP BOX 51 783.08'

(42) MAINTAIN
15+35.36 30.11'N
STOP BOX 42 779.83'

(54) PR. 8" GATE VALVE IN WELL
PR. STA. 13+13.67 15.45' N
PR. RIM. 782.40
PR. T/PIPE 775.75

(68) PR. 12" GATE VALVE IN WELL
PR. STA. 13+72.92' 9.50' N
PR. RIM. 782.80
PR. T/PIPE 775.95

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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
- 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 9" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" NO. CONC. CURB & GUTTER
- 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
Paving Project
Contract #6-25(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. 13+00 to P.O.E.

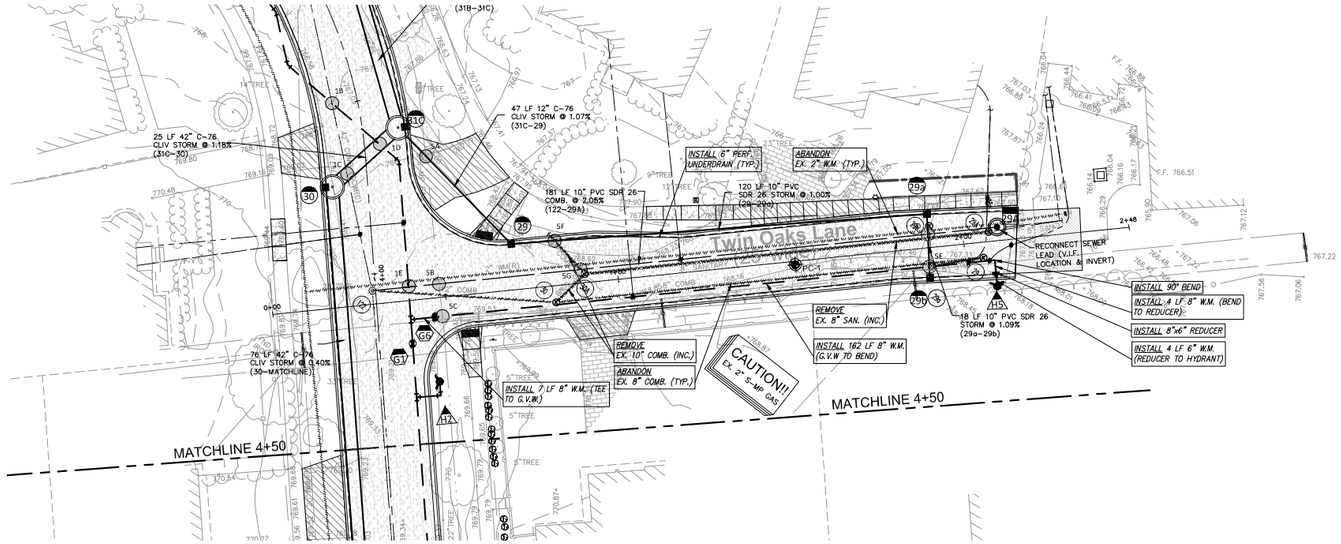
Know what's below Call before you dig. 811

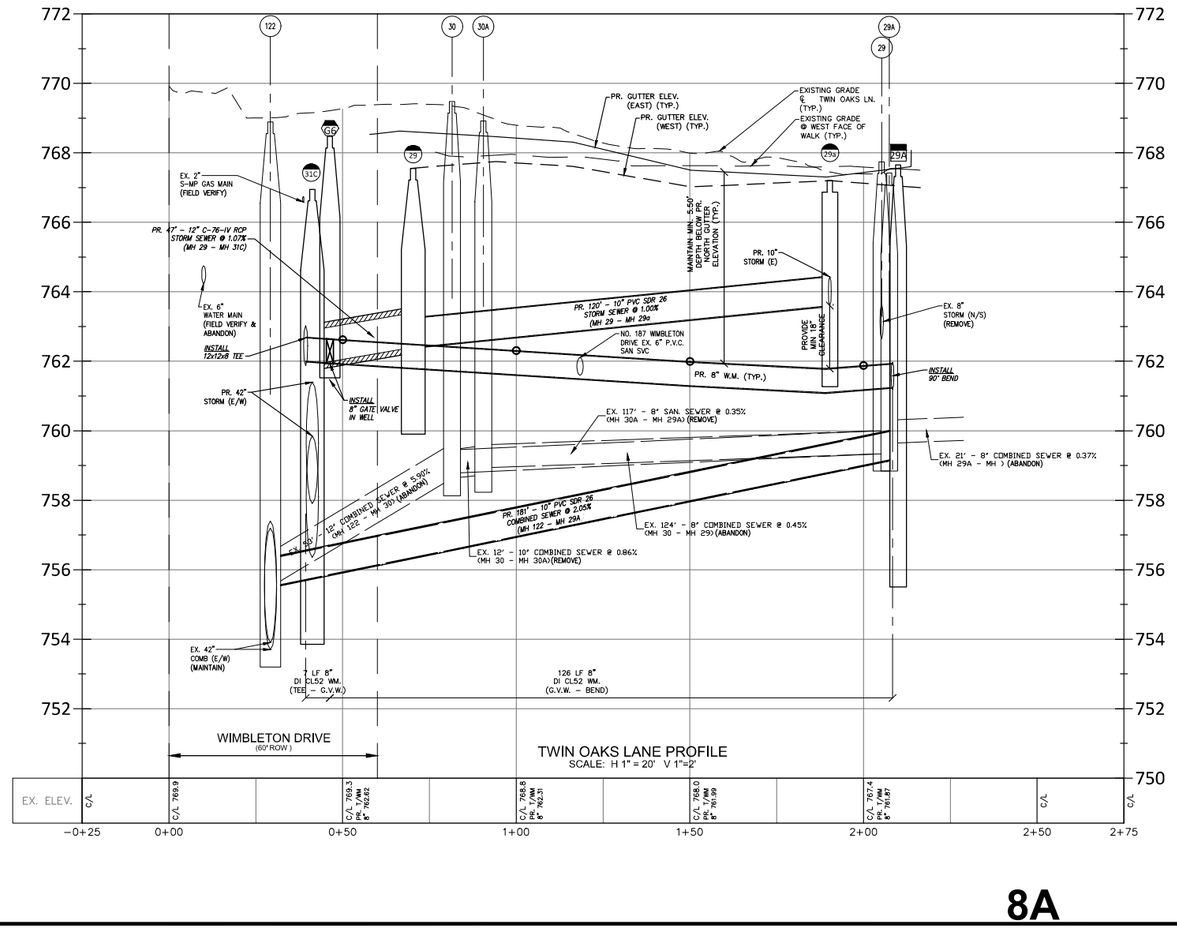
DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O310
SHEET NO. C04

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BY–PASS PUMPING NOTE FOR SEWER CONSTRUCTION:
BY–PASS PUMPING MAY BE REQUIRED FOR SEWER CONSTRUCTION PROPOSED TWIN OAKS LANE, INCLUDING INSTALLATION OF PR. 10" COMBINED SEWER, AND REMOVAL/ABANDONMENT OF EX. 8" AND 12" SEWERS (NEAR INSTALLATION OF PR. WATER MAIN AND 10" COMBINED SEWER). ANY REQUIRED BY–PASS PLUMING IS CONSIDERED CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION, WHICH SHALL BE INCLUDED IN SEWER PAY ITEMS AND NOT PAID FOR SEPARATELY.

DE–WATERING NOTE:
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UTILITY CROSSING SCHEDULE

05A EX. 2" GAS B/P 766.02
PR. 12" STM T/P 763.90
VERTICAL CLEARANCE:2.12 FT

05B EX. 2" GAS. B/P 766.22
PR. 10" SAN. T/P 756.72
VERTICAL CLEARANCE:9.50 FT

05C EX. 2" GAS B/P 766.41
PR. 8" W.M. T/P 762.63 FT.
VERTICAL CLEARANCE:3.79 FT

05D PR. 10" STM B/P 763.69
PR. 10" COMB T/P 756.62
EX. 8" SAN T/P 759.95 (REMOVE)
EX. 2" W.M. T/P V.I.F. (ABANDON)
VERTICAL CLEARANCE:4.06 FT

05E PR. 10" STM B/P 763.80
PR. 8" W.M. T/P 761.77
EX. 8" COMB. T/P 759.95 (ABANDON)
VERTICAL CLEARANCE:2.03 FT

05F PR. 10" STM B/P 762.53
EX. 8" COMB. T/P V.I.F (REMOVE)

05G EX. 8" COMB. B/P V.I.F. (REMOVE)
PR. 10" COMB. T/P 757.57

01B (SEE SHEET C01)
01C (SEE SHEET C01)
01D (SEE SHEET C01)
01E (SEE SHEET C01)

SEWER STRUCTURE SCHEDULE

(122) TAP & ADJUST
0+29.22 3.89' N
COMB. MH 122
RIM 769.00
PR. RIM XX
12" INV N 755.50 (REMOVE)
PR. 10" INV N 755.50 (TAP)
42" INV E 753.90 (MAINTAIN)
42" INV W 753.70 (MAINTAIN)

(30A) REMOVE
0+90.54 2.46' N
SANITARY MH 30A
RIM 768.93
8" INV N 758.93 (REMOVE)
10" INV SE 758.73 (REMOVE)
8" INV SW 758.93 (INVESTIGATE / REMOVE)

(29A) REMOVE & INSTALL NEW 29A
2+07.43 2.74' N
SANITARY MH 29A
RIM 767.64
PR. RIM 767.20
8" INV N 759.64 (RECONNECT TO NEW 29A)
8" INV S 759.34 (REMOVE)

(30) REMOVE
0+81.54 4.80' S
COMB. MH 30
RIM 769.48
8" INV N 758.78 (ABANDON)
12" INV S 758.63 (ABANDON)
10" INV NW 758.63 (REMOVE)

(29) REMOVE
2+05.23 4.50' S
COMB. MH 29
RIM 767.74
8" INV S. 762.64 (REMOVE)
8" INV S. 759.34 (ABANDON)
(BOTTOM)

STORM STRUCTURE SCHEDULE

(29a) REMOVE
1+90.14 5.28' S
C.B. BEEHIVE 29a
RIM 767.20
8" INV W 764.60 (REMOVE)
8" INV N 763.95 (REMOVE)

(29b) REMOVE
1+90.56 6.17' N
STORM MH 29b
RIM 767.14
T/DIRT 764.94 (REMOVE)

WATER MAIN SCHEDULE

(G) PR. 8" GATE VALVE IN WELL
PR. STA. 0+46.36' 5.50' S
PR. RIM. 768.41
PR. T/PIPE 762.60

(H) (SEE SHEET C01)

(HY) HYDRANT & ASSEMBLY
STA. 2+08.40 13.06' S
PR. F.G. 768.15
PR. T/PIPE 762.65

(HY) (SEE SHEET C01)

UTILITY NOTE
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(00) Storm Drainage Structure Schedule

Structure Name	Structure Details
#29 PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 767.55 PR. 10" N. INV. 762.40 PR. 12" SW. INV. 762.40
#29a PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 767.20 PR. 10" S. INV. 763.60 PR. 10" E. INV. 763.60
#29b PR. 2' STORM INLET	PR. RIM 767.30 PR. 10" W. INV. 763.80

(00) Combined Sewer Structure Schedule

Structure Name	Structure Details
#29A PR. 4' COMB. MANHOLE (CONSTRUCT ONLINE, RECONNECT EX. OR REPLACEMENT 8" SAN SVC. NORTH INV. 759.64, V.I.F.)	PR. RIM 767.65 PR. 10" S. INV. 759.20

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. (7" HMA ON 8" 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
×000.00 GROUND ELEVATION

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SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 0579929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive
Paving Project
Contract #6-25(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
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T. 2N, R.10E
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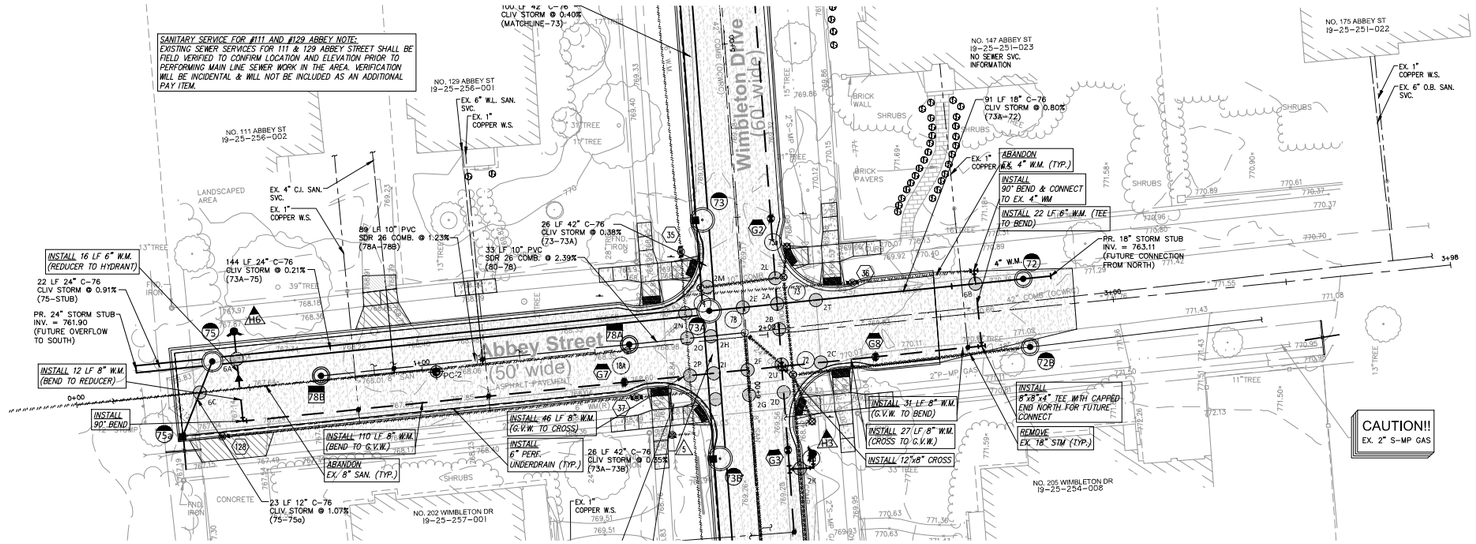
SHEET
Utility Plan - Twin Oaks Lane - P.O.B. to P.O.E.

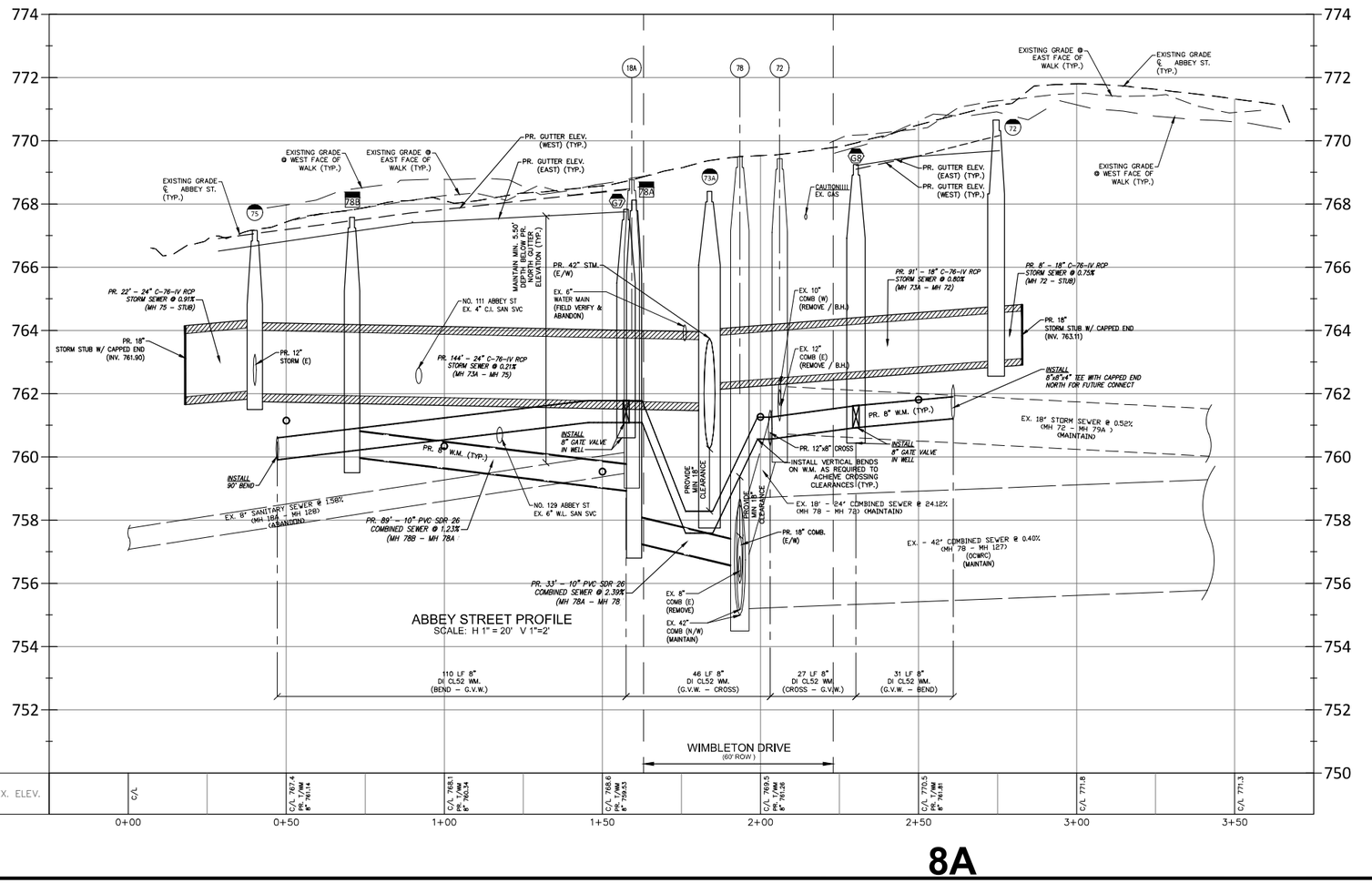
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Know what's below
Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O310
SHEET NO. C05





UTILITY CROSSING SCHEDULE

06A	PR. 18" STM B/P 762.06 PR. 6" W.M. T/P 760.50 VERTICAL CLEARANCE:1.56 FT	02H	(SEE SHEET C02)
06B	PR. 18" STM B/P 762.94 PR. 8" W.M. T/P 761.25 VERTICAL CLEARANCE:1.69 FT	02I	(SEE SHEET C02)
06C	PR. 12" STM B/P 762.35 EX. 8" SAN. T/P V.I.F. (ABANDON)	02J	(SEE SHEET C02)
02A	(SEE SHEET C02)	02K	(SEE SHEET C02)
02B	(SEE SHEET C02)	02L	(SEE SHEET C02)
02C	(SEE SHEET C02)	02M	(SEE SHEET C02)
02D	(SEE SHEET C02)	02N	(SEE SHEET C02)
02E	(SEE SHEET C02)	02O	(SEE SHEET C02)
02F	(SEE SHEET C02)	02P	(SEE SHEET C02)
02G	(SEE SHEET C02)	02T	(SEE SHEET C02)
		02U	(SEE SHEET C02)

WATER MAIN SCHEDULE

128 REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
0+40.74 13.30'S
STOP BOX 128 767.09'

18 HYDRANT & ASSEMBLY
STA. 0+47.17 16.60' R
PR. F.G. 768.15
PR. T/PIPE 762.15

67 PR. 8" GATE VALVE IN WELL
PR. STA. 1+57.48' 8.50' E
PR. RIM. 769.25
PR. T/PIPE 759.40

72 PR. 8" GATE VALVE IN WELL
PR. STA. 2+30.19' 9.50' E
PR. RIM. 769.25
PR. T/PIPE 761.65

Storm Drainage Structure Schedule

Structure Name	Structure Details
#72 PR. 4' STORM MANHOLE	PR. RIM 770.65 PR. 18" S. INV. 763.05 PR. 18" N. INV. 763.05
#72B PR. 4' DIA. STORM MANHOLE (CONSTRUCT ONLINE & RECONNECT EX. 18" STM NORTH INV. 760.35, V.I.F.)	PR. RIM 771.05
#75 PR. 5' STORM MANHOLE W/ 2' SUMP	PR. RIM 767.16 PR. 24" N. INV. 762.00 PR. 12" E. INV. 762.25 PR. 24" S. INV. 762.10
#75a PR. 2' STORM INLET	PR. RIM 766.50 PR. 12" W. INV. 762.50

Combined Sewer Structure Schedule

Structure Name	Structure Details
#78A PR. 4' COMB. MANHOLE	PR. RIM 768.12 PR. 10" S. INV. 758.90 PR. 10" N. INV. 757.30
#78B PR. 4' COMB. MANHOLE	PR. RIM 767.58 PR. 10" N. INV. 760.00

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- (RECORD) CURB STOP LOCATION (APPROX.)
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- WELL
- PUMP
- SIGN
- POST/BOLLARD
- PARKING METER
- MAIL BOX
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION

DE-WATERING NOTE:

BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

NF ENGINEERS
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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
Paving Project
Contract #6-25(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 - Abbey Street - P.O.B. to P.O.E.

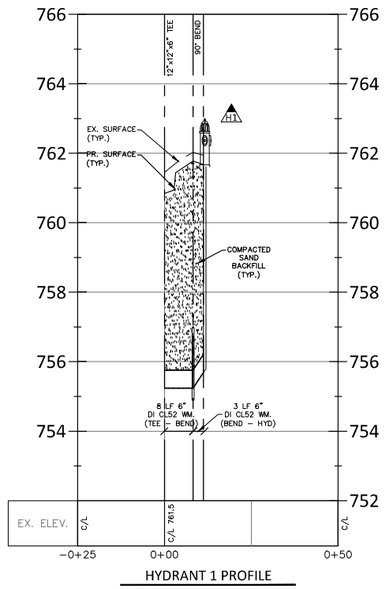
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03-04-25	ADDENDUM 2

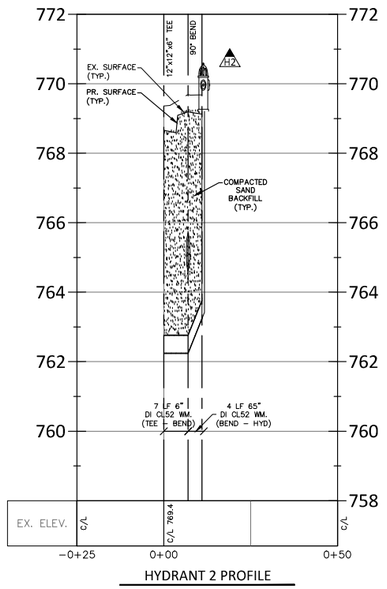
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C06

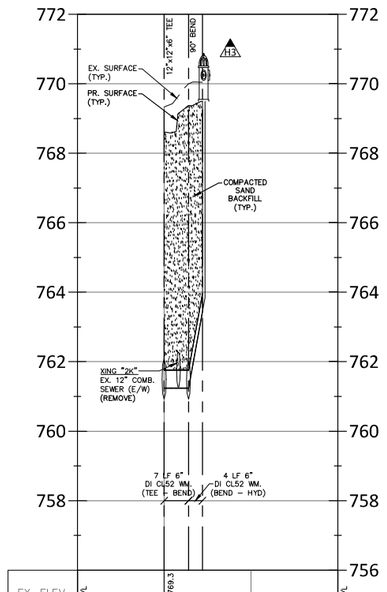
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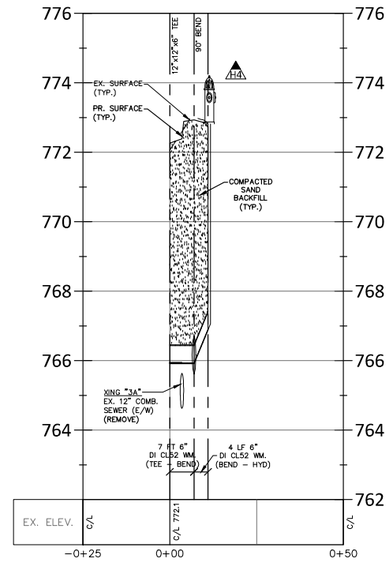
HYDRANT 1 PROFILE



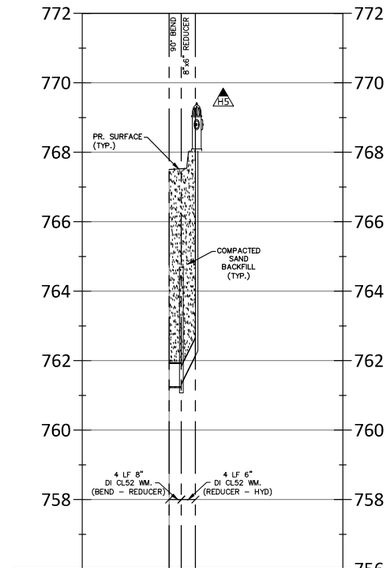
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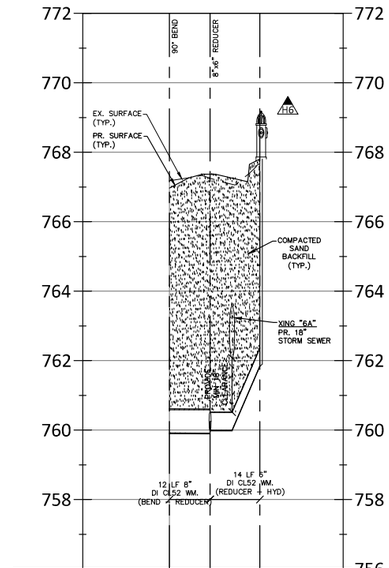
HYDRANT 3 PROFILE



HYDRANT 4 PROFILE



HYDRANT 5 PROFILE



HYDRANT 6 PROFILE

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PROJECT LOCATION

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Oakland County, Michigan

SHEET

Watermain Hydrant Profiles

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10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
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03-04-25	ADDENDUM 2

DRAWN BY: L. Gross

DESIGNED BY: P. Tulikangas

APPROVED BY: P. Tulikangas

DATE: February 20, 2025

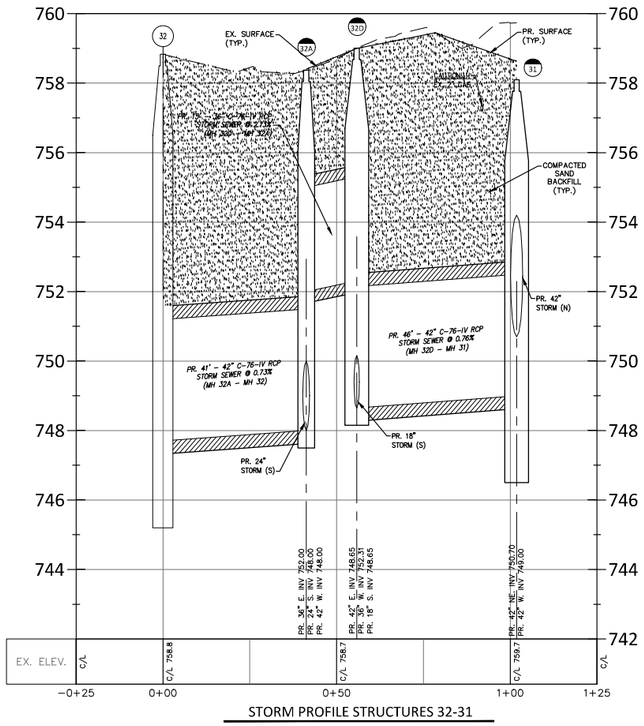
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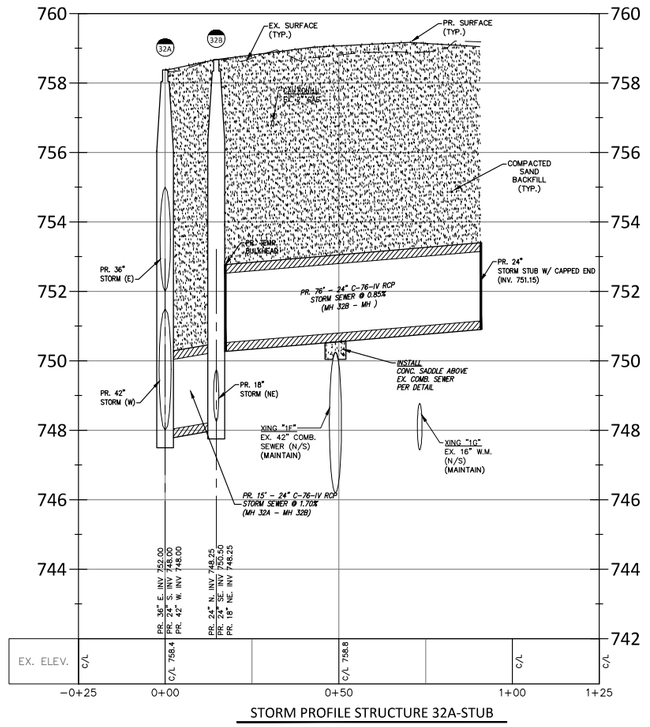
NFE JOB NO. O310

SHEET NO. C07

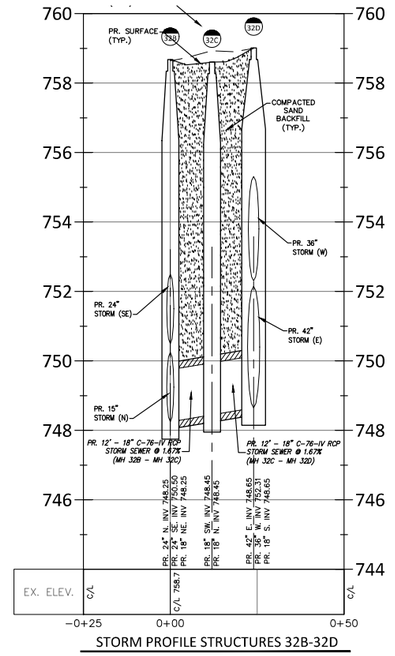
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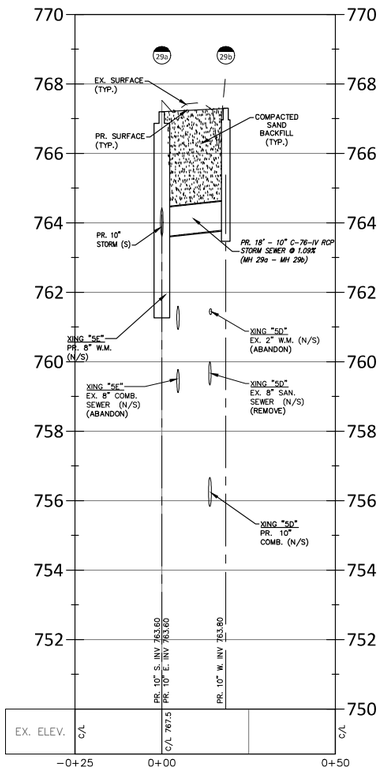
STORM PROFILE STRUCTURES 32-31



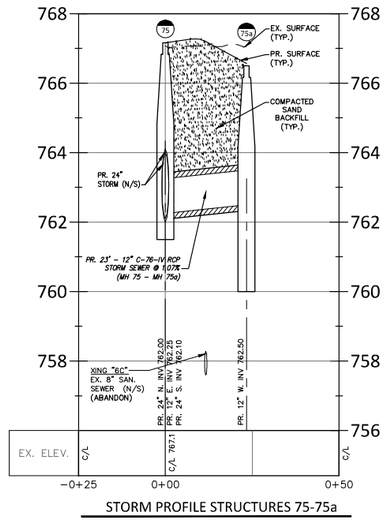
STORM PROFILE STRUCTURE 32A-STUB



STORM PROFILE STRUCTURES 32B-32D



STORM PROFILE STRUCTURES 29a-29b



STORM PROFILE STRUCTURES 75-75a

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SHEET

Sewer Profiles (1 of 2)

811
Know what's below
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02-20-25 BIDS
03-04-25 ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

20 10 0 10 20 30

NFE JOB NO. O310
SHEET NO. C08

UTILITY NOTE

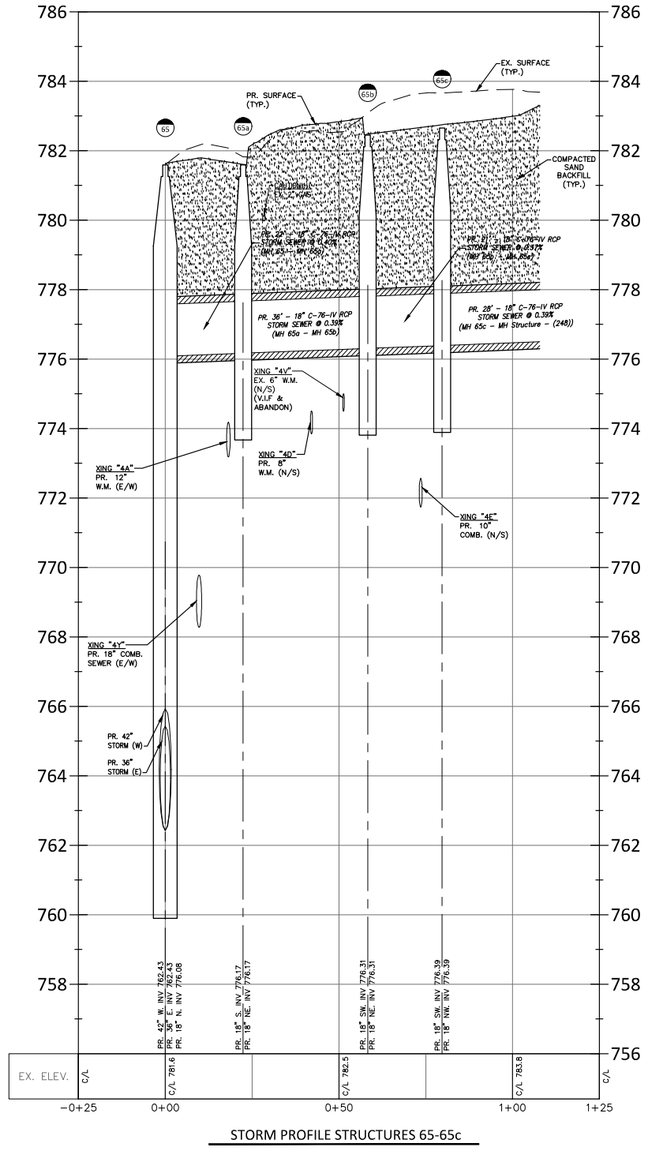
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LEGEND

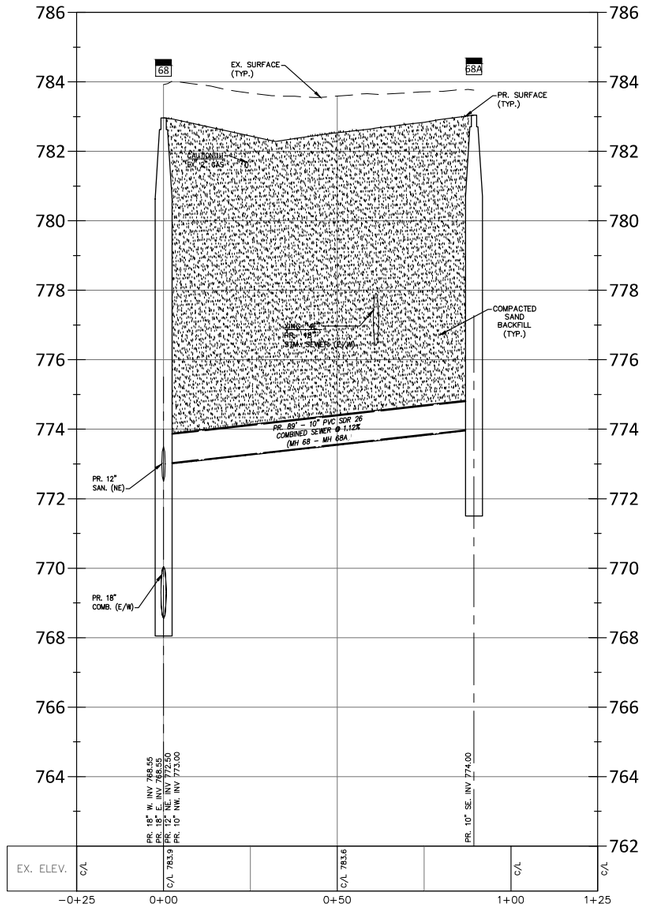
- EXISTING SAN/COMB SEWER
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8A

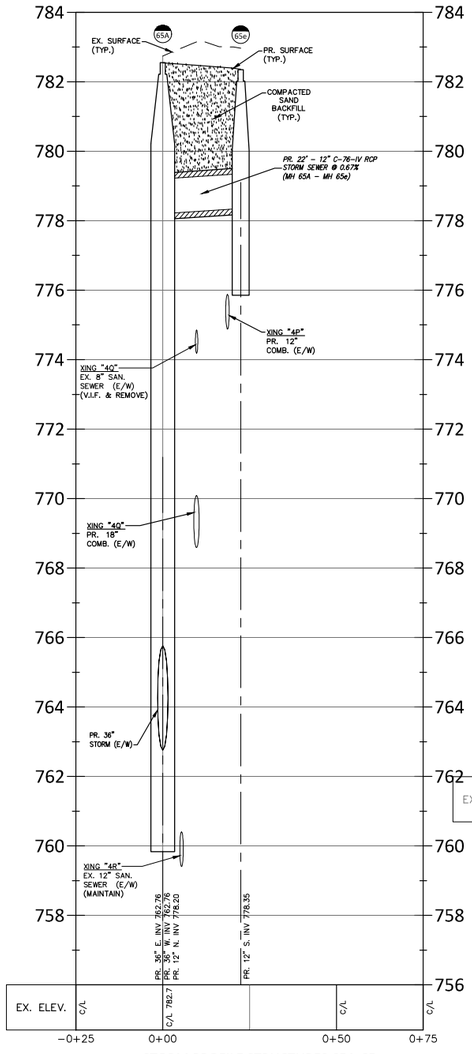
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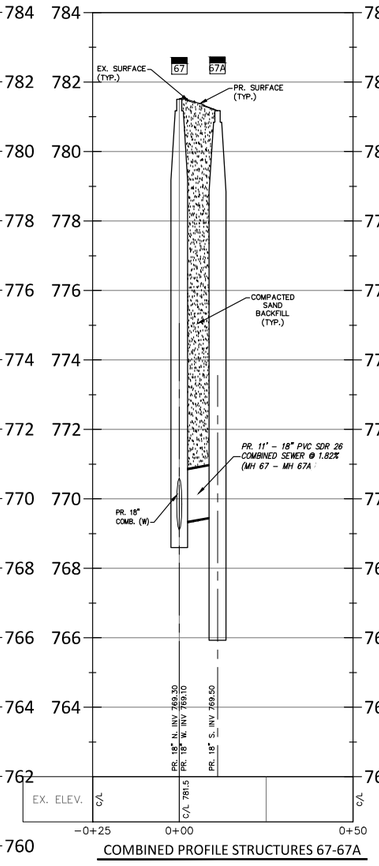
STORM PROFILE STRUCTURES 65-65c



COMBINED PROFILE STRUCTURES 68-68A



STORM PROFILE STRUCTURES 65A-65e



COMBINED PROFILE STRUCTURES 67-67A

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
Paving Project
Contract #6-25(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 2)

Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross

DESIGNED BY: P. Tulikangas

APPROVED BY: P. Tulikangas

DATE: February 20, 2025

SCALE: 1" = 20' / 1"=2'

20 10 0 10 20 30

NFE JOB NO. O310

SHEET NO. C09

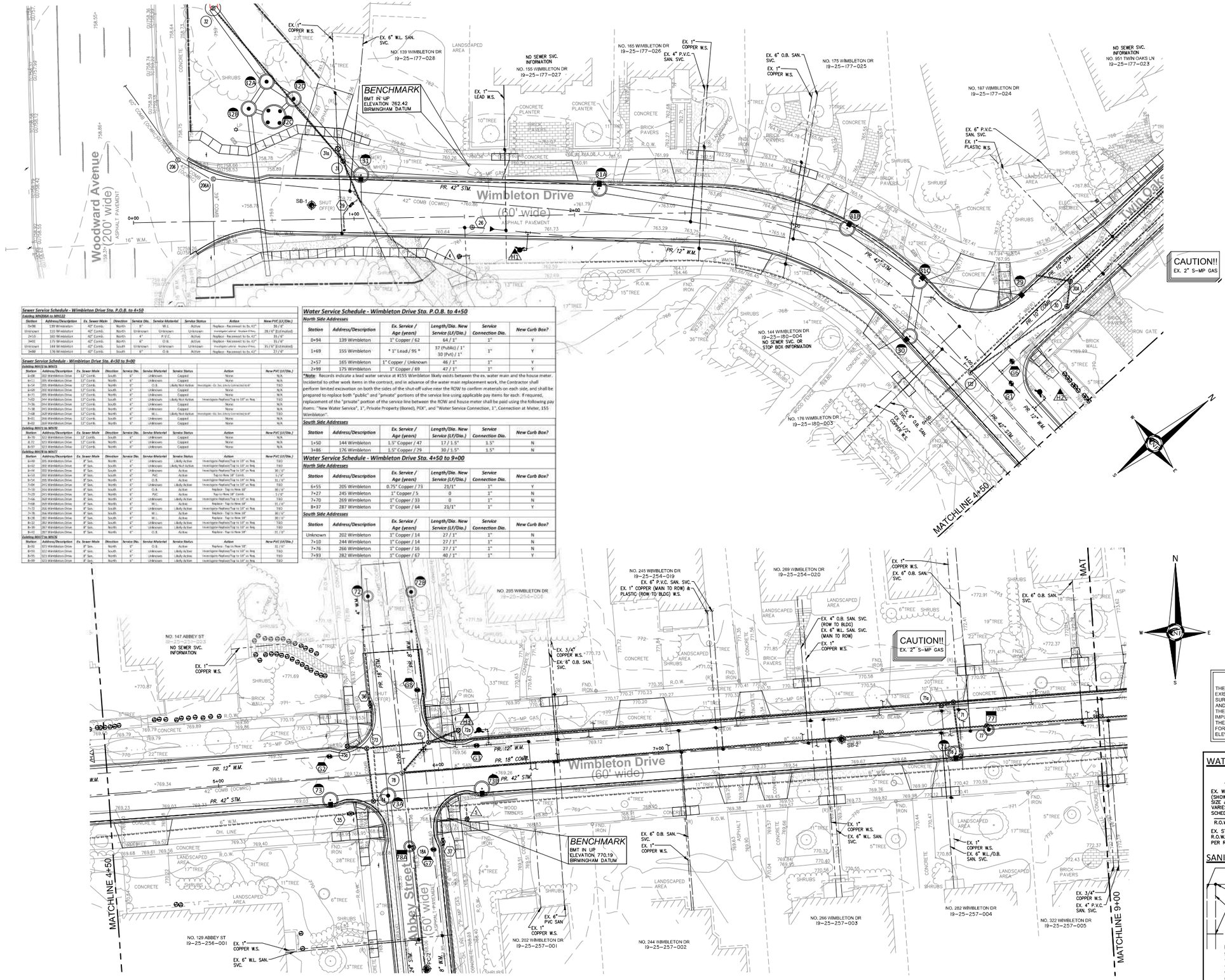
UTILITY NOTE

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
- (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 APRON
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 8" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" MD. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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Sewer Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+50

Existing MH2044 to MH122

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Ex98	139 Wimbleton	42" Comb.	North	8"	W.L.	Active	Replace - Reconnect to Ex. 42"	35 / 6"
Unknown	155 Wimbleton	42" Comb.	North	Unknown	Unknown	Unknown	Investigate Lateral - Replace if Req.	28 / 6" (Estimated)
2+55	165 Wimbleton	42" Comb.	North	4"	P.V.C.	Active	Replace - Reconnect to Ex. 42"	35 / 6"
3+01	175 Wimbleton	42" Comb.	North	6"	O.B.	Active	Replace - Reconnect to Ex. 42"	33 / 6"
Unknown	144 Wimbleton	42" Comb.	South	Unknown	Unknown	Unknown	Investigate Lateral - Replace if Req.	35 / 6" (Estimated)
3+88	176 Wimbleton	42" Comb.	South	6"	O.B.	Active	Replace - Reconnect to Ex. 42"	37 / 6"

Sewer Service Schedule - Wimbleton Drive Sta. 4+50 to 9+00

Existing MH122 to MH72

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
4+08	202 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
4+11	205 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
4+54	205 Wimbleton Drive	12" Comb.	North	6"	O.B.	Likely Not Active	Investigate - Ex. Svc Likely Connected to MH	TBD
4+69	200 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
4+71	205 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
5+02	244 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Not Active	Investigate - Replace/Tap to 18" as Req.	TBD
5+36	244 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
5+38	245 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
5+68	268 Wimbleton Drive	12" Comb.	North	6"	W.L.	Likely Not Active	Investigate - Ex. Svc Likely Connected to MH	TBD
8+01	266 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
8+02	269 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A

Existing MH72 to MH70

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+70	321 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
8+72	323 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
8+97	323 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A

Existing MH70 to MH67

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
6+40	205 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
6+52	200 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
6+44	202 Wimbleton Drive	8" San.	South	6"	Unknown	Active	Investigate - Replace/Tap to 18" as Req.	30 / 6"
6+53	200 Wimbleton Drive	8" San.	South	6"	PVC	Active	Tap to New 18" Comb.	5 / 6"
6+54	205 Wimbleton Drive	8" San.	North	6"	O.B.	Active	Investigate - Replace/Tap to 18" as Req.	31 / 6"
7+04	245 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
7+10	244 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"
7+29	245 Wimbleton Drive	8" San.	North	6"	PVC	Active	Tap to New 18" Comb.	5 / 6"
7+66	269 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
7+68	269 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	31 / 6"
7+73	266 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
7+76	266 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	30 / 6"
8+08	282 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	30 / 6"
8+32	282 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
8+99	282 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD

Existing MH72 to MH67

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+70	321 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
8+72	323 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
8+97	323 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
9+09	323 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD

Water Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+50

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+94	139 Wimbleton	1" Copper / 62	64 / 1"	1"	Y
1+69	155 Wimbleton	* 1" Lead / 95 *	37 (Public) / 1" 30 (Pvt) / 1"	1"	Y
2+57	165 Wimbleton	1" Copper / Unknown	46 / 1"	1"	Y
2+99	175 Wimbleton	1" Copper / 69	47 / 1"	1"	Y

***Note**: Records indicate a lead water service at #155 Wimbleton likely exists between the ex. water main and the house meter. Incidental to other work items in the contract, and in advance of the water main replacement work, 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, 155 Wimbleton".

South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
1+50	144 Wimbleton	1.5" Copper / 47	17 / 1.5"	1.5"	N
3+86	176 Wimbleton	1.5" Copper / 29	30 / 1.5"	1.5"	N

Water Service Schedule - Wimbleton Drive Sta. 4+50 to 9+00

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
6+55	205 Wimbleton	0.75" Copper / 73	21/1"	1"	Y
7+27	245 Wimbleton	1" Copper / 5	0	1"	N
7+70	269 Wimbleton	1" Copper / 33	0	1"	N
8+37	287 Wimbleton	1" Copper / 64	21/1"	1"	Y

South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
Unknown	202 Wimbleton	1" Copper / 14	27 / 1"	1"	N
7+10	244 Wimbleton	1" Copper / 14	27 / 1"	1"	N
7+76	266 Wimbleton	1" Copper / 16	27 / 1"	1"	N
7+93	282 Wimbleton	1" Copper / 67	40 / 1"	1"	Y

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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46777 WOODWARD AVE.
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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
Paving Project
Contract #6-25(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

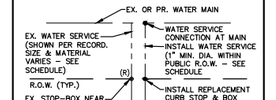
SHEET
Utility Service Plan -
P.O.B. to Sta. 9+00

811
Know what's below
Call before you dig.

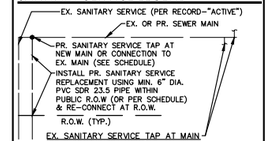
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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

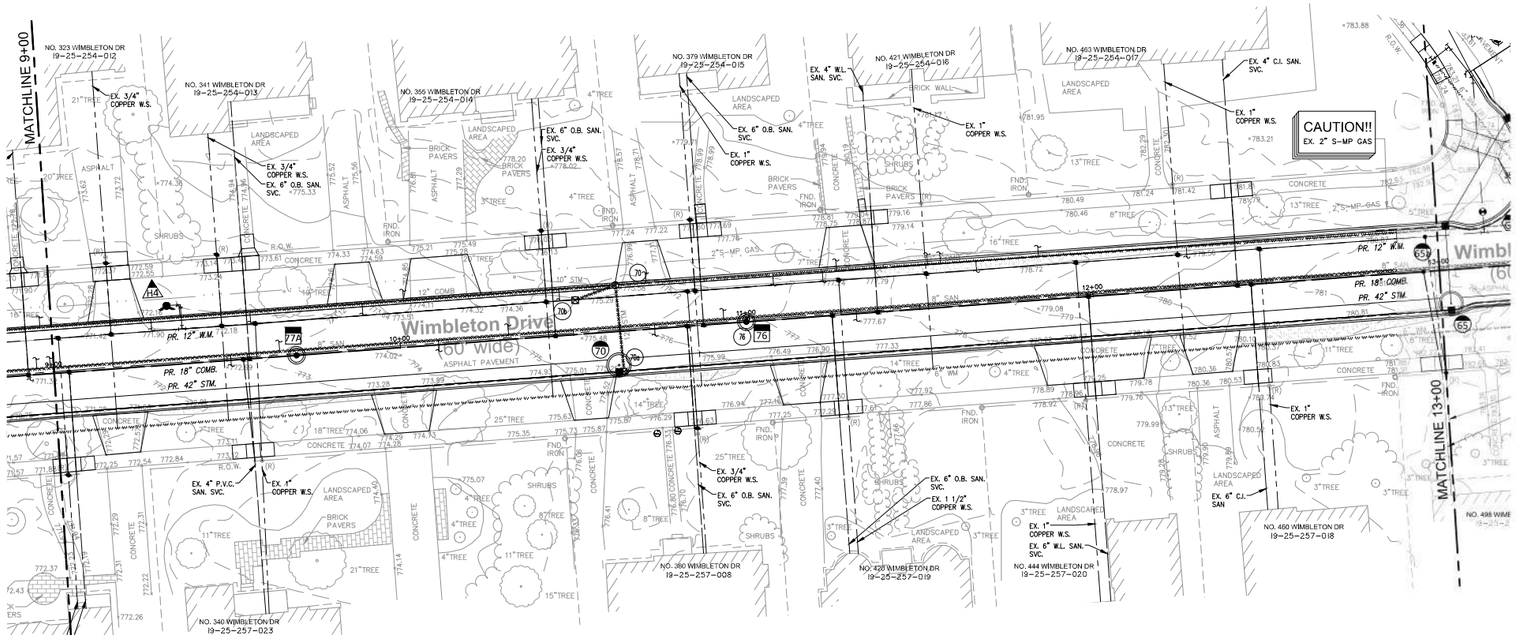
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
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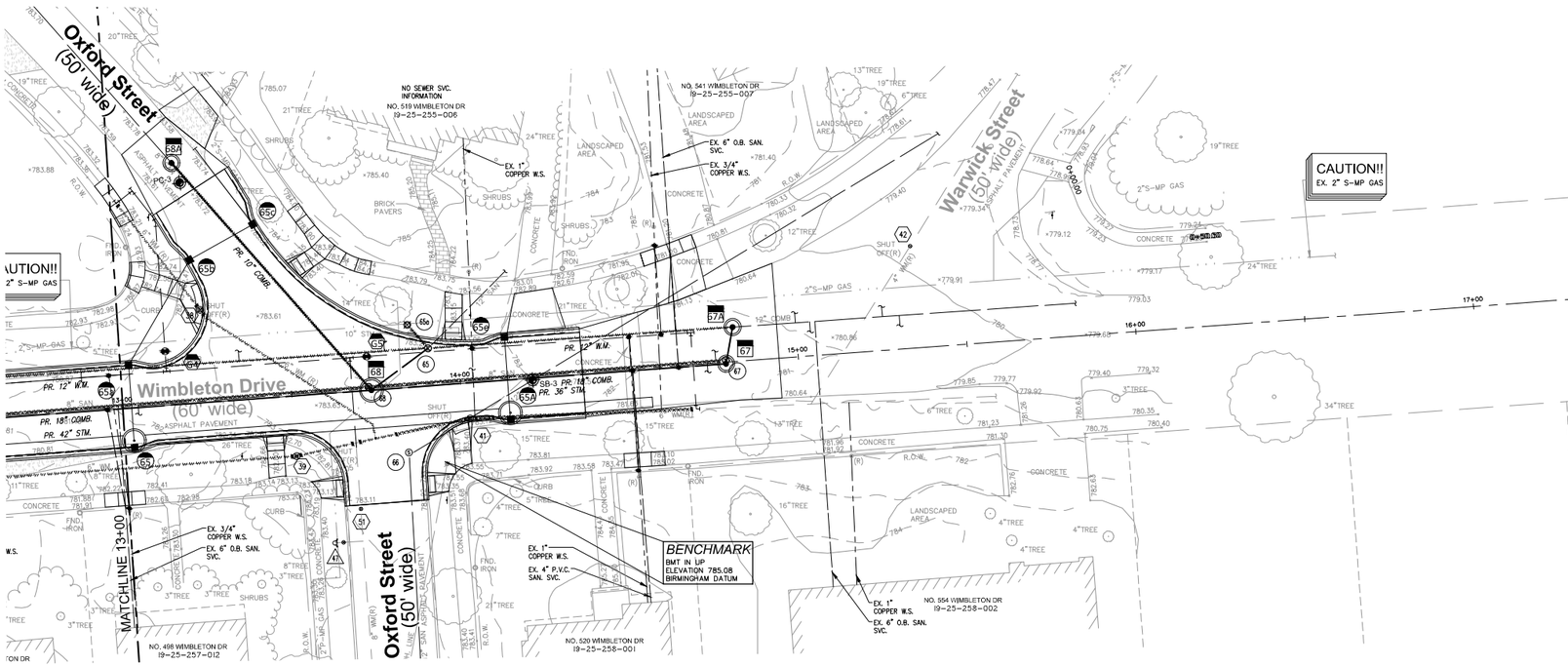
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Sewer Service Schedule - Wimbleton Drive Sta. 9+00 to 13+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Existing MH/Tr to MH/Tr								
Existing MH/Tr to MH10								
9+29	340 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
9+38	341 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
9+57	341 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
9+58	340 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Not Active	Investigate-Replace/Tap to 18" as Req.	TBD
9+91	340 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
10+02	355 Wimbleton Drive	12" Comb.	North	6"	Unknown	Likely Not Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+45	355 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
10+47	380 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
Existing MH/Tr to MH11								
10+72	379 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
10+88	379 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
11+08	420 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
11+23	420 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+27	421 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
11+53	421 Wimbleton Drive	12" Comb.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+67	421 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+67	444 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
11+85	463 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
12+28	460 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
12+42	463 Wimbleton Drive	12" Comb.	North	4"	C.I.	Active	Replace - Tap to New 18"	31/ 6"
12+88	496 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
Existing MH/Tr to MH/Tr								
9+04	322 Wimbleton Drive	8" San.	South	4"	PVC	Active	Replace - Tap to New 18"	30 / 6"
9+51	340 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
9+65	341 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+11	340 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+31	355 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+73	380 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+83	380 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"
10+93	379 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
Existing MH/Tr to MH68								
11+25	420 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"
11+32	420 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+99	444 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	30 / 6"
12+46	460 Wimbleton Drive	8" San.	South	6"	C.I.	Active	Replace - Tap to New 18"	30 / 6"
12+99	498 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"

Sewer Service Schedule - Wimbleton Drive Sta. 13+00 to P.O.E.

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Existing MH/Tr to MH65								
13+35	519 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
13+78	519 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
Existing MH66 to MH61								
Existing MH/Tr to MH66								
14+51	520 Wimbleton Drive	12" Comb.	South	4"	PVC	Active	Replace - Tap to New 18"	30 / 6"
14+64	541 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	38 / 6"
Existing MH/Tr to MH63								
13+05	498 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
Existing MH62 to MH67								
Existing MH/Tr to MH67								
14+04	519 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
14+73	554 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
14+76	541 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD

Water Service Schedule - Wimbleton Drive Sta. 9+00 to 13+00

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
9+17	323 Wimbleton	0.75" Copper / 73	21/1"	1"	Y
9+43	341 Wimbleton	0.75" Copper / 75	21/1"	1"	Y
10+43	355 Wimbleton	0.75" Copper / 69	23/1"	1"	Y
10+86	379 Wimbleton	1" Copper / 63	21/1"	1"	Y
11+53	421 Wimbleton	1" Copper / 5	0	1"	N
12+25	463 Wimbleton	1" Copper / 33	0	1"	N

South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
9+02	322 Wimbleton	0.75" Copper / 72	40 / 1"	1"	Y
9+59	340 Wimbleton	1" Copper / 35	28 / 1"	1"	N
10+84	380 Wimbleton	0.75" Copper / 67	40 / 1"	1"	Y
11+27	420 Wimbleton	1.5" Copper / 24	28 / 1.5"	1.5"	N
11+96	444 Wimbleton	1" Copper / 38	28 / 1"	1"	N
12+49	460 Wimbleton	1" Copper / 4	28 / 1"	1"	N
13+08	498 Wimbleton	0.75" Copper / 72	40 / 1"	1"	Y

Water Service Schedule - Wimbleton Drive Sta. 13+00 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
14+04	519 Wimbleton	1" Copper / 5	0	1"	N
14+59	541 Wimbleton	0.75" Copper / 46	27/1"	1"	Y

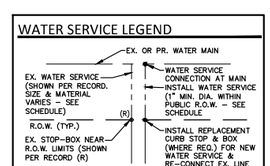
South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
14+51	520 Wimbleton	1" Copper / 69	40 / 1"	1"	Y

UTILITY NOTE

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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



NF ENGINEERS
CIVIL ENGINEERS
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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
Paving Project
Contract #6-25(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
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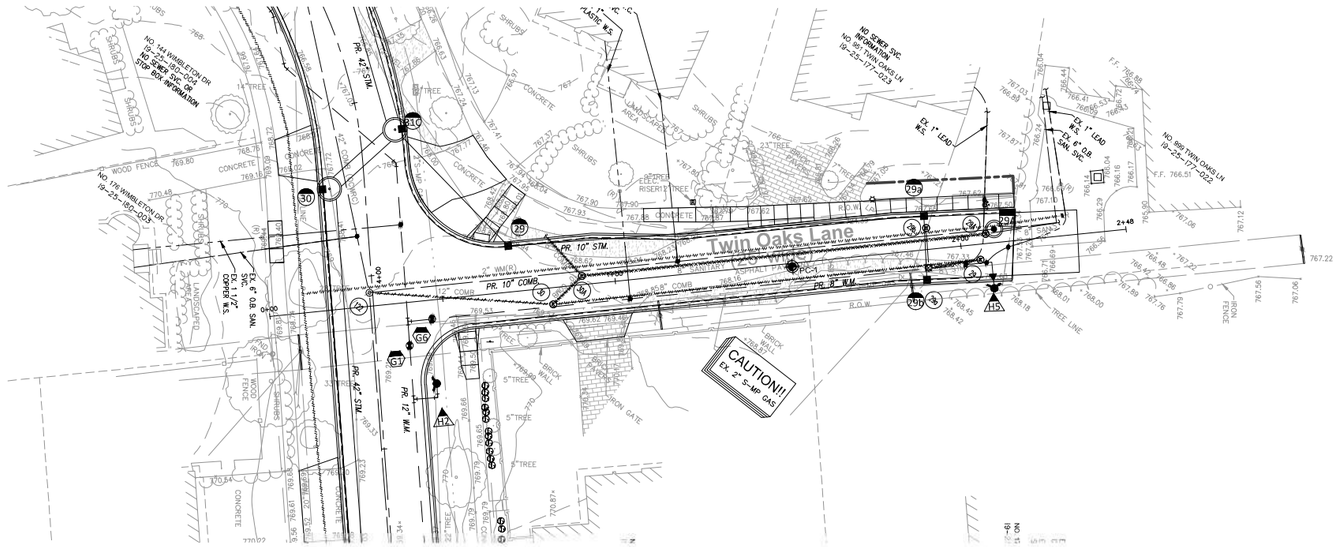
DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O310
SHEET NO. C11

8A

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Sewer Service Schedule - Twin Oaks Lane Sta. P.O.B. to P.O.E.

Existing MH18A to MH29B

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
1+58	187 Wimbleton	8" San.	West	6"	P.V.C.	Active	Tap new 10" Comb.	5 / 6"
Unknown	951 Twin Oaks	Unknown	West	Unknown	D.B.	Active	Investigate Lateral - Replace 10" Comb.	30 / 6" (Estimated)
2+08	999 Twin Oaks	8" San.	West	6"	D.B.	Active	Verify Lateral - Extend & Replace 10" Comb.	20 / 6"

Sewer Service Schedule - Abbey Street Sta. P.O.B. to P.O.E.

Existing MH18A to MH22

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+92	111 Abbey	8" San.	West	4"	C.I.	Active	Replace - Tap to New 10"	24 / 6"
1+18	129 Abbey	8" San.	West	6"	W.I.	Active	Replace - Tap to New 10"	24 / 6"

Existing MH18 to MH22

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Unknown	147 Abbey	42" Comb.	West	Unknown	Unknown	Unknown	Investigate Lateral - Replace if Req.	24 / 6" (Estimated)

Water Service Schedule - Twin Oaks Lane Sta. P.O.B. to P.O.E.

West Side Addresses

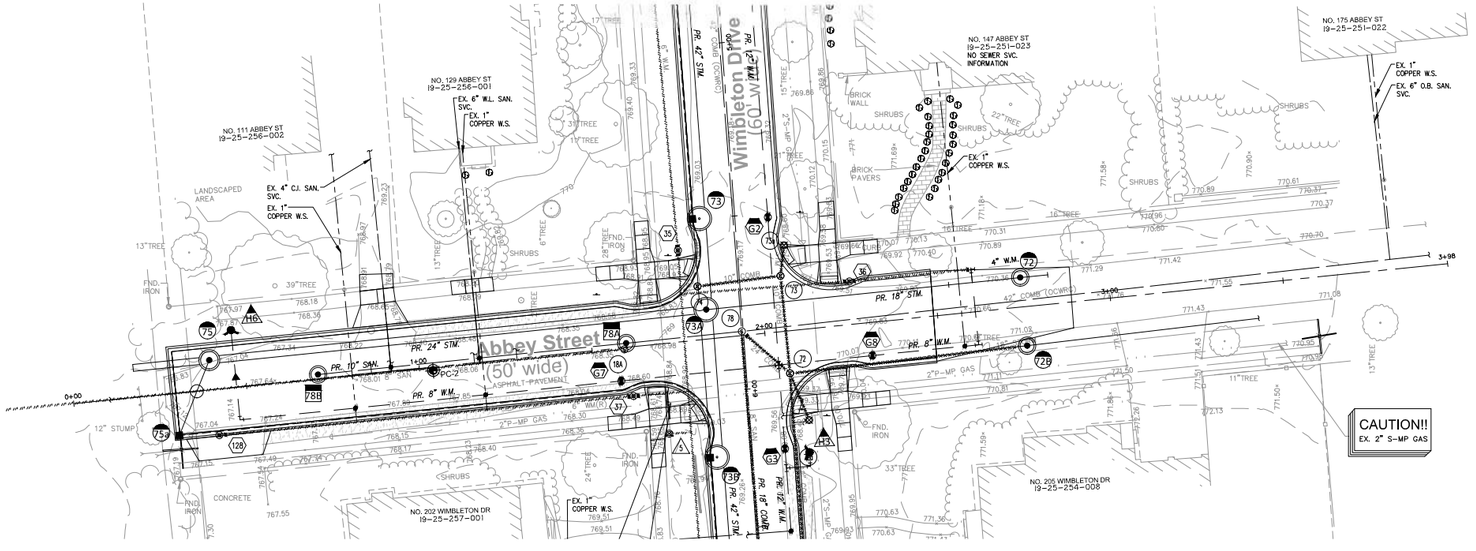
Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
1+04	187 Wimbleton	1" PEX / 6	11 / 1" (PEX)	1"	N
2+06	951 Twin Oaks	" 1" Lead / 77 "	21 (Public) / 1" 40 (Pvt) / 1"	1"	Y
2+08	999 Twin Oaks	" 1" Lead / 70 "	8 (Public) / 1" 65 (Pvt) / 1"	1"	Y

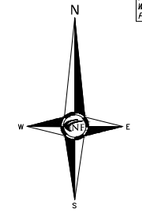
Note: Records indicate that lead water services at 4951 & 4999 Twin Oaks Lane likely exist between the ex. water main and the house meter. Incidental to other work items in the contract, and in advance of the water main replacement work, the Contractor shall perform limited excavation on both the sides 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 mater shall be paid using the following pay items: "New Water Service", 1", Private Property (Bored), PEX", and "Water Service Connection, 1", Connection at Meter, 951 (or 999) Twin Oaks".

Water Service Schedule - Abbey Street Sta. P.O.B. to P.O.E.

West Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+81	111 Abbey	1" Copper / 4	0	1"	N
1+69	129 Abbey	1" Copper / 57	0	1"	N
2+57	147 Abbey	1" Copper / 45	46 / 1"	1"	Y



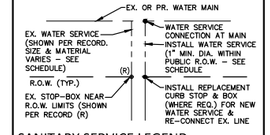


SANITARY SERVICE NOTE:
EXISTING SEWER SERVICES FOR 111 & 129 ABBEY STREET SHALL BE FIELD VERIFIED TO CONFIRM LOCATION AND ELEVATION PRIOR TO PERFORMING MAIN LINE SEWER WORK IN THE AREA. VERIFICATION WILL BE INCIDENTAL & WILL NOT BE INCLUDED AS AN ADDITIONAL PAY ITEM.

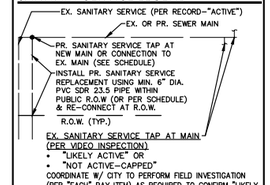
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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



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Utility Service Plan - Twin Oaks Lane & Abbey Street

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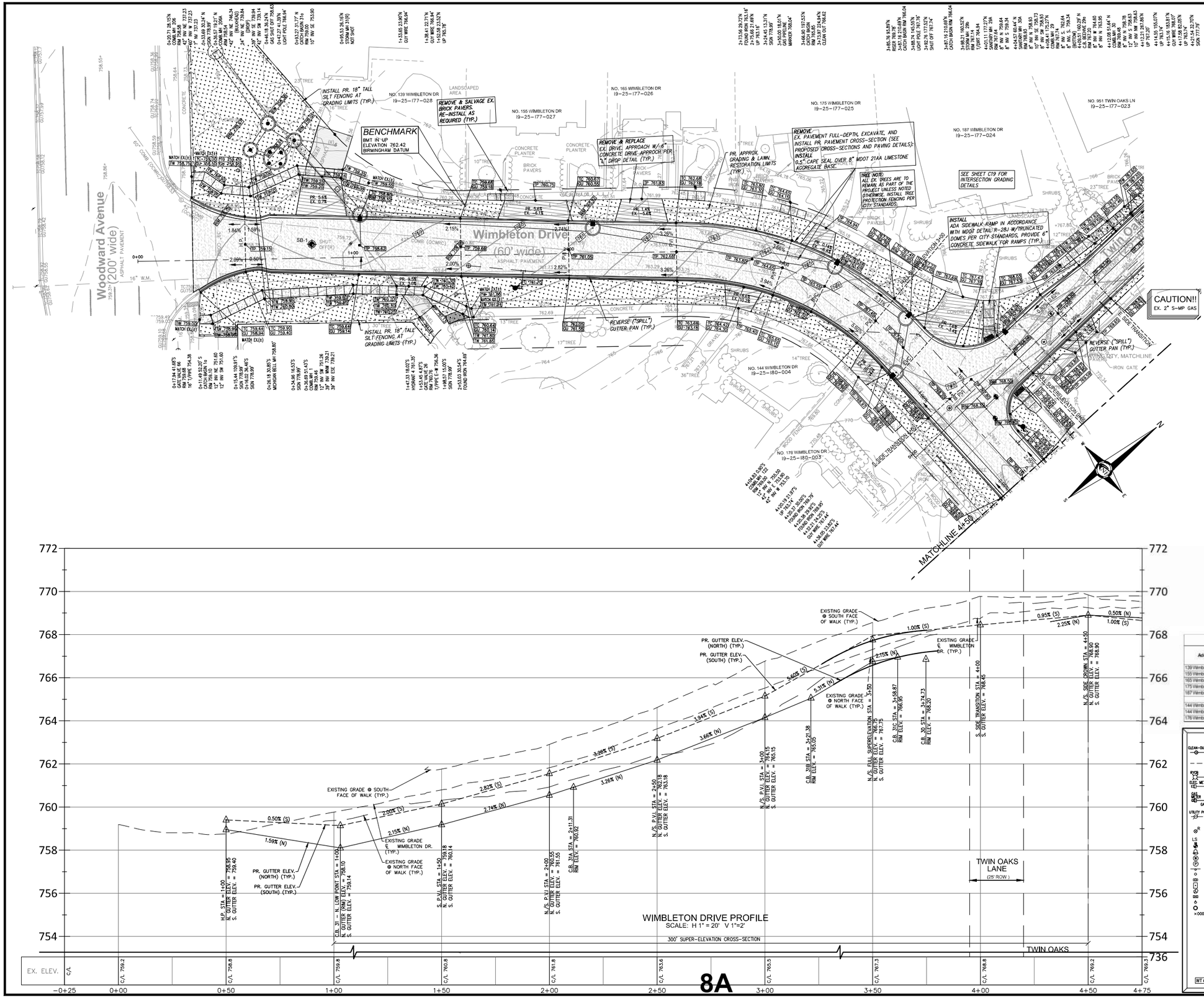
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03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C12

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Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
139 Wimbleton	17.6	23.6	18.1	41.3	1.5
155 Wimbleton	28.5	34.5	9.0	31.6	1.5
165 Wimbleton	18.9	24.6	10.7	25.7	1.5
175 Wimbleton	10.0	16.0	11.2	16.2	1.5
187 Wimbleton	15.9	23.4	22.4	42.5	1.5
144 Wimbleton (S/W)	11.4	17.4	5.0	8.0	1.5
144 Wimbleton (N/E)	11.7	17.7	10.0	16.5	1.5
176 Wimbleton	10.3	16.3	11.1	16.2	1.5

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. (7" HMA ON 6" 21AA)
- PR. BITUMINOUS OVERSEAL
- PR. 18" MD. CONC. CURB & GUTTER
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- (RECORD) CURB STOP LOCATION (APPROX.)
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- PUBLIC PHONE
- WELL
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- POST/BOLLARD
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- SPRINKLER HEAD
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SEAL

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

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Paving Project
Contract #6-25(W)

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Paving and Grading - Wimbleton - P.O.B. to Sta. 4+50

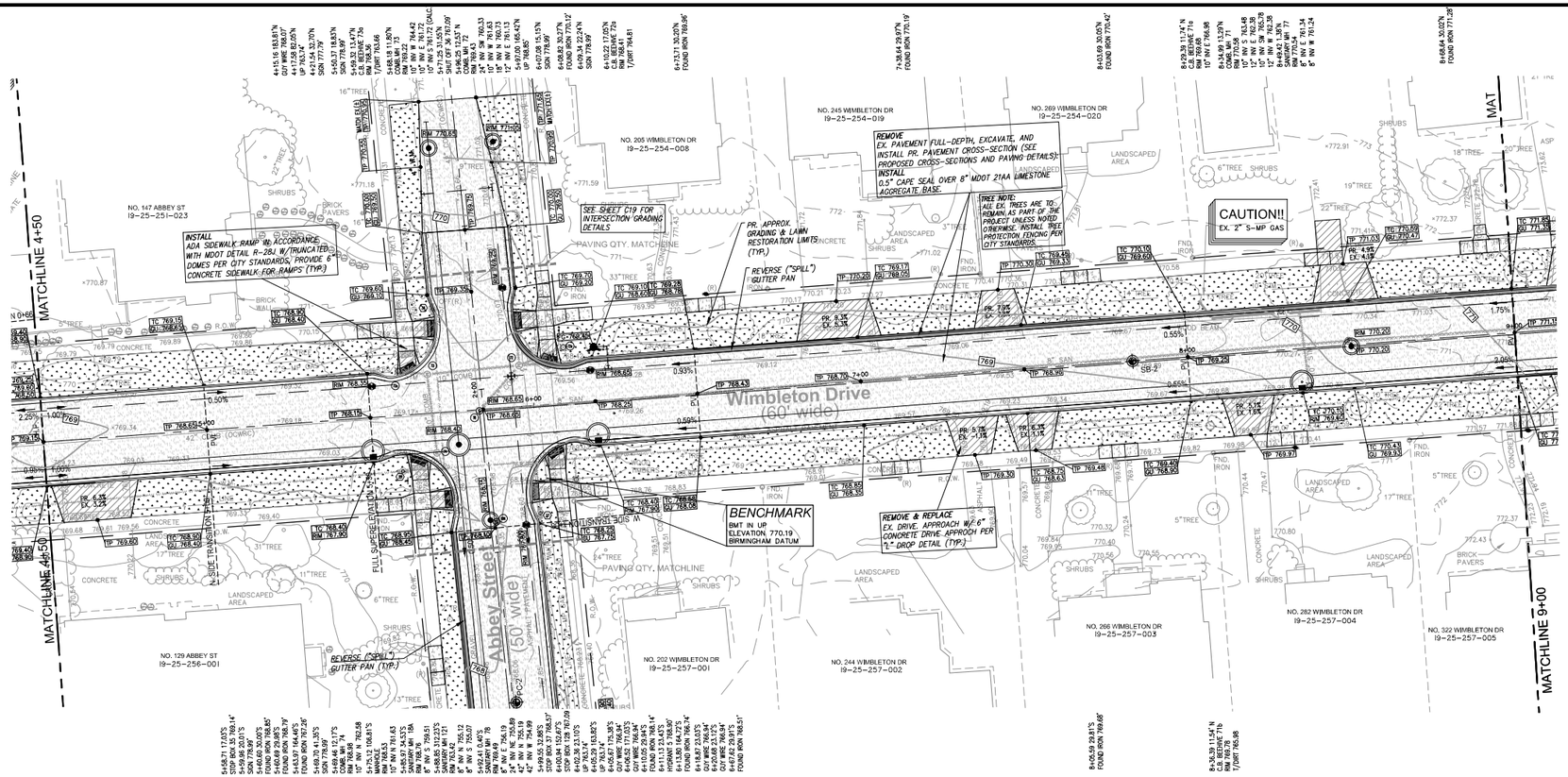
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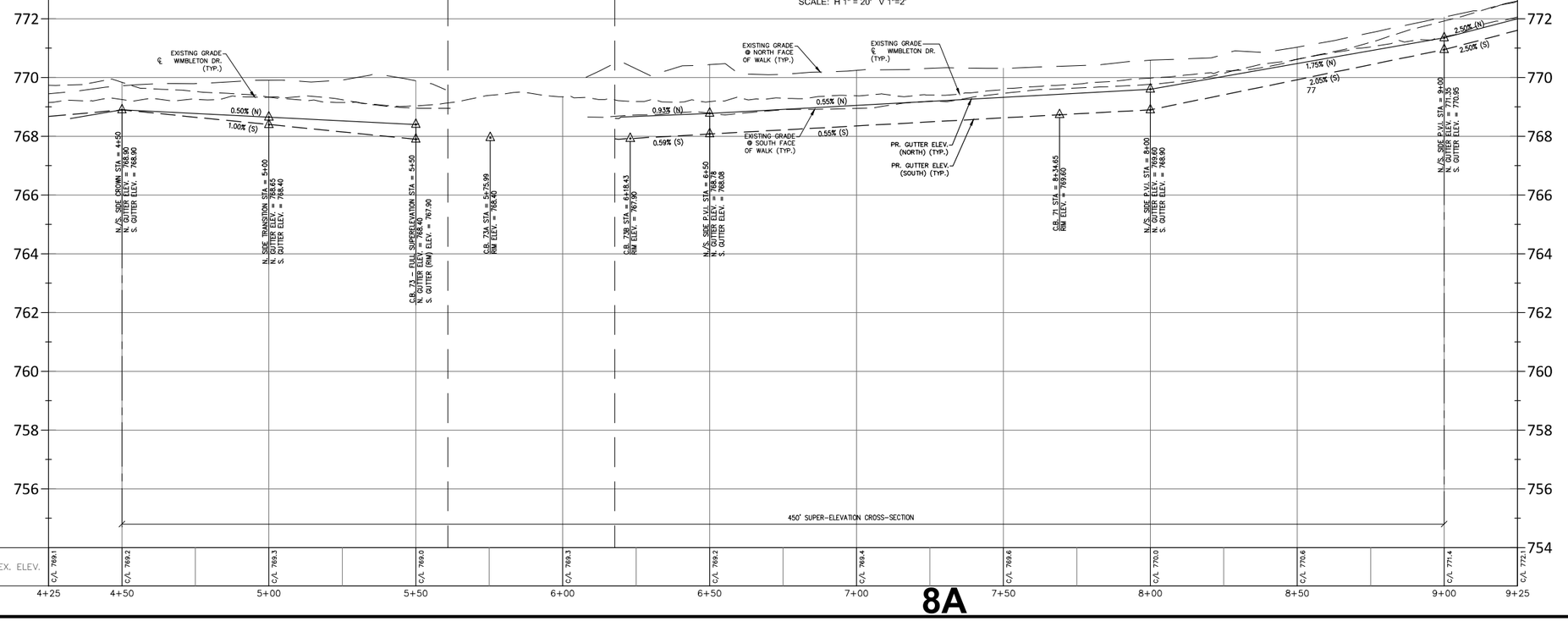
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APPROVED BY: P. Tulikangas
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NFE JOB NO. 0310
SHEET NO. C13

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Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
245 Wimbleton	19.9	25.9	11.4	29.0	1.5
269 Wimbleton	10.0	16.0	11.2	16.2	1.5
287 Wimbleton	13.9	19.9	11.4	29.6	1.5
129 Abbey	20.5	26.5	11.4	29.8	1.5
224 Wimbleton	10.0	16.0	11.4	16.5	1.5
266 Wimbleton	10.2	16.2	11.4	16.8	1.5
282 Wimbleton	10.0	16.0	11.6	16.8	1.5

LEGEND

- EXISTING SAN./COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
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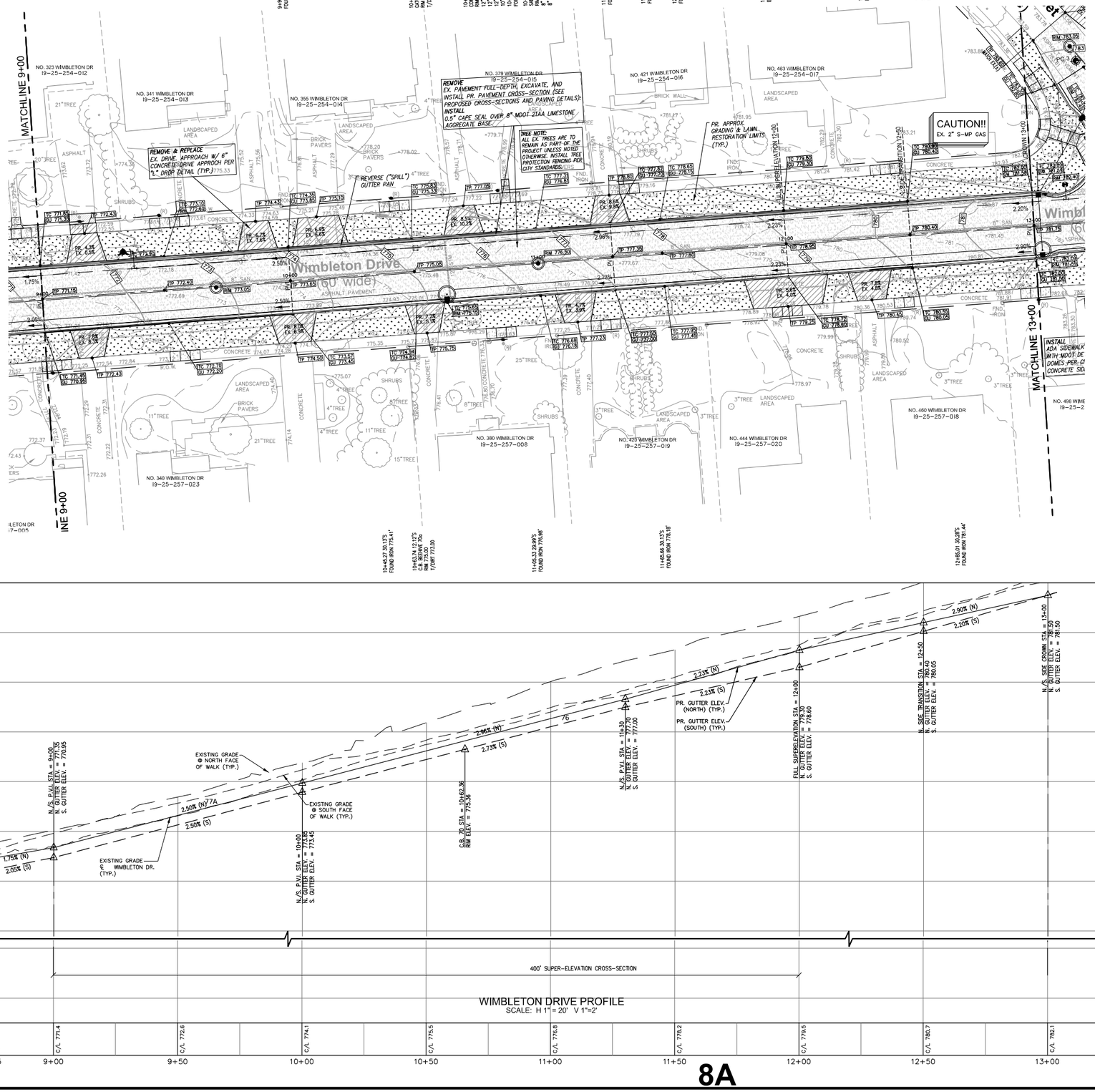
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NFE JOB NO. O310
SHEET NO. C14

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8A

Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
323 Wimbleton	10.1	16.1	11.5	16.8	1.5
341 Wimbleton	10.0	16.0	11.3	16.3	1.5
355 Wimbleton	16.3	22.3	11.3	24.2	1.5
379 Wimbleton	10.0	16.0	11.3	16.3	1.5
421 Wimbleton	10.0	16.0	11.3	16.3	1.5
322 Wimbleton	10.0	19.0	11.5	16.5	1.5
340 Wimbleton	12.9	18.9	11.5	20.3	1.5
360 Wimbleton	10.0	16.0	11.7	16.8	1.5
420 Wimbleton	10.5	16.5	11.7	17.5	1.5
444 Wimbleton	27.8	33.8	11.7	40.0	1.5
460 Wimbleton	11.5	17.5	11.6	18.6	1.5

LEGEND

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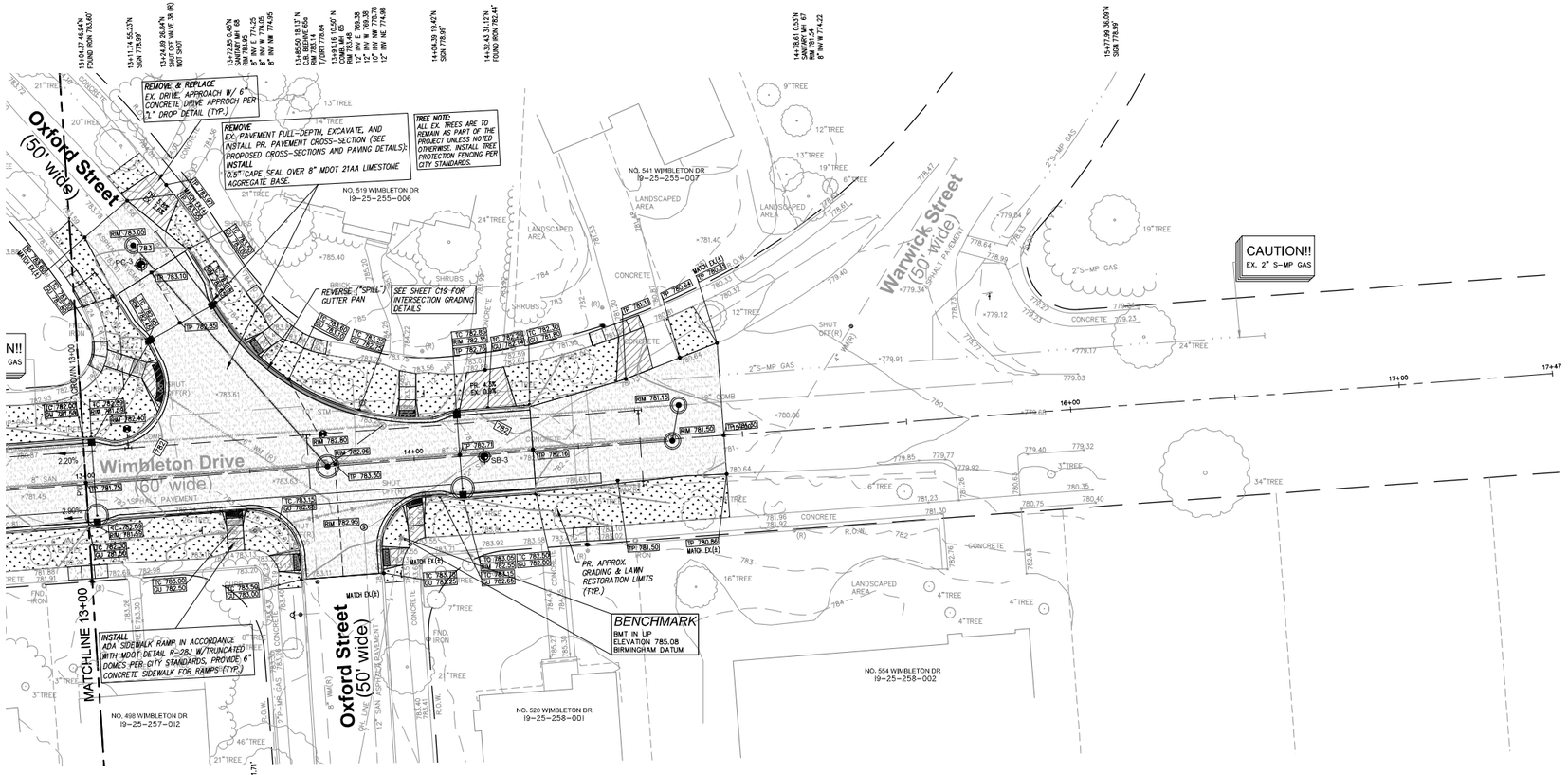
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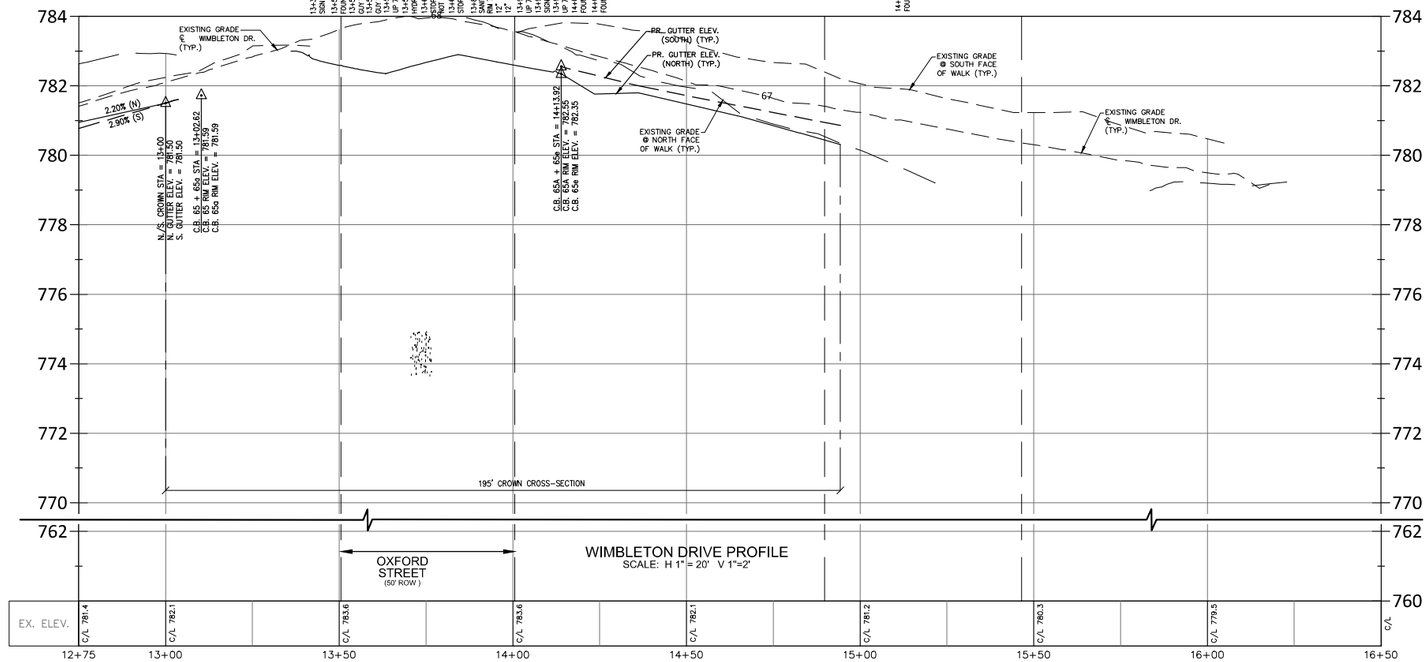
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NFE JOB NO. O310
SHEET NO. C15

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8A

Driveway Schedule					
Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
950 Oxford	11.3	17.8	11.1	17.9	1.5
519 Wimbleton	11.3	17.3	11.6	18.5	1.5
541 Wimbleton	8.0	11.8	12.7	13.9	1.5

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SHEET
Paving and Grading - Wimbleton - Sta. 13+00 to P.O.E.

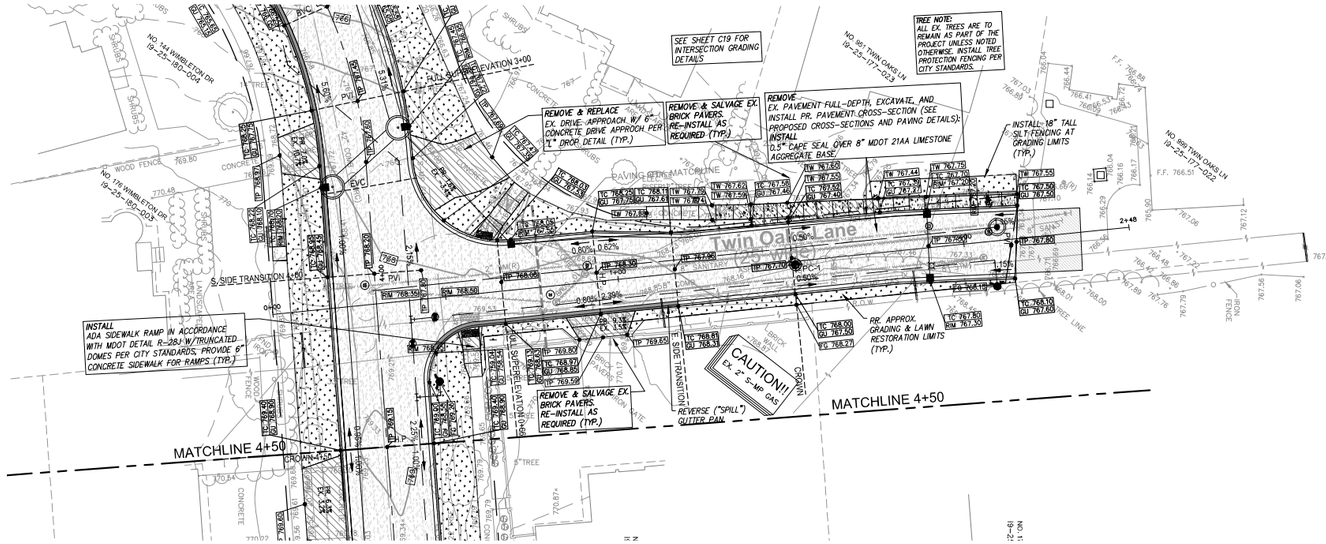
811 Know what's below Call before you dig.

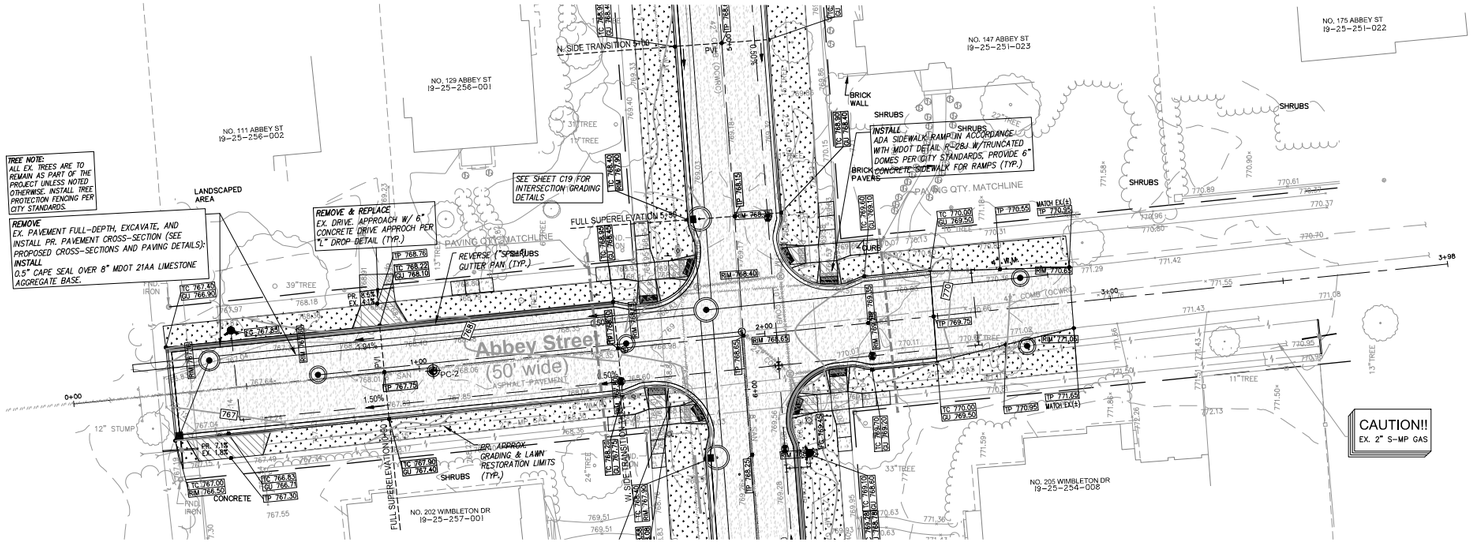
DATE	ISSUED/REVISED
10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: 1" = 20' / 1"=2'

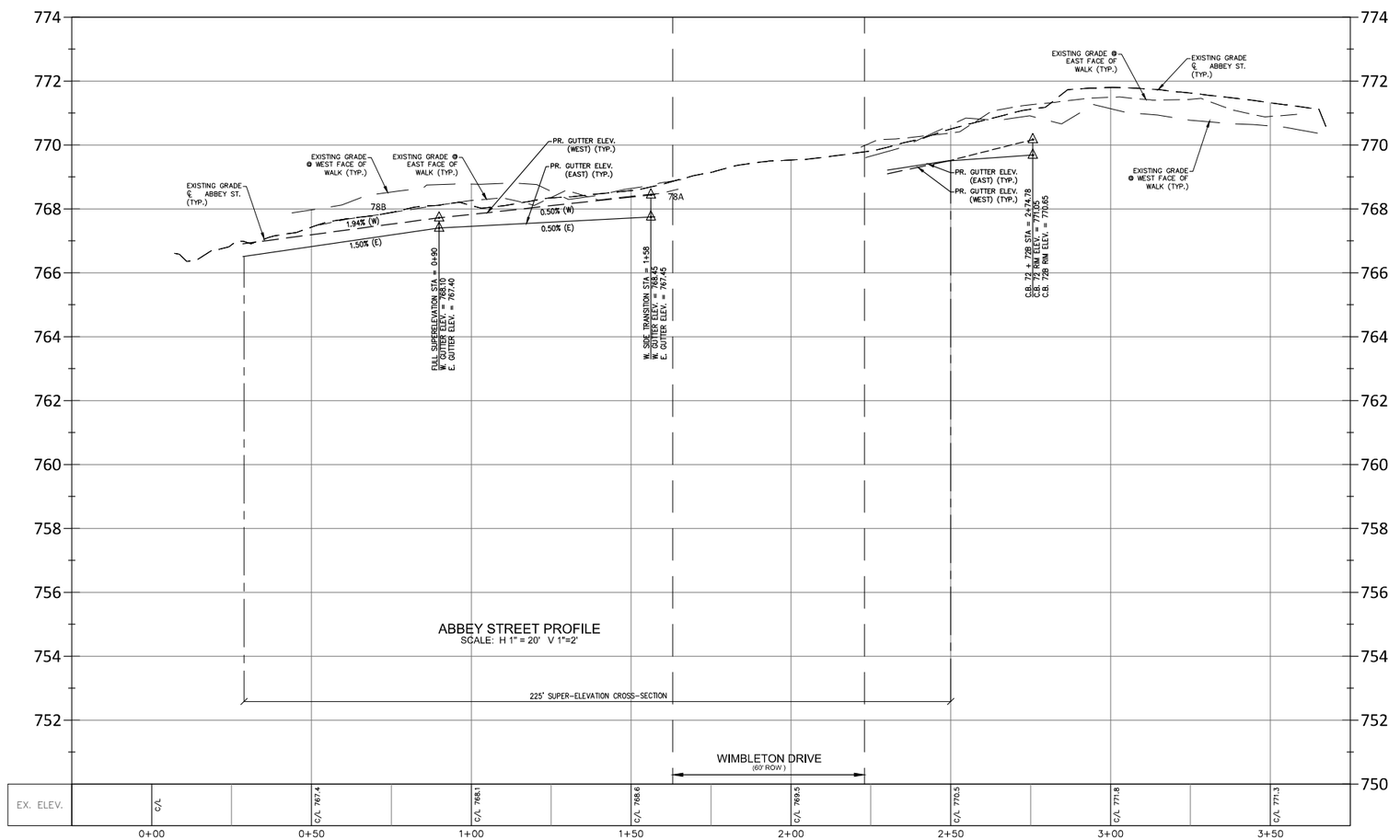
NFE JOB NO. O310
SHEET NO. C16

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SEE SHEET C19 FOR INTERSECTION GRADING DETAILS
TREE NOTE: ALL EX. TREES ARE TO REMAIN AS PART OF THE PROJECT UNLESS NOTED OTHERWISE. INSTALL TREE PROTECTION FENCING PER CITY STANDARDS.
REMOVE & REPLACE EX. DRIVE-APPROACH W/ 6" CONCRETE DRIVE APPROCH PER "1" DROP DETAIL (TYP.)
REMOVE & SALVAGE EX. BRICK PAVERS. RE-INSTALL AS REQUIRED (TYP.)
REMOVE EX. PAVEMENT FULL-DEPTH, EXCAVATE, AND INSTALL PR. PAVEMENT CROSS-SECTION (SEE PROPOSED CROSS-SECTIONS AND PAVING DETAILS): INSTALL 0.5" CAPE SEAL OVER 8" MDOT 21AA LIMESTONE AGGREGATE BASE.
INSTALL 18" TALL SILT-FENCING AT GRADING LIMITS (TYP.)
INSTALL ADA SIDEWALK RAMP IN ACCORDANCE WITH MDOT DETAIL R-28J-W/TRUNCATED DOMES PER CITY STANDARDS. PROVIDE 6" CONCRETE SIDEWALK FOR RAMPS. (TYP.)
REMOVE & SALVAGE EX. BRICK PAVERS. RE-INSTALL AS REQUIRED (TYP.)
PR. APPROX. GRADING & LAWN RESTORATION LIMITS (TYP.)
REVERSE ("SPILL") GUTTER PAN
CAUTION!! Ex 2" S-Line Gas
MATCHLINE 4+50
MATCHLINE 4+50
Twin Oak Lane
(60' ROW)
WIMBLETON DR. (60' ROW)
NO. 144 WIMBLETON DR 19-25-180-004
NO. 176 WIMBLETON DR 19-25-180-003
NO. 361 TWIN OAKS LN 19-25-177-023
NO. 999 TWIN OAKS LN 19-25-177-022
S. SIDE TRANSITION 4+50
N. SIDE TRANSITION 2+48
CROWN 4+72
PAVING MATCHLINE
2+48
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CONCRETE
BRICK
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5" TREE
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0.50%
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0.80% (W)
0.50% (W)
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Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
111 Abbey	10.0	16.0	6.4	9.2	1.5
202 Wimbleton	18.5	24.5	6.6	15.8	1.5

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 8" 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

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
Paving Project
Contract #6-25(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 - Abbey Street - P.O.B. to P.O.E.

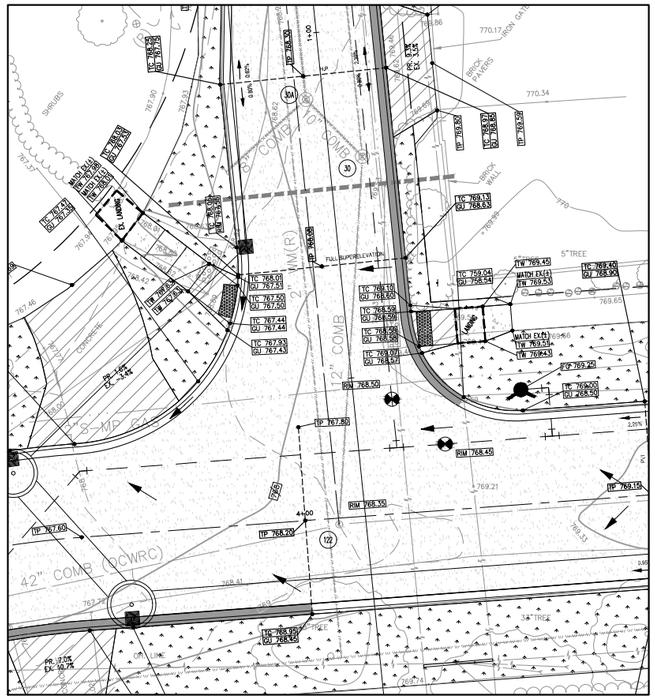
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

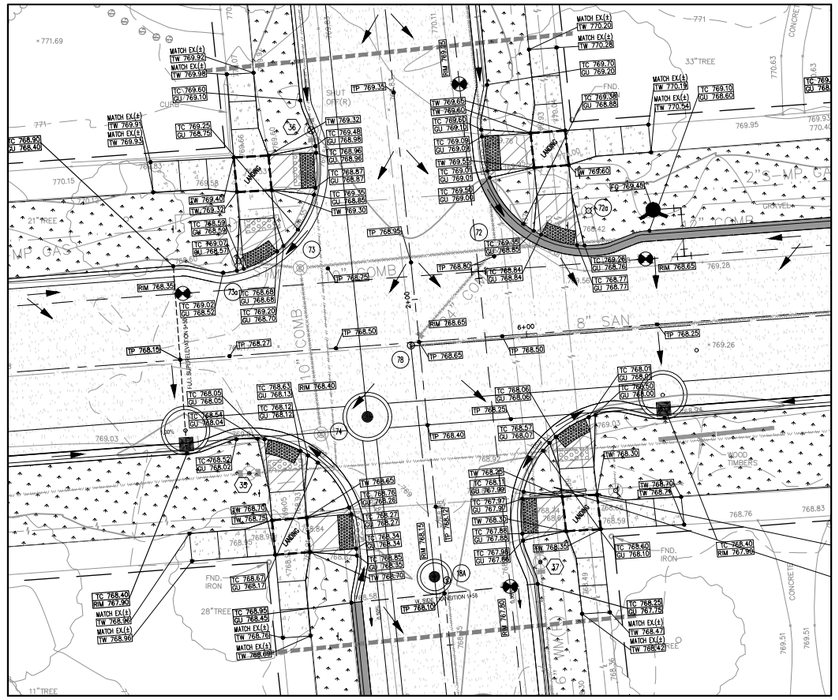
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C18

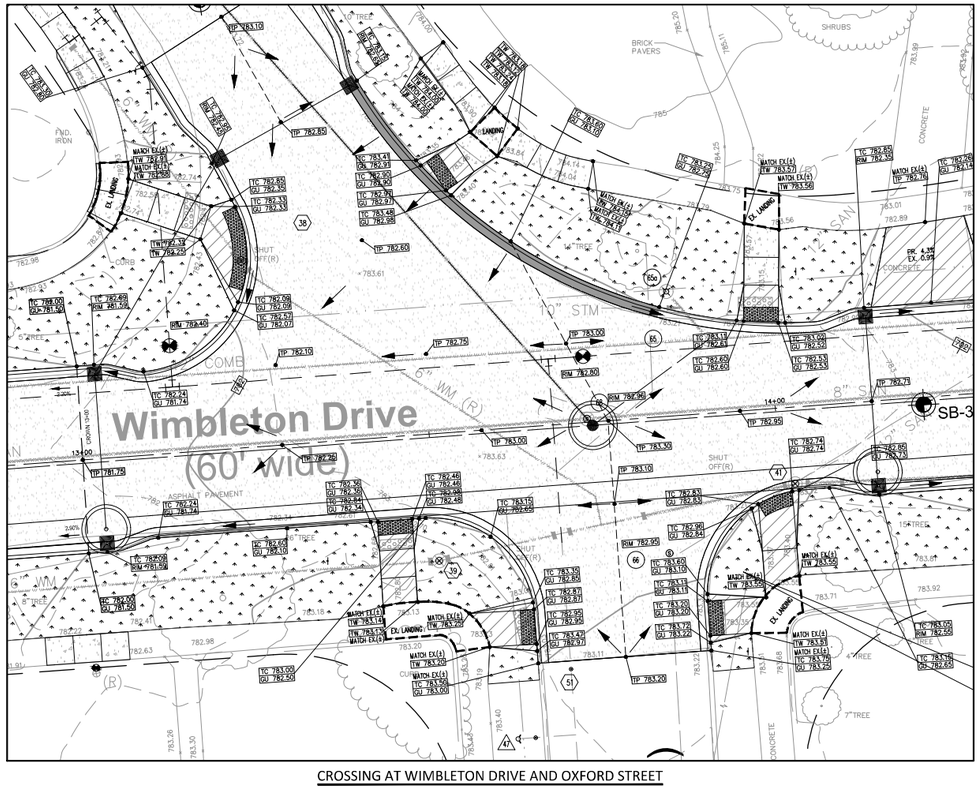
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CROSSING AT WIMBLETON DRIVE AND TWIN OAKS LANE



CROSSING AT WIMBLETON DRIVE AND ABBEY ROAD



CROSSING AT WIMBLETON DRIVE AND OXFORD STREET

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W E

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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" HMA ON 8" 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
- ×000.00 GROUND ELEVATION

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SHEET

Intersection and Sidewalk Grading Details

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03-04-25	ADDENDUM 2

DRAWN BY: L. Gross

DESIGNED BY: P. Tulikangas

APPROVED BY: P. Tulikangas

DATE: February 20, 2024

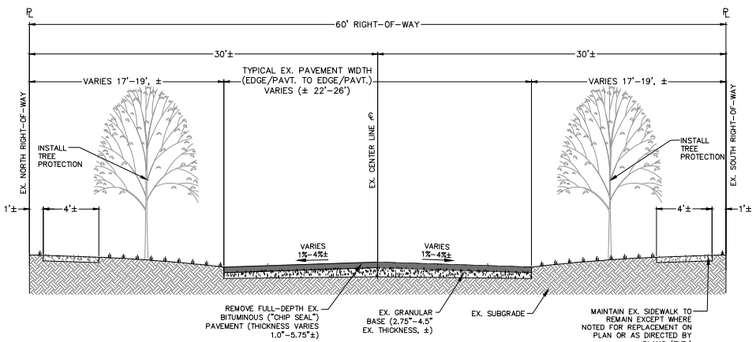
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NFE JOB NO. O310

SHEET NO. C19

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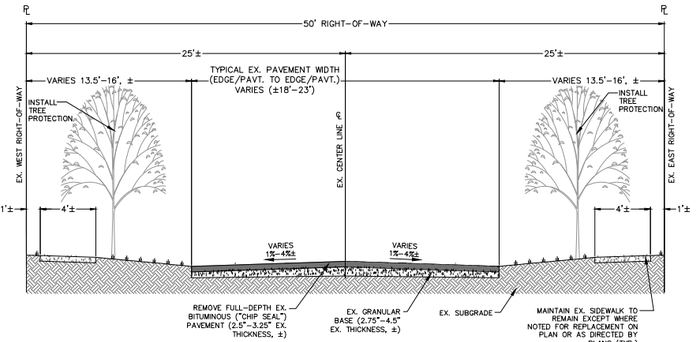
EXISTING BITUMINOUS PAVEMENT SECTION

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 9/20/24, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



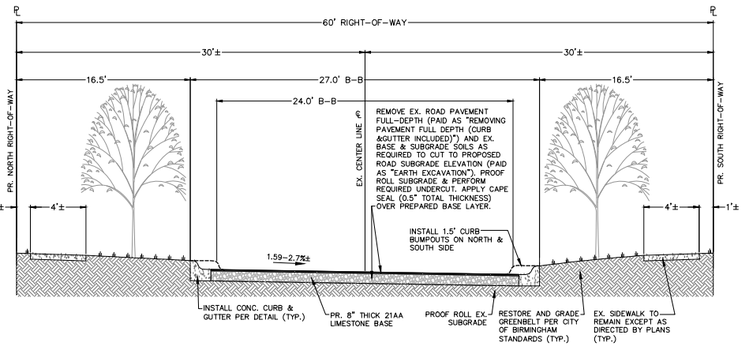
EXISTING BITUMINOUS PAVEMENT SECTION

N.T.S.

ABBEY STREET

APPLIES TO: STA. P.O.B. TO STA. P.O.E

NOTE: REFER TO GEOTECHNICAL INVESTIGATION REPORT BY G2 CONSULTING GROUP, DATED 9/20/24, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



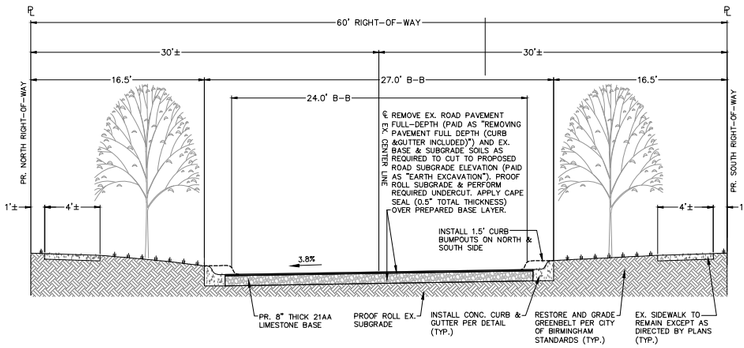
PROPOSED SUPER-ELEVATED PAVEMENT SECTION

N.T.S.

WIMBLETON DRIVE

APPLIES TO: STA. 5+50 TO STA. 12+00

NOTE: TRANSITION FROM SUPER-ELEVATION TO CROWN OCCURS BETWEEN STA. 12+00 & STA. 13+00



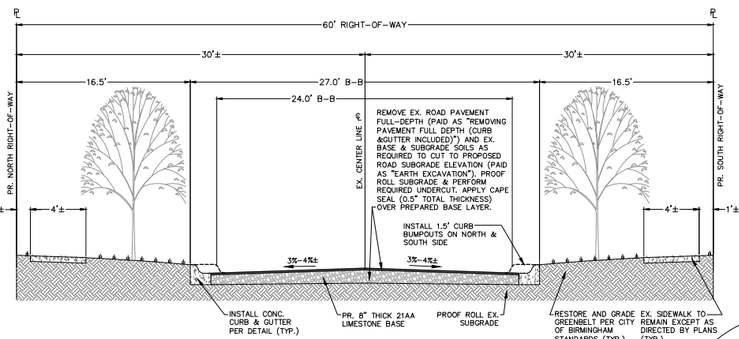
PROPOSED SUPER-ELEVATED PAVEMENT SECTION

N.T.S.

WIMBLETON DRIVE

APPLIES TO: STA. P.O.B. TO STA. 3+50

NOTE: TRANSITION FROM SUPER-ELEVATION TO CROWN OCCURS BETWEEN STA. 3+50 & STA. 4+25

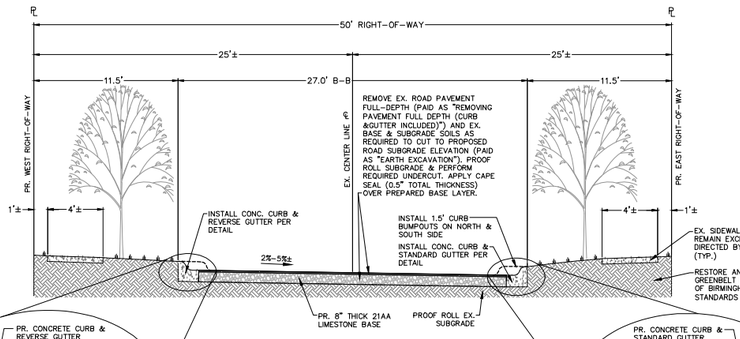


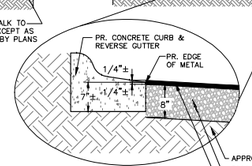
PROPOSED CROWN PAVEMENT SECTION

N.T.S.

WIMBLETON DRIVE

APPLIES TO: STA. 4+25 TO STA. 5+00
STA. 13+00 TO STA. P.O.E.





TYPICAL DETAIL

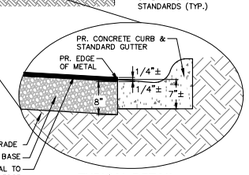
TYP. FOR ALL STREETS

PROPOSED SUPER-ELEVATED PAVEMENT SECTION

N.T.S.

ABBEY STREET

APPLIES TO: STA. 0+25 TO STA. 2+00



TYPICAL DETAIL

TYP. FOR ALL STREETS

8A

UTILITIES

AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL EXPOSE AND VERIFY EXISTING UTILITIES FOR LOCATION, SIZE, DEPTH, MATERIAL AND CONFIGURATION PRIOR TO CONSTRUCTION. COSTS FOR EXPLORATORY EXCAVATION IS AN INCIDENTAL COST AND SHALL NOT BE CONSIDERED AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING UTILITIES WHICH DO NOT MATCH THE PLANS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. ANY FIELD CHANGES OF THE PROPOSED UTILITIES SHALL BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

DAMAGE TO PRIVATE PROPERTY

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AND ARE PART OF THE CONTRACT DOCUMENTS.

DEWATERING OF TRENCH AND EXCAVATIONS

IF NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION DESIGN DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF GROUND WATER DEWATERING SYSTEMS IS BEYOND THE SCOPE OF DESIGN FOR THESE DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND PROVIDING APPROPRIATE EXCAVATION DEWATERING SYSTEMS FOR USE DURING CONSTRUCTION.

THE DEWATERING METHOD SELECTED BY THE CONTRACTOR WILL NOT ADVERSELY AFFECT ADJACENT PAVEMENTS OR STRUCTURES PRIOR TO BEGINNING DEWATERING CONDITIONS. MEANS AND METHODS OF DEWATERING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE CONSIDERED INCLUDED IN THE WORK OF CONSTRUCTING THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

BY-PASS PUMPING

FROM TIME TO TIME IT MAY BE NECESSARY FOR THE CONTRACTOR TO BY-PASS PUMP TO COMPLETE THE WORK INDICATED ON THE PLANS. THE COST OF BY-PASS PUMPING, THE METHODS, EQUIPMENT AND MEANS OF PROVIDING THAT WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK WHETHER SPECIFICALLY CALLED OUT ON THE PLANS OR NOT.

MEANS AND METHODS FOR PIPE CONSTRUCTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEANS AND METHODS FOR CONSTRUCTING THE UNDERGROUND PIPE SYSTEMS PROPOSED ON THE PLANS, INCLUDING BUT NOT LIMITED TO THE NEED FOR SHORING/BRACING OF TRENCHES, DEWATERING OF TRENCHES, SCHEDULING THE WORK AT OFF PEAK HOURS, AND/OR MAINTAINING EXISTING FLOWS THAT MAY BE ENCOUNTERED VIA PUMPING, BY-PASS PIPING OR OTHER MEANS. THE CONTRACTOR SHALL NOT BE PAID ANY ADDITIONAL COMPENSATION TO IMPLEMENT ANY MEANS AND METHODS TO SATISFACTORILY COMPLETE THE CONSTRUCTION.

PAVEMENT REMOVAL

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. PAVEMENT CORE SAMPLES ARE FOR INFORMATIONAL PURPOSES ONLY AS TO THE THICKNESS OF THE PAVEMENT AT THE LOCATION OF THE SAMPLE. THE OWNER AND ENGINEER MAKE NO REPRESENTATION, WARRANTY OR GUARANTY THAT THE SAMPLES ACCURATELY REFLECT THE PAVEMENT THICKNESS ON THE PROJECT.

MAINTENANCE OF TRAFFIC

DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL ACCOMMODATE BOTH VEHICULAR AND PEDESTRIAN TRAFFIC IN THE ROAD RIGHTS OF WAY. THE CONTRACTOR'S EQUIPMENT AND OPERATIONS ON PUBLIC STREETS SHALL BE GOVERNED BY ALL APPLICABLE LOCAL, COUNTY AND STATE ORDINANCES, REGULATIONS AND LAWS. THE CONTRACTOR SHALL OBTAIN AND SATISFY ANY AND ALL PERMIT REQUIREMENTS BY THE LOCAL, COUNTY AND STATE GOVERNMENTAL AGENCIES.

IN ADDITION, WHERE THE WORK REQUIRES THE CLOSURE OF ONE OR MORE LANES OR IS WITHIN THE INFLUENCE OF THE ROAD OR PEDESTRIAN RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDOT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

COMPENSATION FOR TRAFFIC CONTROL SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC TRAFFIC CONTROL ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

IRRIGATION

THE CONTRACTOR SHALL MAINTAIN OR REPAIR ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA UNLESS THE DRAWINGS CALL FOR THE IRRIGATION SYSTEM TO BE REMOVED. THE OWNER AND NFE MAKE NO REPRESENTATIONS, WARRANTY OR GUARANTY AS TO THE LOCATION OF THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT THE IRRIGATION SYSTEM DURING CONSTRUCTION ACTIVITIES. COMPENSATION FOR MAINTAINING OR REPAIRING EXISTING IRRIGATIONS SYSTEMS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC IRRIGATION SYSTEM REPAIR ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

SUB-SOIL CONDITIONS

ANY SOIL BORING PROVIDED BY THE OWNER AND/OR ENGINEER IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION IS NOT OFFERED AS EVIDENCE OF GROUND CONDITIONS THROUGHOUT THE PROJECT AND ONLY REFLECT THE GROUND CONDITIONS AT THE LOCATION OF THE BORING ON THE DATE THEY WERE TAKEN.

THE ACCURACY AND RELIABILITY OF THE SOIL LOGS AND REPORT ARE NOT WARRANTED OR GUARANTEED IN ANY WAY BY THE OWNER OR ENGINEER AS TO THE SUB-SOIL CONDITIONS FOUND ON THE SITE. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION AND SUB-SOIL INVESTIGATION AND SECURE OTHER SUCH INFORMATION AS THE CONTRACTOR CONSIDERS NECESSARY TO DO THE WORK PROPOSED AND IN PREPARATION OF THEIR BID.

SUBGRADE UNDERCUTTING AND PREPARTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY AND ALL SOILS WHICH DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SUBGRADE IN CONFORMANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS. THE MEANS AND METHODS USED TO ACHIEVE THE REQUIRED RESULT SHALL REST SOLELY WITH THE CONTRACTOR.

ANY AREAS OF UNDERCUTTING THAT RESULT IN ADDITIONAL OR EXTRA WORK BECAUSE THEY COULD NOT BE IDENTIFIED BY THE CONTRACTOR'S PRE-BID SITE OBSERVATION OR ARE NOT SET FORTH IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE ANY EXTRA WORK IS PERFORMED. THE CONTRACTOR SHALL MAKE A REQUEST FOR ANY ADDITIONAL COMPENSATION FOR THE UNDERCUTTING IN WRITING AND THE REQUEST SHALL CONFORM TO THE CONTRACT'S CHANGE ORDER PROVISIONS.

STRUCTURE BACKFILL

STRUCTURAL BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PROJECT PLANS, SPECIFICATIONS OR AS REQUIRED BY THE COMMUNITY, GOVERNMENT AGENCY OR UTILITY THAT HAS JURISDICTION OVER THE WORK.

TRENCH BACKFILL

TRENCH BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PLANS AND/OR SPECIFICATIONS. TRENCH BACKFILL SHALL ALSO BE INSTALLED IN CONFORMANCE WITH THE COMMUNITY REQUIREMENTS OR AGENCY/UTILITY GOVERNING SAID TRENCH CONSTRUCTION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.

EARTH BALANCE / GRADING

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER THE SITE EARTHWORK BALANCES OR NOT. ANY EXCESS CUT MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR. IN A LIKE MANNER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT APPROVED FILL MATERIAL AND PLACE IT AS REQUIRED TO ATTAIN THE SITE GRADE AND COMPACTION REQUIREMENTS PER THE ENGINEER'S PLAN AND ALL APPLICABLE GOVERNMENTAL STANDARDS. THE ENGINEER AND OWNER MAKE NO REPRESENTATION AS TO THE QUANTITIES THAT MAY BE NEEDED TO CREATE A BALANCED EARTHWORK CONDITION OR THAT THE SITE EARTHWORK IS BALANCED.

SOIL EROSION / SEDIMENTATION CONTROL

THE CONTRACTOR SHALL OBTAIN THE REQUIRED SOIL EROSION PERMIT AND SATISFY ALL REGULATORY REQUIREMENTS FOR CONTROLLING SOIL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR INSPECTION OR APPROVAL OF THE CONTRACTOR'S WORK IN CONNECTION WITH SATISFYING THE SOIL EROSION PERMIT REQUIREMENTS UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS.

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SHEET

Existing and Proposed
Road Cross-Sections

Know what's below
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03-04-25	ADDENDUM 2

DRAWN BY: L. Gross

DESIGNED BY: P. Tulikangas

APPROVED BY: P. Tulikangas

DATE: February 20, 2024

SCALE: N.T.S.

NFE JOB NO. O310

SHEET NO. C20

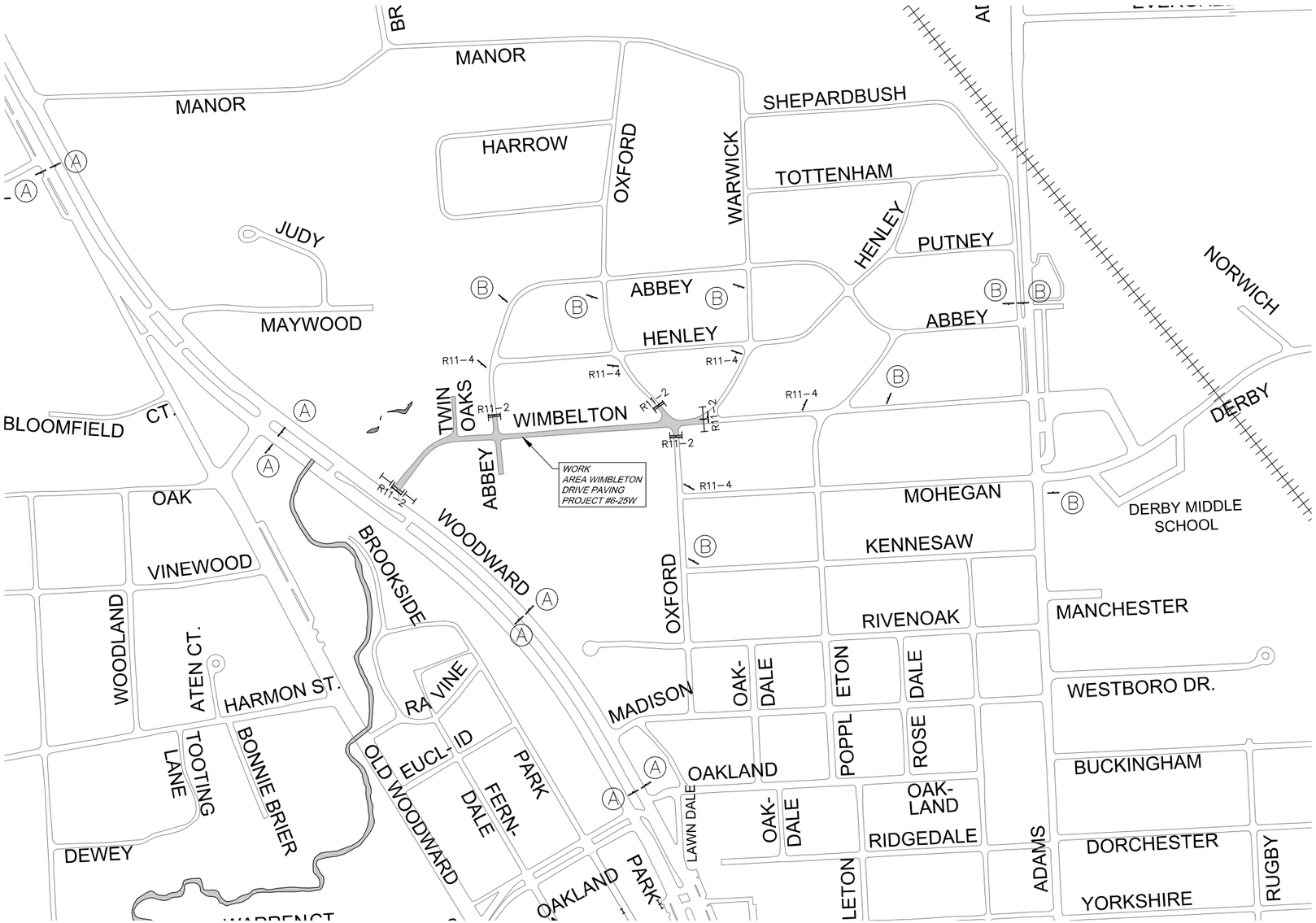
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WIMBLETON CLOSED
NO ACCESS FROM WOODWARD
SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED OXFORD TO
WOODWARD - SEEK ALTERNATE
ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND



ADVANCED WARNING SIGNAGE PLAN: WIMBLETON DRIVE PAVING PROJECT

8A



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 TO WOODWARD - SEEK ALTERNATE ROUTE	36"x72"	8

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"	5

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

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. 0557929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive
Paving Project
Contract #6-25(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 & Detour Plan

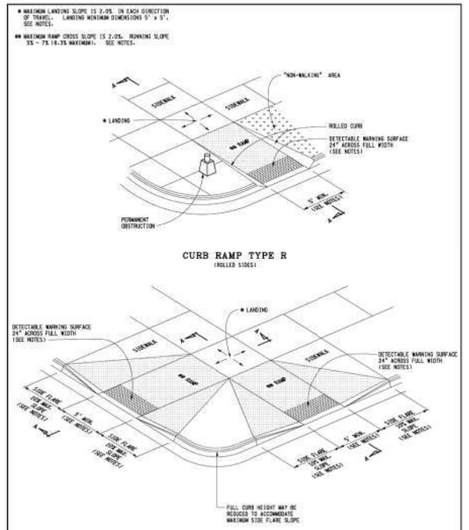
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Know what's below
Call before you dig.

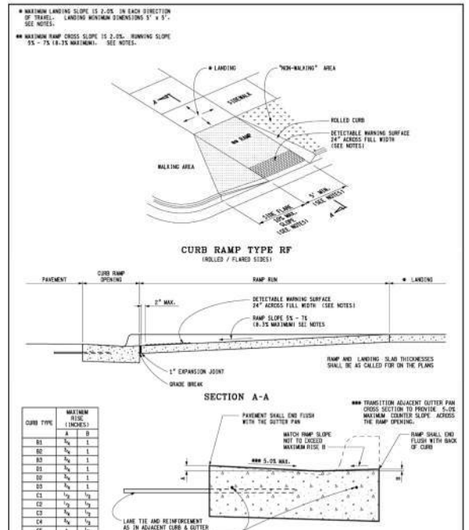
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02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

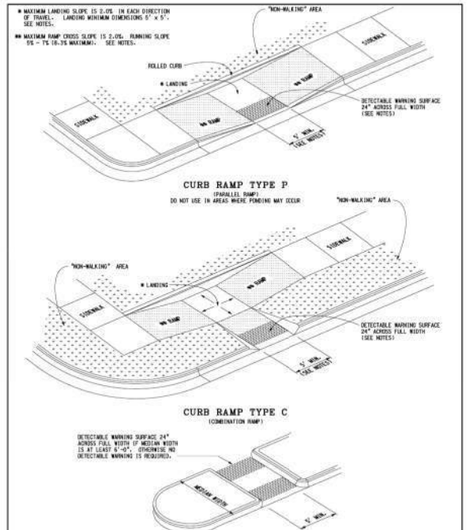
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
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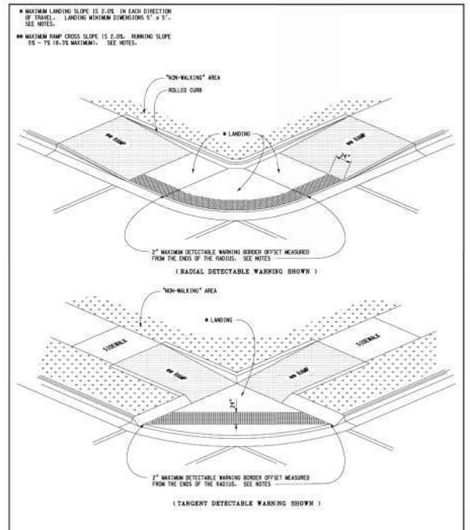
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SHEET NO. C21

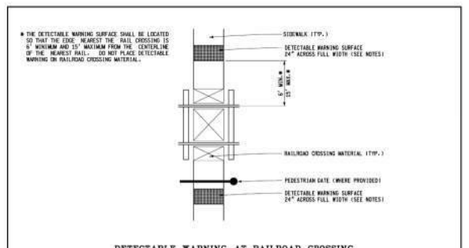
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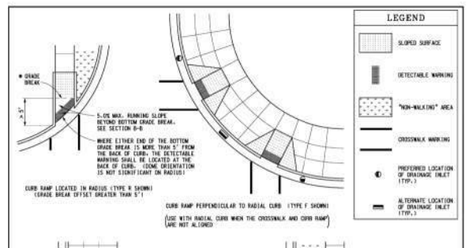


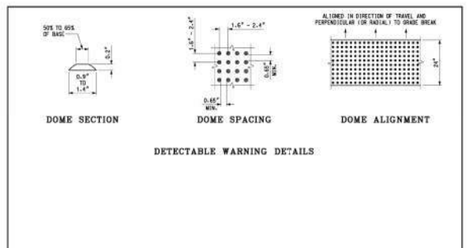












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A WALKABLE CITY
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Birmingham, MI 48012

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

SHEET
Notes and Details

811
Know what's below
Call before you dig.

DATE ISSUED/REVISED
10-25-24 ISSUED SURVEY
02-12-25 CITY REVIEW
02-20-25 BIDS
03-04-25 ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: N.T.S.

NFE JOB NO. O310
SHEET NO. C22

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GENERAL NOTES

1. BRICK PAVERS SHALL BE REMOVED BY MEANS WHICH CAUSE NO DAMAGE TO THE BRICKS. BRICKS SHALL BE DELIVERED TO CITY OF BIRMINGHAM DEPARTMENT OF SERVICES AS DIRECTED BY THE ENGINEER.
2. ALL PAVEMENT TO BE REMOVED SHALL BE SAWCUT FULL DEPTH.
3. ANY GRAVEL REPLACEMENT NECESSARY FOR REGRADING DRIVEWAYS SHALL BE CONSIDERED INCLUDED IN THE COST OF CONCRETE DRIVE APPROACH.
4. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE.
5. ALL DRIVEWAYS (BEHIND THE SIDEWALK) SHALL BE REPAIRED WITH A CROSS SECTION WHICH MATCHES THE EXISTING IN THICKNESS, OR A MINIMUM 4.0" BITUMINOUS MIXTURE No. 13A. IF THE EXISTING DRIVEWAY IS GREATER THAN 4.0" IN DEPTH, THE THICKNESS OF THE BITUMINOUS MIXTURE No. 13A SHALL BE ADJUSTED TO MAKE UP THE DIFFERENCE.
6. UNLESS OTHERWISE SHOWN, PROPOSED GRADES IN PROFILE ARE TOP OF CURB GRADES.
7. ROCKS, OR OTHER MISC. DEBRIS WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, UNLESS DIRECTED OTHERWISE FROM THE CITY.
8. THE PAY ITEM "ADJUST STRUCTURE COVER" APPLIES ONLY TO PRE-EXISTING STRUCTURES TO BE ADJUSTED TO PROPOSED GRADES AS PART OF CONSTRUCTION.
9. IF THE CONTRACTOR HAS MULTIPLE CREWS WORKING THAT REQUIRES MULTIPLE CITY INSPECTORS ON A GIVEN WORK DAY, THE PAY ITEM "INSPECTOR CREW DAYS" SHALL BE MULTIPLIED BY THE CORRESPONDING NUMBER OF INSPECTORS REQUIRED DURING SAID WORK DAY.

PAVING NOTES

1. PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

   CONCRETE ROAD: BASE COURSE – 21AA CRUSHED LIMESTONE AGGREGATE (8" THICK)
   MIX – PORTLAND CEMENT TYPE IA (AIR-ENTRAINED), TO COMPLY WITH MDOT 350CHP REQUIREMENTS.

   CONCRETE FLATWORK: 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 1.5 TO 3 INCHES. COMPLY WITH MDOT 3500 REQUIREMENTS.

   ALL CONCRETE PAVEMENT AND FLATWORK MIXES USED ON THIS PROJECT SHALL COMPLY WITH A MINIMUM GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS) SUBSTITUTION OF TWENTY-FIVE (25) PERCENT SUBJECT TO SEASONAL LIMITATIONS PER THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION.

   ASPHALT: BASE COURSE – 21AA CRUSHED LIMESTONE AGGREGATE (8" THICK)

   SURFACE COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE 220 POUNDS PER SQUARE YARD)

   LEVELING COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 4EML (MAX. APPLICATION RATE 330 POUNDS PER SQUARE YARD)

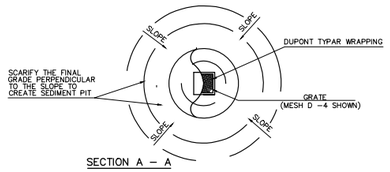
   REPAIR AREAS –
   BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD
2. PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
3. ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
4. ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.
5. 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, 2003 EDITION.
6. ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.
7. ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.
8. 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.
9. 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.
10. 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).
11. EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.
12. 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.
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.
15. R.A.P. NOT ALLOWED IN SURFACE / TOP COURSE OF ASPHALT.

WATER MAIN NOTES

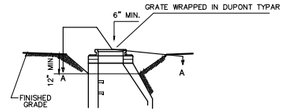
1. ALL WATER MAINS 4" AND LARGER SHALL BE DUCTILE IRON PIPE THICKNESS CLASS 52, WITH PUSH ON TYPE JOINTS PER CITY REQUIREMENTS.
2. NEW WATER MAINS SHALL BE INSTALLED WITH A MINIMUM 5.5 FEET OF COVER. EXCEPTIONS WILL BE ALLOWED WHEN NECESSARY TO CONNECT TO EXISTING MAIN OR WHEN AUTHORIZED BY THE ENGINEER.
3. KNOWN WATER SERVICES BASED ON FIELD INFORMATION OR CITY RECORDS ARE SHOWN ON THE PLANS AS FOLLOWS: "C" = COPPER, "L" = LEAD AND "W.S." = WATER SERVICE TYPE UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL EXISTING SERVICES TO THE NEW MAIN AFTER IT HAS BEEN APPROVED FOR USE.
4. COAT ALL BOLTS ON MECHANICAL FITTINGS WITH TAR.
5. HYDRANT CONNECTION TO CONSIST OF 6" DUCTILE IRON PIPE, 6" GATE VALVE AND BOX, AND HYDRANT. HYDRANT SHALL BE EJIW MODEL 5BR WITH 6" MECHANICAL JOINT INLET, TWO PUMPER INLETS, ALL OPENING LEFT, 5'-6" TRENCH, PLUGGED DRAIN AND BLOCK BOLTS.
6. INSTALL GATE VALVE AS CLOSE TO HYDRANT AS PRACTICABLE.
7. GATE VALVES 4" AND LARGER MAY BE MUELLER BRAND SPECIFIED, OR APPROVED EQUIVALENT. ALL MATERIALS RELATIVE TO WATER SERVICE CONNECTIONS SHALL BE MUELLER BRAND.
8. IN ABANDONING MAINS, THE FOLLOWING SHALL BE DONE: PLUG ALL OPEN PIPE ENDS WITH MASONRY, DISCONNECT MAINS WHICH ARE TO BE ABANDONED FROM FITTINGS AT LIVE MAINS AND PLUG AND BLOCK THOSE FITTINGS. FILL MAIN TO BE ABANDONED WITH GROUT OR HYDRAULIC CEMENT.
9. WORK INDICATED BY (A) SHALL BE PERFORMED AFTER THE NEW MAINS ARE PLACED IN SERVICE.
10. THE LOCATIONS AND TYPES OF SERVICE LEADS IS BASED ON THE BEST AVAILABLE INFORMATION. THE EXACT LOCATION OF SERVICE LEADS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
11. WHERE APPLICABLE, THE APPROPRIATE SECTIONS OF EXISTING WATERMAIN SHALL BE SHUTDOWN AND DEPRESSURIZED PRIOR TO A) CUTTING AND REMOVING, B) CUTTING AND INSTALLING PROPOSED TEE CONNECTIONS, C) PERFORMING ANY AND ALL OTHER WORK AROUND/ADJACENT TO HYDRANTS AND ALL OTHER CONNECTIONS, WHILE MEETING AND/OR EXCEEDING APPLICABLE INDUSTRY SAFETY PRECAUTIONS AND MIOSHA STANDARDS.

STORM SEWER NOTES (where applicable)

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY. THE MUNICIPALITY STANDARD NOTES, DETAILS AND SPECIFICATIONS SHALL BE INCORPORATED AS PART OF THESE PLANS.
2. ALL STORM SEWER TRENCHES UNDER OR WITHIN THREE (3) FEET OF EXISTING OR PROPOSED PAVEMENT SHALL BE BACK FILLED WITH MDOT CLASS II MATERIAL (SAND) AND BE MACHINE COMPACTED TO A MINIMUM OF % OF THE MATERIAL'S MAXIMUM DENSITY. PAVEMENT SHALL INCLUDE PARKING LOTS, DRIVE APPROACHES, 95 CURB & GUTTER AND ADJACENT WALKS.
3. ALL STORM SEWER PIPE SHALL BE INSTALLED ON CLASS "B" BEDDING OR BETTER UNLESS OTHERWISE INCLUDED ON THE PLANS.
4. STORM SEWER SHALL BE OF THE TYPE, SIZE & CLASS DESIGNATION INDICATED ON THE PLANS AND LIKEWISE BE INSTALLED AT THE PROPOSED LINE & GRADE INDICATED.
5. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM SPECIFICATION C-76 CL IV.
6. ALL MAN HOLE, CATCH BASIN, INLET, REAR YARD DRAINAGE STRUCTURES AND COVERS SHALL BE AS INDICATED ON THE PLANS AND CONSTRUCTED IN ACCORDANCE WITH MUNICIPALITY STANDARDS.
7. INSTALL TRAPS ON THE FIRST CATCH BASIN (TYPICALLY A 4' DIAMETER STRUCTURE WITH 2' SUMP) THAT IS UPSTREAM OF ITS CONNECTION TO A MAINLINE STORM OR SEWER MANHOLE, TO CAPTURE FLOATABLES AND TO MINIMIZE ESCAPE OF ODOR.
8. THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
9. EXACT GRADES AND INVERTS OF PROPOSED STORM SEWER ARE TO BE CHECKED WITH THE FIELD ENGINEER PRIOR AND DURING INSTALLATION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY PLAN INCONSISTENCY AND/OR UTILITY CONFLICTS.
10. ALL STORM SEWER PIPE JOINTS SHALL BE "PREMIUM JOINT" MODIFIED GROOVED TONGUE (M.G.T.) WITH SYNTHETIC RUBBER GASKETS CONFORMING TO ASTM SPECIFICATION C-443 & C-361, UNLESS OTHERWISE INDICATED ON THE PLANS.
11. FACILITY MANUFACTURED PRECAST TEE SECTIONS SHALL BE FOR ROOF DRAINS AND/OR SUMP PUMP LEADS AND LATERALS WHERE INDICATED ON THE PLANS. BLIND TOP CONNECTIONS INTO STORM SEWER WILL NOT BE PERMITTED BY BREAKING PIPE WALL.
12. THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL SITE INSPECTIONS.

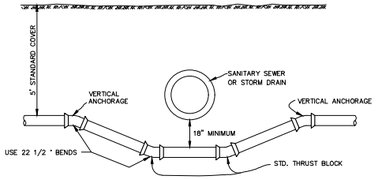


SECTION A – A



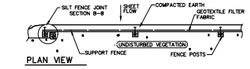
LOW POINT INLET FILTER & SEDIMENT PIT DETAIL

N.T.S.

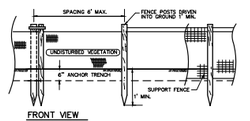


STANDARD SEWER OR STORM CROSSING

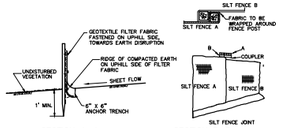
N.T.S.



PLAN VIEW



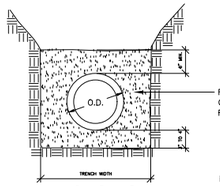
FRONT VIEW



SECTION A–A SECTION B–B

SILT FENCE DETAIL

N.T.S.

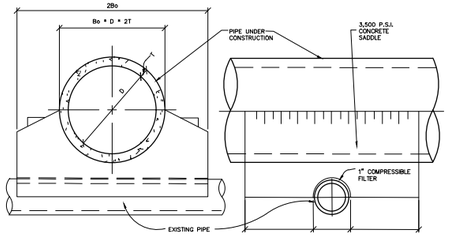


MAX. 30" 4" – 12" I.D.
O.D. + 12" 15" – 36" I.D.
O.D. + 24" 42" I.D. AND LARGER

NOTE:
APPROVAL MAY BE GIVEN TO ALTERNATE MATERIALS AND METHODS TO ACHIEVE CLASS B BEDDING.

STANDARD PIPE BEDDING

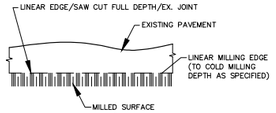
N.T.S.



CONCRETE SADDLE REQUIRED WHEN DISTANCE BETWEEN PIPES IS LESS THAN 18 INCHES. COMPRESSIBLE FILTER SHALL BE NEOPRENE CONFORMING TO ASTM D1056, CLASS SBO-11 & C509

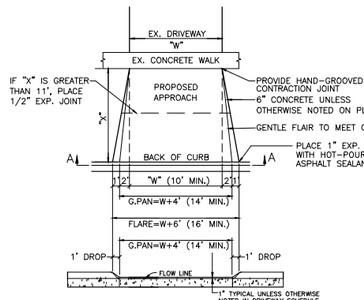
CONCRETE SADDLE OVER EXISTING UTILITIES

N.T.S.



LINEAR MILLING/SAWCUT EDGE DETAIL

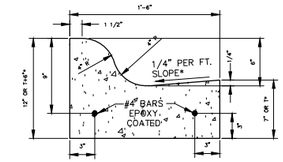
PLAN VIEW N.T.S.



SECTION A–A

CONCRETE DRIVE APPROACH – DETAIL 'L'

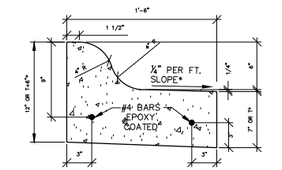
N.T.S.



NOTE: OMIT #4 LONGITUDINAL BARS WHEN CURB & GUTTER IS POURED INTEGRAL OR TIED TO A NON-REINFORCED CONCRETE PAVEMENT.

BIRMINGHAM 6" ROLL CURB CONCRETE CURB & STANDARD GUTTER DETAIL

N.T.S.

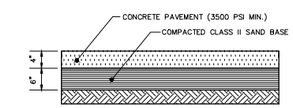


NOTE: OMIT #4 LONGITUDINAL BARS WHEN CURB & GUTTER IS POURED INTEGRAL OR TIED TO A NON-REINFORCED CONCRETE PAVEMENT.

BIRMINGHAM 6" ROLL CURB CONCRETE CURB & REVERSE GUTTER DETAIL

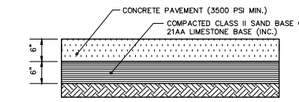
N.T.S.

*NOTE: "T" IS EQUAL TO THE THICKNESS & SLOPE IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.



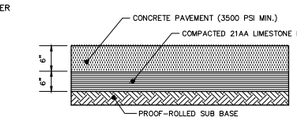
4" CONCRETE SIDEWALK SECTION

STANDARD SIDEWALK REPLACEMENTS/INSTALLATIONS N.T.S.



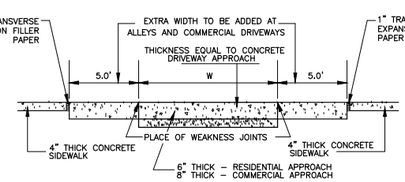
6" CONCRETE SIDEWALK SECTION

TO MATCH SPECIFIED PAVEMENT THICKNESS THROUGH DRIVE APPROACH N.T.S.



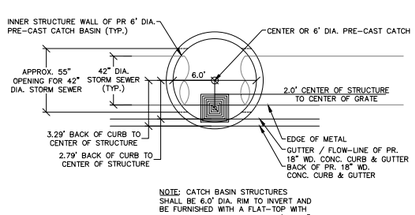
TYPICAL CONCRETE SECTION FOR RESIDENTIAL APPROACH

N.T.S.



THICKENED CONCRETE SIDEWALK (PLAIN)

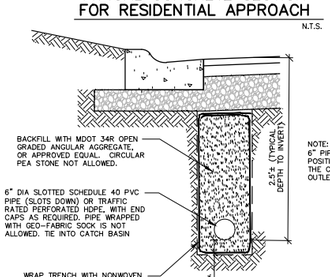
N.T.S.



NOTE: CATCH BASIN STRUCTURES SHALL BE 6.0' DIA. RIM TO INVERT AND BE FURNISHED WITH A FLAT-TOP WITH PRE-CAST ADJUSTMENT RINGS (MIN. 3" AND MAX. 18" ADJUSTMENT).

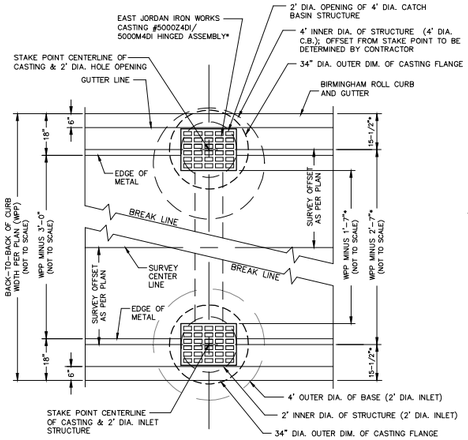
BIRMINGHAM – 6' DIA. CATCH BASIN W/ 2' SUMP & OFFSET GRATE

N.T.S.



6" PERFORATED PIPE UNDERDRAIN DETAIL

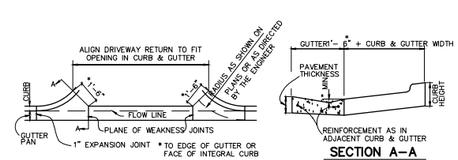
N.T.S.



*CONTRACTOR RESPONSIBLE FOR CORRECT ALIGNMENT OF STRUCTURE, CASTING AND CURB AS SPECIFIED, UNLESS OTHERWISE DIRECTED BY CITY.

CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

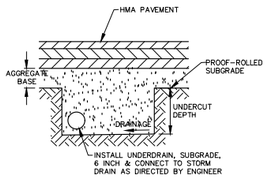
SCALE: 1" = 2'



SECTION A–A

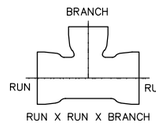
MDOT DRIVEWAY OPENING DETAIL 'M'

N.T.S.



UNDERCUT DETAIL

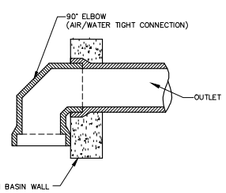
N.T.S.



RUN X RUN X BRANCH

WATER MAIN TEE FITTING SIZE DESIGNATION SCHEMATIC

N.T.S.



SEWER TRAP

N.T.S.

8A

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
Paving Project
Contract #6-25(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
Notes and Details

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: N.T.S.

NFE JOB NO. O310
SHEET NO. C23

\2000-2000 Files\2000-FILES\2310\Office\Construction Documents\2310_NOTES.dwg 3/4/2025 5:20 PM

BIRMINGHAM CONTRACT #6-25(W) - WIMBLETON DRIVE PAVING 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 C06 Utility Plan	SHEET C10 Utility Service Plan	SHEET C11 Utility Service Plan	SHEET C12 Utility Service Plan	SHEET C13 P&G Plan	SHEET C14 P&G Plan	SHEET C15 P&G Plan	SHEET C16 P&G Plan	SHEET C17 P&G Plan	SHEET C18 P&G Plan	TOTAL QUANTITY
	SEWER PAY ITEMS																	
1	18" Combined Sewer, PVC SDR 26, Trench A	LF		317	400	190												907
2	12" Combined Sewer, PVC SDR 26, Trench A	LF				21												21
3	10" Combined Sewer, PVC SDR 26, Trench A	LF				89	181	122										392
4	42" Storm Sewer, CI6, CI-IV, Trench A	LF	451	450	400													1,304
5	36" Storm Sewer, CI6, CI-IV, Trench A	LF	15			153												168
6	24" Storm Sewer, CI6, CI-IV, Trench A	LF	91					166										257
7	18" Storm Sewer, CI6, CI-IV, Trench A	LF	24			110		99										233
8	12" Storm Sewer, CI6, CI-IV, Trench A	LF				22	47											69
9	10" Storm Sewer, PVC, SDR 26, Trench A	LF					138											138
10	Sewer Service, 6" PVC SDR 23.5	LF							460	342	106							928
11	6" Perforated Pipe Underdrain (No sock)	LF	375	440	420	345	310	150										2,040
12	New 6'-0" Diameter Combined Manhole w/ Two Int. Drop Connections	EA				1												1
13	New 5'-0" Diameter Combined Manhole w/ Int. Drop Connection	EA			1													1
14	New 4'-0" Diameter Combined Manhole, Construct Online	EA				2	1											3
15	New 4'-0" Diameter Combined Manhole	EA		1	1	1		2										5
16	Contech SCV-10 Water Quality Structure	EA	1															1
17	New 6'-0" Diameter Storm Manhole w/ 2' Sump & Elevated 36" Dia. Overflow	EA	1															1
18	New 6'-0" Diameter Storm Manhole	EA	2	1														3
19	New 6'-0" Diameter Storm Catch Basin w/ 2' Sump & Offset Grate (Per Detail)	EA	5	3	1	2												11
20	New 5'-0" Diameter Storm Manhole w/ 2' Sump	EA						1										1
21	New 4'-0" Diameter Storm Manhole, Construct Online	EA						1										1
22	New 4'-0" Diameter Storm Manhole	EA						1										1
23	New 4'-0" Diameter Storm Catch Basin w/ 2' Sump	EA				3	2											5
24	New 2'-0" Diameter Storm Inlet	EA				1	1	1										3
25	Sewer Investigation, Laterals	EA							17	16	3							36
26	Sewer Service Tap, 6"	EA							16	27	5							48
27	Sewer Service Connection, 6"	EA							6		1							7
28	Sewer Tap, Combined, OCWRC, 18"	EA		1														1
29	Sewer Tap, Combined, OCWRC, 10"	EA					1	1										2
30	Sewer Tap, Storm, 42"	EA	1															1
31	Sewer Stub w/ Capped End, Storm, 36"	EA				1												1
32	Sewer Stub w/ Capped End, Storm, 24"	EA	1					1										2
33	Sewer Stub w/ Capped End, Storm, 18"	EA				1		1										2
34	Install Concrete Saddle at Utility Crossing	EA	1			2												3
35	Reconstruct Manhole (if and where needed)	VF																25
36	Remove & Replace Structure Cover (as directed by City)	LB																1,650
37	Remove Ex. Sewer Manhole	EA	1	6	2	3	4											16
38	Remove Ex. Drainage Structure	EA	1	4	2	1	2											10
39	Abandon Ex. 12" Combined Sewer	LF			236	181	52											471
40	Abandon Ex. 8" Combined Sewer	LF					123	274										397
41	Remove Ex. 24" Combined Sewer	LF				18												18
42	Remove Ex. 12" Combined Sewer	LF		304	162													466
43	Remove Ex. 10" Combined Sewer	LF		70														70
44	Remove Ex. 18" Storm Sewer	LF						66										66
45	Remove Ex. 10" Storm Sewer	LF				8												8
46	Bulkhead Structure, 24"	EA		1														1
47	Bulkhead Structure, 12" or Less	EA																2
48	Bulkhead Pipe, Larger than 8"	EA																10
49	Clean and Televise Ex. Storm Outfall	LS																1
50	CCTV Sewer Acceptance Inspection	LS																1
	SUBTOTAL SEWER PAY ITEMS																	
	WATER MAIN PAY ITEMS																	
51	Remove Hydrant	EA	1	1														2
52	Remove Gate Valve Well	EA		3														3
53	12" Gate Valve & Well	EA	1	2		2	1	2										8
54	Fire Hydrant Assembly, Complete	EA	2	1	1		1	1										6
55	16" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	10															10
56	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	267	451	400	169												1,307
57	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF				79	173	226										478
58	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	22	7	7	29	4	16										85
59	4" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF						22										22
60	16" Water Main Connection to Ex. 16" Water Main	EA	1															1
61	8" Water Main Connection to Ex. 8" Water Main	EA				1												1
62	6" Water Main Connection to Ex. 6" Water Main	EA				2												2
63	4" Water Main Connection to Ex. 4" Water Main	EA						1										1
64	New Water Service, 1.5", Trench A, Copper	LF							47	28								75
65	New Water Service, 1", Trench A, Copper	LF							357	355	29							741
66	New Water Service, 1", Trench A, PEX	LF									11							11
67	New Water Service", 1", Private Property (Bored), PEX	LF							30		105							135
68	Water Service Connection, 1.5"	EA							2	1								3
69	Water Service Connection, 1"	EA							12	15	6							33
70	Water Service Connection, 1", Connection at Meter, 155 Wimbleton	EA							1									1
71	Water Service Connection, 1", Connection at Meter, 951 Twin Oaks	EA									1							1
72	Water Service Connection, 1", Connection at Meter, 999 Twin Oaks	EA									1							1
73	Install Curb Stop & Box, 1"	EA							7	9	3							19
74	Hydra-Stop, Insta-Valve 250, 16"	EA																1
75	Hydra-Stop, Insta-Valve 250, 6"	EA																1
76	Hydra-Stop, Line-Stop, 16"	EA																1
77	Hydra-Stop, Line-Stop, 6"	EA																1
78	Hydra-Stop, Line-Stop, 4"	EA																1
79	Abandon Existing Water Mains, Entire Project	LS																1
	SUBTOTAL WATER MAIN PAY ITEMS																	
	PAVING PAY ITEMS																	
80	Earth Excavation	CY										790	820	460	410	170	200	2,850
81	Subgrade Undercutting, 21AA Limestone	CY										120	125	70	65	30	35	445
82	Subgrade Undercutting, 1"x3" Limestone	CY										25	25	15	15	10	10	100
83	Subgrade Geogrid Fabric, Tensar Triax TX 1309	SY																1,250
84	Remove and Salvage Brick Pavers	SF										525				175		700
85	Removing Concrete Drive Approach	SY										85	166	132	31		21	435
86	Removing Asphalt Drive Approach	SY										100	14	113			22	249
87	Removing Concrete Sidewalk & Ramp (saw cutting included)	SY										52	140	74	99	48	10	414
88	Removing Pavement Full Depth (Curb & Gutter included)	SY										1340	1280	1018	990	305	435	5,368
89	Aggregate Base, MDOT 21AA Limestone, 8"	SY										1510	1635	1295	960	370	540	6,310
90	Capeseal Surface	SY										1260	1360	1070	860	290	460	5,300
91	Bituminous Mixture No. 4EML (Handpatching for Driveways)	TON										10		1		9	1	21
92	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	LF										885	960	690	345	278	302	3,570
93	Concrete Drive Approach, 6" Thick on 6" 21AA Limestone	SY										150	155	220	51	13	25	614
94	Concrete Drive Approach, 7" Thick on 9" 21AA Limestone	SY										50						50
95	Concrete Sidewalk, 6" (Includes Ramps)	SF										240	350	90	385	210	40	1,325
96	Concrete Sidewalk, 4"	SF										985	890	560	430	265	50	3,180
97	Reinstall Salvaged Brick Pavers	SF										150				125		275
98	Handicap Ramp Truncated Domes	SF										20	80		85			185
99	Adjust Structure Cover	EA										2	1		1	1		5
100	Maintenance Aggregate for Entire Project	LS																1
	SUBTOTAL PAVING PAY ITEMS																	
	GENERAL PAY ITEMS																	
101	Mobilization (Max. 5% of Bid)	LS																1
102	Traffic Maintenance & Control	LS																1
103	Inspector Crew Days	DAYS																90
104	Water and Sewer Allowance	LS																1
105	Audio-Video Route Survey	LS																1
106	Salvage Existing Signs	LS																1
107	New Signs	SF																60
108	Sign Post, U-Channel	LF																240
109	Tree Protection, 3" Dia. Or Greater	EA																66
110	Silt Fencing, 18" Height	LF							260							50		310
111	Mulch, 3"	SY										25	5	45	55	15	10	155
112	Topsoil, 3"	SY										1250	960	690	400	100	300	3,900
113	Sod, Class A	SY										1250	960	690	400	100	300	3,900
114	Inlet Filter	EA										5	3	1	6	3	1	19
115	Inlet Sediment Pit	EA										5	3	1	6	3	1	19
	SUBTOTAL GENERAL PAY ITEMS																	
	ALTERNATE #1 - "ROUGE RIVER STORM OUTFALL IMPROVEMENTS"																	
	ALTERNATE #1 PAY ITEMS																	
116	42" Storm Sewer, CI6, CI-IV, Trench A	LF																10
117	New 6'-0" Diameter Storm Manhole, Construct Online	EA																1
118	New 42" Dia. End Section w/ Bar Screen	EA																1
119	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	LF																244
120	Sewer Lining, Pre-Liner, 48" RIPI-CIPP	LF																244
121	Sewer Lining, 48" RIPI-CIPP	LF																244
122	Cut/Grind Protruding Sewer Leads, Any Material	EA																2
123	Cut/Grind Root Intrusion	EA																5
124	Cut/Grind Mineral Deposit	EA																5
125	Remove Ex. 42" Storm Headwall	EA																1
126	Remove Ex. 42" Storm Sewer	LF																39
127	Earth Excavation, Alternate #1	CY																325
128	Remove & Replace Woodward Ave. Sidewalk	SF																300
129	Remove & Replace Woodward Ave. Guardrail	LF																60
130	Mobilization (Max. 5% of Bid Alternate #1 Total)	LS																1
131	Traffic Maintenance & Control, Alternate #1	LS																1
132	Inspector Crew Days, Alternate#1	DAYS																20
133	Silt Fencing, 30" Height	LF																260
134	Lawn Restoration Along Bank at Storm Outlet	LS																1
135	Gravity Retaining Wall, Boulder	FSF																365
136	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per detail)	SY																130
	SUBTOTAL ALTERNATE #1 PAY ITEMS																	

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
Paving Project
Contract #6-25(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

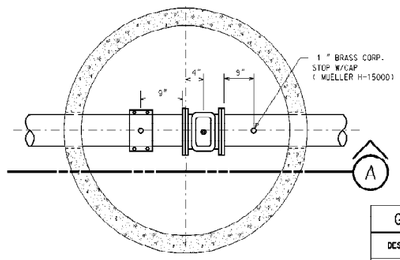
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: N.T.S.

NFE JOB NO. O310
SHEET NO. Q1

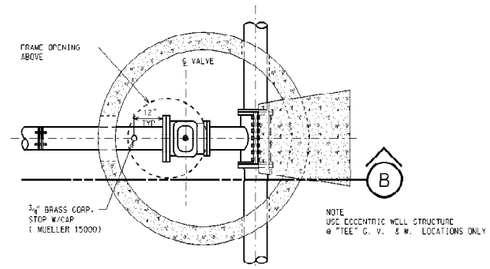
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GATE WELL PLAN

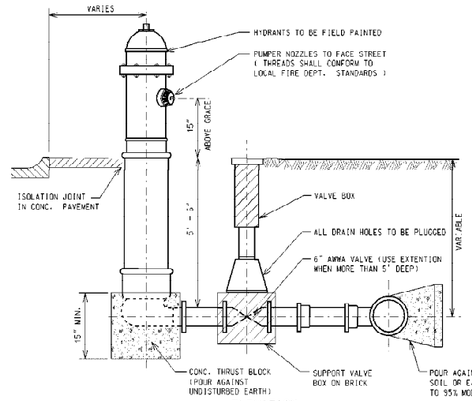
NO SCALE

GATE WELL SCHEDULE				
DESCRIPTION	DIM.	PIPE DIA. INCHES		
		6" & 8"	12"	16"
INSIDE DIA.	A	60"	72"	72"
WALL THICK.	B	5"	7"	7"
VALVE BLOCK THICK.	C	4"	4"	4"

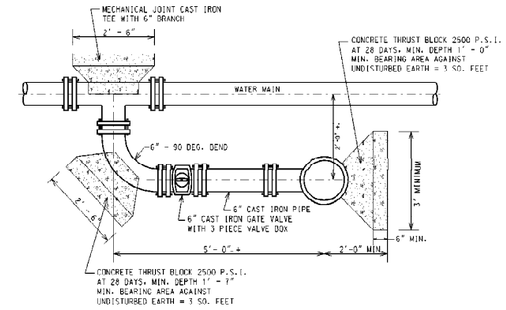


TAPPING SLEEVE, VALVE & WELL PLAN

NO SCALE



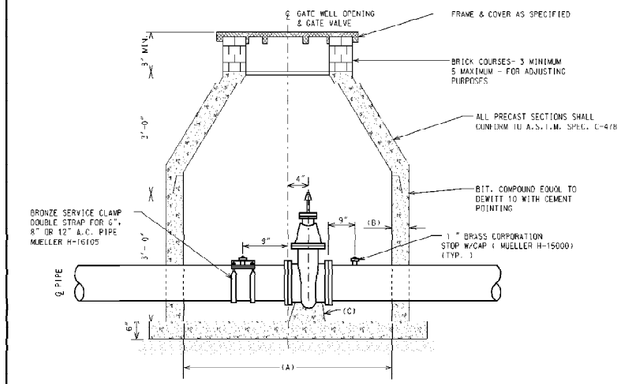
ELEVATION



"L" HYDRANT CONNECTION

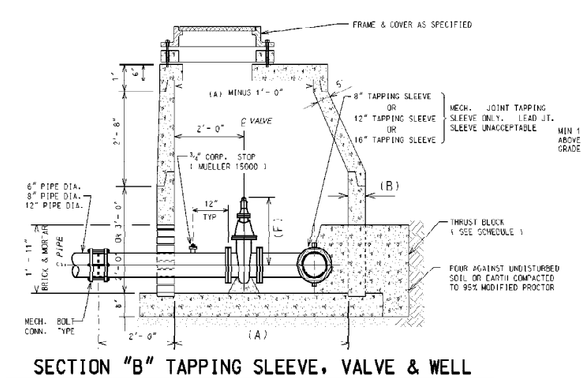
NO SCALE
W-9

NOTE: FOR CONSTRUCTION OF NEW FIRE HYDRANT TO EXISTING CIVIL WATER MAIN, USE 6" TAPPING SLEEVE VALVE & BOX TO MAKE CONNECTION, AND DELETE "6" CAST IRON GATE VALVE WITH 3 PIECE VALVE " AS SHOWN ON DETAIL .



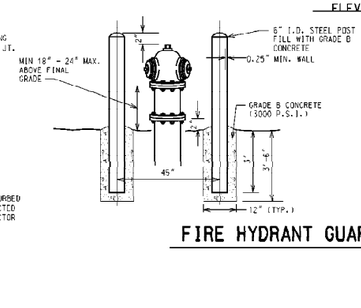
SECTION "A" GATE WELL

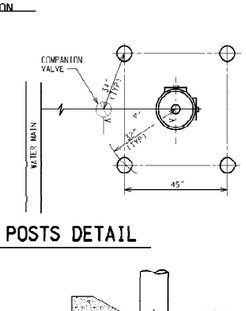
NO SCALE
W-1 & W-3



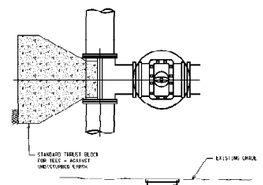
SECTION "B" TAPPING SLEEVE, VALVE & WELL

NO SCALE
W-4

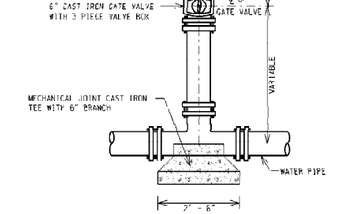




FIRE HYDRANT GUARD POSTS DETAIL



TAPPING SLEEVE & VALVE W/VALVE BOX



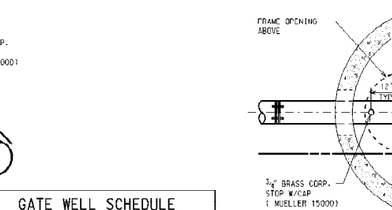
STRAIGHT HYDRANT CONNECTION

NO SCALE
W-10

VERTICAL BEND THRUST BLOCKS FOR 8"-12" MAINS

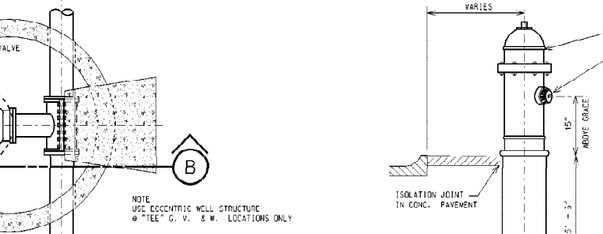
DITCH AND STREAM CROSSING

NO SCALE



SEWER OR CULVERT CROSSING

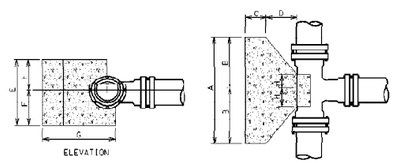
NO SCALE



PROP. WATER MAINS NOT UNDER PAVED SURFACE

PROP. WATER MAINS UNDER PAVED SURFACE OR WITHIN INFLUENCE OF PAVED SURFACE

BEDDING DETAILS



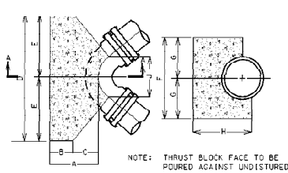
THRUST BLOCK FACE SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SCHEDULE OF THRUST BLOCK DIMENSIONS				
CODE		TEE SIZE		
		8"x8" 12"x8" 16"x8" 24"x8"	12"x12" 16"x12" 24"x12"	16"x16" 24"x16"
A		3'-0"	4'-0"	5'-0"
B		1'-6"	2'-0"	2'-6"
C		0'-9"	0'-9"	1'-0"
D		2'-0"	3'-0"	4'-0"
E		1'-0"	1'-6"	2'-0"
F		1'-0"	1'-6"	2'-0"
G	8"	2'-2"		
	12"	2'-6"	2'-10"	
	16"	2'-10"	3'-1"	3'-8"
	24"	3'-5"	3'-7"	4'-2"
H	8"	0'-6"		
	12"	0'-6"	0'-10"	
	16"	0'-6"	0'-10"	1'-0"
	24"	0'-6"	0'-10"	1'-0"

CONCRETE THRUST BLOCK FOR TEES

N.T.S.

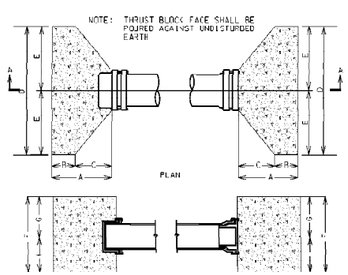


CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SIZE	ANGLE	A MIN.	B MIN.	C	D	E	F	G	H MIN.	J
6"	90°	1'-6"	0'-9"	0'-9"	2'-0"	1'-0"	2'-0"	1'-0"	1'-8"	0'-10"
8"	45°	1'-6"	0'-9"	1'-0"	2'-4"	1'-0"	2'-8"	1'-3"	1'-11"	1'-4"
8"	90°	1'-9"	0'-9"	1'-0"	3'-6"	1'-8"	2'-8"	1'-3"	1'-11"	1'-2"
12"	22-1/2°	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	2'-0"	1'-3"	2'-0"	1'-4"
12"	45°	2'-1"	0'-9"	1'-4"	3'-6"	1'-9"	2'-6"	1'-3"	2'-4"	1'-4"
12"	90°	2'-1"	0'-9"	1'-4"	5'-6"	2'-9"	3'-0"	1'-6"	2'-4"	1'-8"
16"	22-1/2°	2'-3"	1'-0"	1'-8"	3'-4"	1'-8"	2'-0"	1'-3"	3'-0"	1'-2"
16"	45°	2'-8"	1'-0"	1'-8"	5'-4"	2'-8"	3'-0"	1'-5"	3'-0"	1'-6"
16"	90°	2'-8"	1'-0"	1'-8"	8'-0"	3'-0"	5'-0"	2'-5"	3'-0"	1'-8"
24"	90°	4'-7"	1'-0"	3'-7"	10'-0"	5'-0"	7'-0"	2'-5"	5'-4"	2'-4"

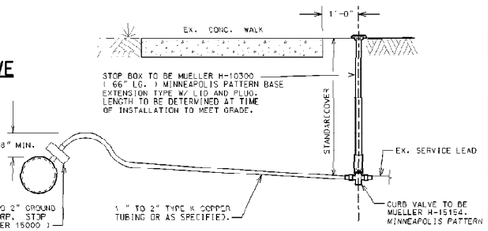
CONCRETE THRUST BLOCK FOR BENDS

N.T.S.



SIZE	A MIN.	B MIN.	C	D	E	F	G
6"	1'-11"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"
8"	2'-1"	0'-9"	1'-4"	4'-0"	2'-0"	2'-0"	1'-6"
12"	2'-6"	1'-0"	1'-8"	5'-0"	2'-6"	2'-0"	2'-0"
16"	2'-6"	1'-0"	1'-8"	5'-0"	2'-6"	2'-0"	2'-0"

CONC. THRUST BLOCKS FOR PLUGS & CAPS



WATER SERVICE CONNECTION (TYP)

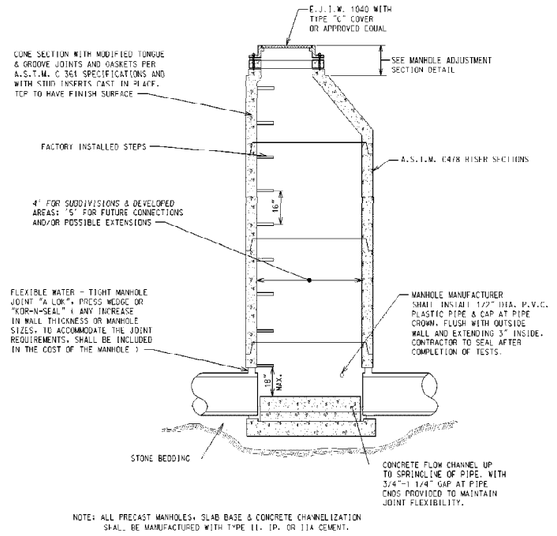
NO SCALE

City of Birmingham

151 MARTIN STREET BIRMINGHAM, MICHIGAN 48012

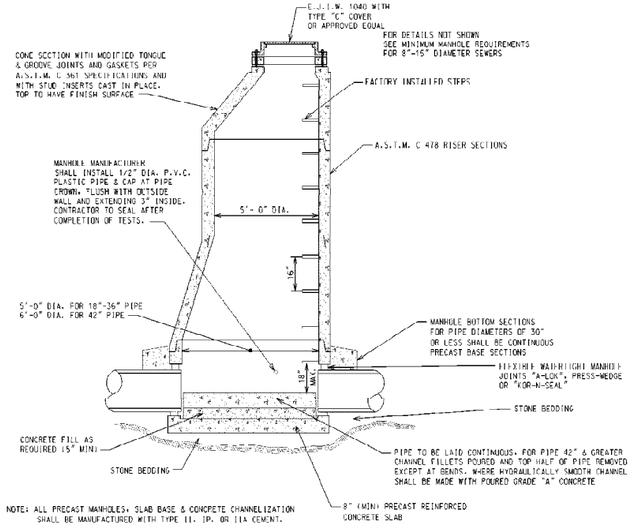
WATER MAIN STANDARD DETAILS

DATE	ADDITION AND/OR REVISION	DRAWN	PROJECT NO.	SHEET NO.
		DESIGNED	DATE APRIL 1995	WM-1
		APPROVED	SCALE	



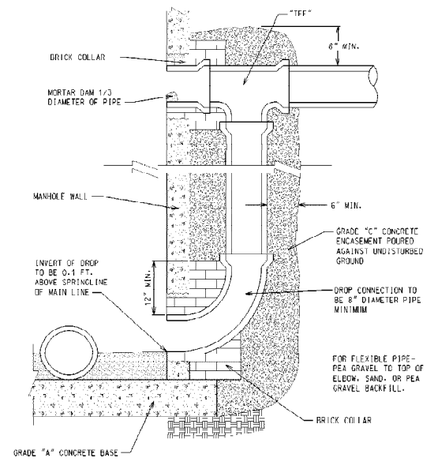
SEWER MANHOLE

(8" THRU 15" DIA. SEWERS)

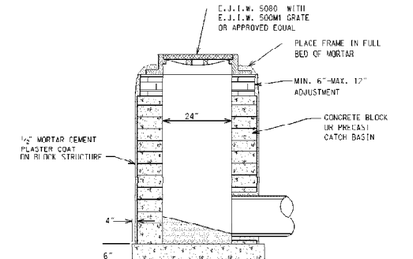


SEWER MANHOLE

(18" THRU 42" DIA. SEWERS)

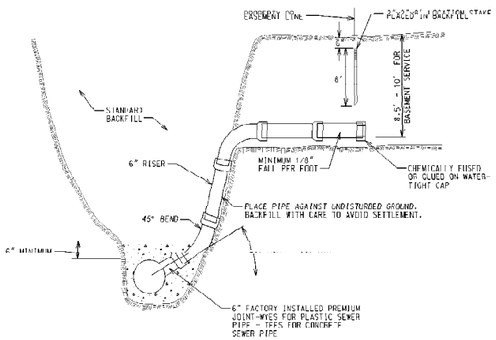


EXTERNAL DROP CONNECTION



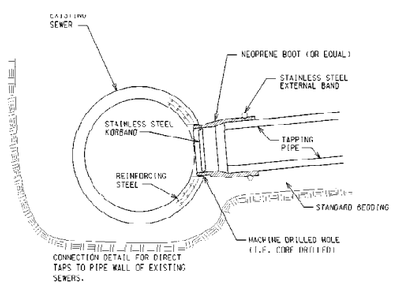
2 FT. DIAMETER INLET

NOTE:
FOR CATCH BASINS OR INLETS WITHIN YARD AREAS USE E.J.I.W. 1040 WITH TYPE "M" COVER OR APPROVED EQUAL



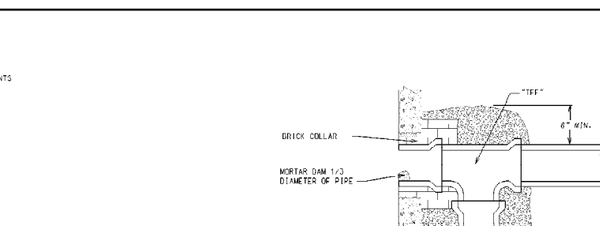
BUILDING LEAD DETAIL

0' - 15' COVER

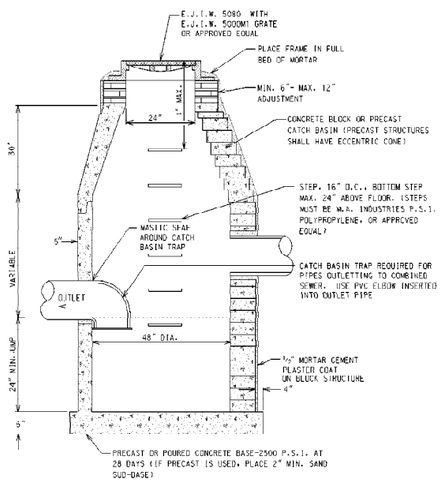


KOR-N-TEE TAP FOR CONCRETE

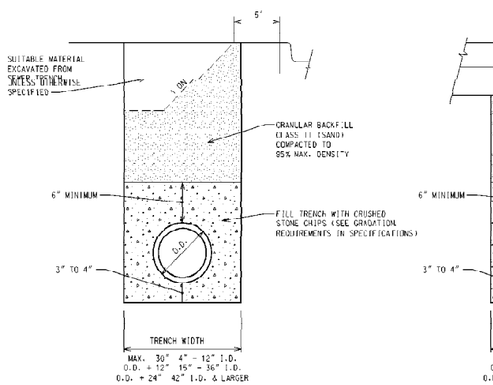
NO SCALE



SANITARY MANHOLE ADJUSTMENT SECTION DETAIL



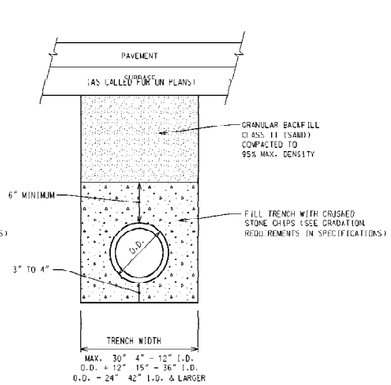
4 FT. DIAMETER CATCH BASIN

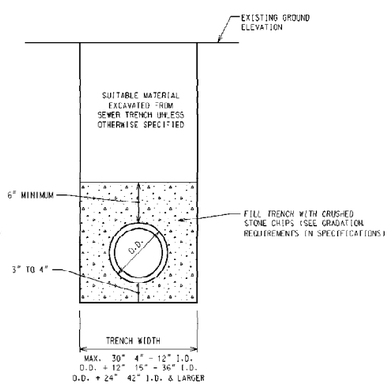


TRENCH DETAIL "A"

SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED

NOT TO SCALE

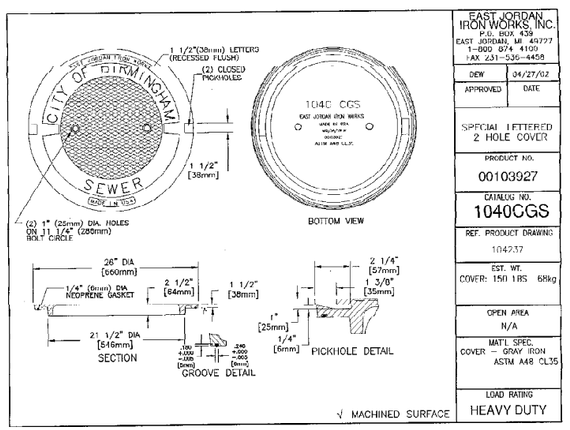




TRENCH DETAIL "B"

SEWER NOT UNDER ROAD BED

NOT TO SCALE



EAST JORDAN IRON WORKS, INC.
P.O. BOX 439
EAST JORDAN, MI 49727
1-800 874 4100
FAX 231-536-4458

DRW	04/27/02
APPROVED	DATE
SPECIAL LETTERED 2 HOLE COVER	
PRODUCT NO.	00103927
CATALOG NO.	1040CGS
REF. PRODUCT DRAWING	104737
EST. WT.	COVER: 150 LBS 68kg
OPEN AREA	N/A
MATL SPEC.	COVER - GRAY IRON ASTM A48 CL35
LOAD RATING	HEAVY DUTY

City of Birmingham

151 MARTIN STREET BIRMINGHAM, MICHIGAN 48102

SEWER STANDARD DETAILS

DATE	REVISION AND/OR REVISION	DRAWN	PROJECT NO.	SHEET NO.
		DESIGNED	DATE JANUARY 2007	
		APPROVED	SCALE	

APPENDIX – D

Sketch for:

“Alternate #1 – Rouge River Storm Outfall Improvements”

APPENDIX "D"

ALTERNATE #1 SKETCH - "ROUGE RIVER OUTFALL"

REMOVE EX. 42" HEADWALL AND 42" PIPE TO PR. MH 43A

APPROX. SOUTH EDGE OF ROUGE RIVER

APPROX. LOCATION OF WOODWARD AVE. ROUGE RIVER CULVERT

PR. MH 33A (6' DIA. CONSTRUCT ONLINE OF EX. 42" SEWER: PR. RIM 743.00. PR. 42" N.E. 733.60 EX. 42" INV. 733.66± (FIELD VERIFY) (MAINTAIN AND C.I.P.P. LINE 42" SOUTHEAST; REMOVE 42" NORTHWEST)

RESTORE ALL DISTURBED GREENBELT AREAS BETWEEN GRADING LIMITS AND BOULDERS/RIP-RAP IN ACCORDANCE WITH "TURF/LAWN RESTORATION ALONG BANK AT STORM OUTLET" NOTE (SEE SHEET 2). APPROX. 200 SY AREA SHOWN. BID AS LUMP SUM PAY ITEM BASED IN ANTICIPATED DISTURBANCE LIMITS.

PR. BOULDER WALL (FOR RETAINING AND PERIMETER SEPARATION – MAX. 30" EXPOSED HEIGHT W/ MIN. 12" BURY)

APPROX. GRADING, CONSTRUCTION, AND SILT FENCE LIMITS (TYP.).

APPROX. GRADING, CONSTRUCTION, AND SILT FENCE LIMITS (TYP.).

PR. 42" PRE-CAST END SECTION W/ BAR-SCREEN (INV. 733.50)

SEWER LINING C.I.P.P. EX. 48" SEWER (38 LF – PR. MH 33A TO EX. MH 33)

EX. M.H. 33 (FIELD LOCATE) MAINTAIN & REPAIR AS NEEDED

REMOVE & REPLACE WOODWARD AVE. GUARDRAIL AS REQUIRED)

REMOVE & REPLACE WOODWARD AVE. SIDEWALK AS REQUIRED)

MOBILIZATION & TRAFFIC CONTROL PAY ITEMS FOR BID ALTERNATE:
TRAFFIC CONTROLS PER M.D.O.T. TRAFFIC TYPICALS TO ACCOMMODATE APPROX. STAGING AREA SHOWN IN N.B. WOODWARD AVE. MDOT PERMIT REQUIRED FOR REQ. LANE CLOSURES SHALL BE SECURED BY CITY (CONTRACTOR SHALL ADHERE TO ALL PERMIT REQUIREMENTS). BIDDERS SHOULD ASSUME TWO WESTERLY N.B. LANES WILL BE REQUIRED TO BE CLOSED TO ALLOW FOR A CRANE TO BE UTILIZED FOR EQUIPMENT AND MATERIAL PLACEMENT AND REMOVAL FROM WORK ZONE. A MAXIMUM OF TWO INSTANCES FOR THE LANE CLOSURE SHOULD BE ASSUMED (ONE FOR MOBILIZATION, AND 1 FOR DE-MOBILIZATION).

SEWER LINING C.I.P.P. EX. 42" SEWER (206 LF – EX. MH 33 TO EX. MH 32)

733
732

WOODWARD AVE (N.B.)

N
W E
S

3/2/2025, 12:12:41 AM

Outlets
Birmingham-Owned Manhole
SanitaryManhole
StormManhole
Non-City Manhole
SanitaryManhole
Birmingham-Owned Sewer Main
Storm
Sanitary
Non-City Sewer Main
Sanitary
Abandoned Sewer Mains
Sanitary
Combined
Drainage Areas
OC Tax Parcels

1:282
0 0 0 0.01 mi
0 0 0.01 0.01 km

Oakland County, Michigan, SEMCOG, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

City of Birmingham
Oakland County, Michigan, SEMCOG, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

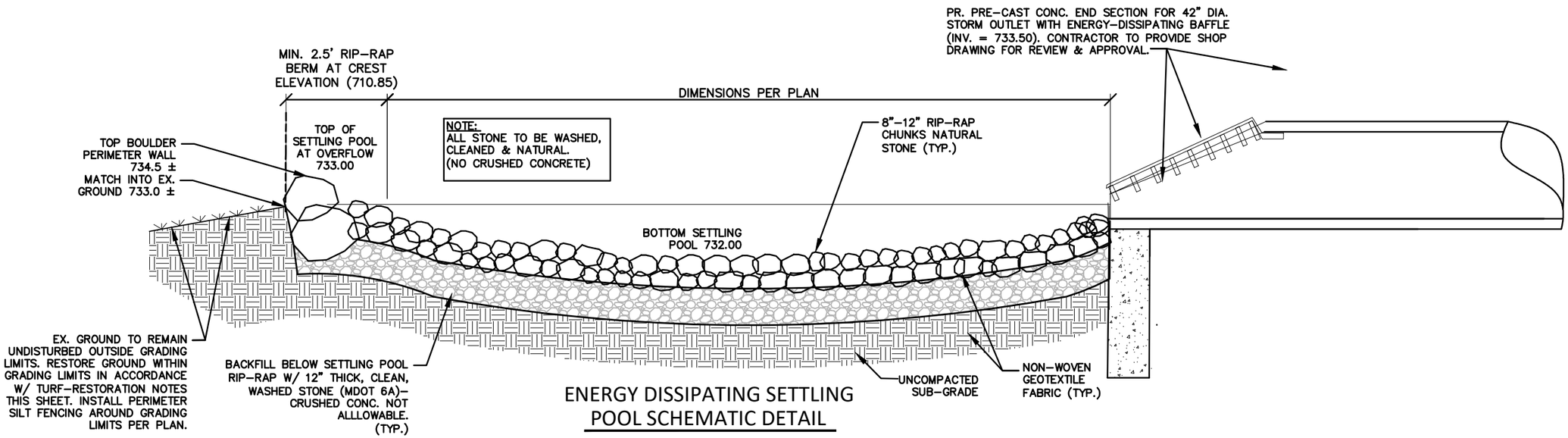
1" = 20'
20 10 0 10 20 30

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

SCALE	DATE	DRAWN	JOB NO.	SHEET
1 = 20'	03/04/25	PT	O310	1 OF 2

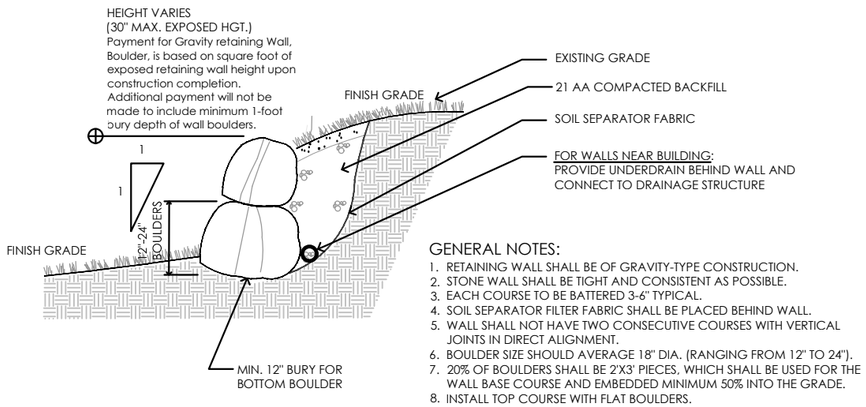
APPENDIX "D"

ALTERNATE #1 SKETCH - "ROUGE RIVER OUTFALL"



ENERGY DISSIPATING SETTLING POOL SCHEMATIC 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 3-6" 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'X3' 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

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.

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

SCALE	DATE	DRAWN	JOB NO.	SHEET
N.T.S.	03/04/25	PT	O310	2 OF 2

Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assement District

Sidwell Number	Street Address	Sewer Lateral Length (ft)	Estimated Sewer SAD Costs	Water Lateral Length (ft)	Estimated Water SAD Costs
1925251022	175 ABBEY RD	35	$3,500.00	-	-
1925255006	519 WIMBLETON DR	31	$3,100.00	-	-
1925256002	111 ABBEY RD	24	$2,400.00	-	-
1925177022	999 TWIN OAKS LN	19	$1,900.00	-	$0.00*
1925177023	951 TWIN OAKS LN	10	$1,000.00	-	$0.00*
1925177024	187 WIMBLETON DR	-	-	-	-
1925177025	175 WIMBLETON DR	34	$3,450.00	47	$4,230.00
1925177026	165 WIMBLETON DR	35	$3,500.00	46	$4,140.00
1925177027	155 WIMBLETON DR	28	$2,800.00	-	$0.00*
1925177028	139 WIMBLETON DR	36	$3,600.00	64	$5,760.00
1925180003	176 WIMBLETON DR	27	$2,700.00	-	-
1925180004	144 WIMBLETON DR	35	$3,500.00	-	-
1925251023	147 ABBEY RD	24	$2,400.00	-	-
1925254008	205 WIMBLETON DR	31	$3,100.00	21	$1,890.00
1925254011	287 WIMBLETON DR	31	$3,100.00	21	$1,890.00
1925254012	323 WIMBLETON DR	31	$3,100.00	21	$1,890.00
1925254013	341 WIMBLETON DR	31	$3,100.00	21	$1,890.00
1925254014	355 WIMBLETON DR	31	$3,100.00	21	$1,890.00
1925254015	379 WIMBLETON DR	31	$3,100.00	21	$1,890.00
1925254016	421 WIMBLETON DR	31	$3,100.00	-	-
1925254017	463 WIMBLETON DR	31	$3,100.00	-	-
1925254019	245 WIMBLETON DR	-	-	-	-
1925254020	269 WIMBLETON DR	31	$3,100.00	-	-
1925256001	129 ABBEY RD	24	$2,400.00	-	-
1925257001	202 WIMBLETON DR	-	-	-	-

Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assement District

1925257002	244 WIMBLETON DR	30	$3,000.00	-	-
1925257003	266 WIMBLETON DR	30	$3,000.00	-	-
1925257004	282 WIMBLETON DR	30	$3,000.00	40	$3,600.00
1925257005	322 WIMBLETON DR	30	$3,000.00	40	$3,600.00
1925257008	380 WIMBLETON DR	30	$3,000.00	40	$3,600.00
1925257012	498 WIMBLETON DR	30	$3,000.00	40	$3,600.00
1925257018	460 WIMBLETON DR	30	$3,000.00	-	-
1925257019	420 WIMBLETON DR	30	$3,000.00	-	-
		30	$3,000.00	-	-
1925257020	444 WIMBLETON DR	30	$3,000.00	-	-
1925257023	340 WIMBLETON DR	30	$3,000.00	-	-
1925401001	N/A POPPLETON PARK	-	-	-	-
1925255007	541 WIMBLETON DR	38	$3,800.00	27	$2,430.00
1925258001	520 WIMBLETON DR	30	$3,000.00	40	$3,600.00

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

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Clerk's Office

DATE: March 19, 2025

TO: Jana L. Ecker, City Manager

FROM: Alexandria Bingham, City Clerk

SUBJECT: Clerk's Confirmation of Public Hearing Notice: Wimbleton Water and Sewer Laterals Project, Contract #6-25(W) - Sewer and Water Lateral Special Assessment District (SAD)

INTRODUCTION:
The public hearing notice process has been completed for Wimbleton Water and Sewer Laterals Project, Contract #6-25(W) - Sewer and Water Lateral Special Assessment District (SAD). Please see attachments for further confirmation.

PUBLIC COMMUNICATIONS:
Mailing Date: 3/19/2025
Test Mail Return Date:
Publishing Dates in the Oakland Press: 3/23/2025 & 4/6/2025
Posted in www.bhamgov/publicnotices

ATTACHMENTS:
1. Public Hearing Notice
2. Addresses
3. Mailing Letter
4. Mail Machine Counter Repot
5. 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, April 7, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, April 21, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton:

1925256002	111 ABBEY RD	1925254012	323 WIMBLETON DR
1925256001	129 ABBEY RD	1925257023	340 WIMBLETON DR
1925177028	139 WIMBLETON DR	1925254013	341 WIMBLETON DR
1925180004	144 WIMBLETON DR	1925254014	355 WIMBLETON DR
1925251023	147 ABBEY RD	1925254015	379 WIMBLETON DR
1925177027	155 WIMBLETON DR	1925257008	380 WIMBLETON DR
1925177026	165 WIMBLETON DR	1925257019	420 WIMBLETON DR
1925177025	175 WIMBLETON DR	1925254016	421 WIMBLETON DR
1925180003	176 WIMBLETON DR	1925257020	444 WIMBLETON DR
1925254008	205 WIMBLETON DR	1925257018	460 WIMBLETON DR
1925257002	244 WIMBLETON DR	1925254017	463 WIMBLETON DR
1925257003	266 WIMBLETON DR	1925257012	498 WIMBLETON DR
1925254020	269 WIMBLETON DR	1925255006	519 WIMBLETON DR
1925257004	282 WIMBLETON DR	1925258001	520 WIMBLETON DR
1925254011	287 WIMBLETON DR	1925255007	541 WIMBLETON DR
1925257005	322 WIMBLETON DR	1925177023	951 TWIN OAKS LN
		1925177022	999 TWIN OAKS LN

Nature of Improvement:	The City intends to replace private sewer and water laterals meeting certain "useful life" criteria in the right-of-way in an effort to protect the public investments being made with this project. This will include the replacement of all sewer laterals that are 50 years of age or older, less than 6-inch diameter, or an unsuitable material. Water services less than the City minimum size of 1-inch diameter, are 60 years of age or older, or an unsuitable material will also be replaced.
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 3/23/2025 & 4/6/2025
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	First Owner Name	Postal Address	POSTALCITY	POSTALSTAT	POSTALZIP5	PNUM	Postal City Postal State Postal Zip 5
1925254013	MICHAEL DAVID MISCHLE	1109 EARL BLVD	FERNDALE	MI	48220	08-19-25-254-013	FERNDALE, MI 48220
1925256002	FREDERICK J PHILLIPS	111 ABBEY RD	BIRMINGHAM	MI	48009	08-19-25-256-002	BIRMINGHAM, MI 48009
1925256001	JOHN J MCINERNEY JR	129 ABBEY RD	BIRMINGHAM	MI	48009	08-19-25-256-001	BIRMINGHAM, MI 48009
1925177028	CHRISTOPHER BIDLAKE	139 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-177-028	BIRMINGHAM, MI 48009
1925180004	SUSAN ANN HORNUNG	144 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-180-004	BIRMINGHAM, MI 48009
1925251023	CHARLES G MILLER III LVNG TRUST	147 ABBEY RD	BIRMINGHAM	MI	48009	08-19-25-251-023	BIRMINGHAM, MI 48009
1925177027	JACQUELINE L SPICER	155 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-177-027	BIRMINGHAM, MI 48009
1925177026	STEVEN L WICHLACZ	165 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-177-026	BIRMINGHAM, MI 48009
1925177025	GEOFFREY D KAHN	175 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-177-025	BIRMINGHAM, MI 48009
1925180003	ANTHONY R ANSARA	176 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-180-003	BIRMINGHAM, MI 48009
1925254008	ELISA H ROOVERS	205 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-008	BIRMINGHAM, MI 48009
1925257002	TIMOTHY J DOYLE	244 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-002	BIRMINGHAM, MI 48009
1925257003	DANIEL C KOWAL	266 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-003	BIRMINGHAM, MI 48009
1925254020	JORDAN INGRAM	269 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-020	BIRMINGHAM, MI 48009
1925257004	DANIEL J HILL	282 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-004	BIRMINGHAM, MI 48009
1925254011	VOSS REVOCABLE TRUST	287 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-011	BIRMINGHAM, MI 48009
1925257005	JULIANA MAMOU	322 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-005	BIRMINGHAM, MI 48009
1925254012	KENT L FAIRLESS	323 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-012	BIRMINGHAM, MI 48009
1925257023	PIETER E KRIEL	340 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-023	BIRMINGHAM, MI 48009
1925254014	ANNETTA P SARGENT LIVING TRUST	355 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-014	BIRMINGHAM, MI 48009
1925254015	DAVID E BREAUGH JR	379 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-015	BIRMINGHAM, MI 48009
1925257008	MARGARET A DESMOND	380 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-008	BIRMINGHAM, MI 48009
1925258001	BINGHAM WIMBLETON LLC	401 S OLD WOODWARD AVE STE 470	BIRMINGHAM	MI	48009	08-19-25-258-001	BIRMINGHAM, MI 48009
1925257019	PIERRE LOUIS GIRON REVOC LVG TRST	420 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-019	BIRMINGHAM, MI 48009
1925254016	SEAN CHRISTOPHER VAUGHAN	421 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-016	BIRMINGHAM, MI 48009
1925257020	DONAL S O'LEARY	444 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-020	BIRMINGHAM, MI 48009
1925257018	KEVIN PATRICK CLEARY	460 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-018	BIRMINGHAM, MI 48009
1925254017	BRYAN J UHL TRUST	463 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-254-017	BIRMINGHAM, MI 48009
1925257012	BRADFORD L COULTER	498 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-257-012	BIRMINGHAM, MI 48009
1925255006	TIMOTHY C BRADLEY TRUST	519 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-255-006	BIRMINGHAM, MI 48009
1925255007	CLIFFORD RAGER	541 WIMBLETON DR	BIRMINGHAM	MI	48009	08-19-25-255-007	BIRMINGHAM, MI 48009
1925177023	PERISH A LAVOISNE	951 TWIN OAKS LN	BIRMINGHAM	MI	48009	08-19-25-177-023	BIRMINGHAM, MI 48009
1925177022	JEFFREY SLATKIN	999 TWIN OAKS LN	BIRMINGHAM	MI	48009	08-19-25-177-022	BIRMINGHAM, MI 48009
	CITY OF BIRMINGHAM	151 MARTIN STREET					BIRMINGHAM, MI 48009

BIRMINGHAM
A WALKABLE CITY

March 18, 2025

PNUM
OWNER NAME
STREET ADDRESS
CITY STATE ZIP CODE

Re: Wimbleton Water and Sewer Laterals Project, Contract #6-25(W)
Sewer and Water Lateral Special Assessment District (SAD)

To whom it may concern,

The City of Birmingham Wimbleton Project will start in the Spring of 2025. The project includes the replacement of the water main and sewer, and the streets will receive concrete curb and gutter with cape seal treatments.

This project will include the replacement of the water main and sewer improvements. The City intends to replace private sewer and water laterals meeting certain "useful life" criteria in the right-of-way in an effort to protect the public investments being made with this project. This will include the replacement of all sewer laterals that are 50 years of age or older, less than 6 inch diameter, or an unsuitable material. Water services less than the City minimum size of 1 inch diameter, are 60 years of age or older, or an unsuitable material will also be replaced. All unsuitable sewer laterals will be replaced with 6" schedule 40 PVC, and unsuitable water services will be replaced with new 1 inch diameter pipe. The lengths of sewer and/or water laterals replacement will be within the City's right-of-way. Enclosed is a map of properties included in the Sewer and Water Lateral SAD.

With this letter, you are receiving notifications for two public hearings for the Sewer and Water Lateral Special Assessment District (SAD):

- The Public Hearing of the Necessity to form a Special Assessment District for the sewer and water laterals replacement meeting the requirements as part of the Wimbleton Water and Sewer Laterals Project is **Monday, April 7, 2025**, at the regularly scheduled City Commission meeting at 7:30 p.m. in City Hall at 151 Martin St.

- If necessity is determined at the April 7 hearing, a Public Hearing of Confirmation to confirm the Special Assessment District will follow on **Monday, April 21, 2025**, at the regularly scheduled City Commission meeting at 7:30 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 100% of the costs of replacing the portion of unsuitable water and sewer laterals within the right-of-way to the property owner.

After the work is completed, an invoice will be generated and sent to the property owner of record for the public improvements. Payment in full will be expected within 30 days of receipt. If you are not in a position to pay off the charge in one payment, it can be broken into as many as 10 annual payments. An annual interest charge on the remaining balance, currently about 8.50 percent, will apply. Official estimates of the water and sewer lateral replacements will be provided at the Hearing of Necessity.

The Engineering Department will have a resident meeting on **Wednesday April 2, 2025, 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 or concerns, please contact the Engineering Office at (248) 530-1850. You will 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

151 Martin Street • P.O. Box 3001 • Birmingham, MI 48012-3001
(248) 530-1800 • Fax (248) 530-1080 • www.bhamgov.org

Funds Report

Available:	$7,499.15	PBP Account Number:	35884980
Used:	$82,286.85	Indicia Number:	0008029208
Total Pieces:	110209	Meter Number:	8029208
Control Sum:	$89,786.00	Meter Name:	
Resettable Piece Count:	34	Printed:	MAR 19 2025 3:39 PM
Piece Count Value:	$23.46		

8A

Faith

FROM PAGE 3

bridgewoodchurch.com. Sunday worship services are 8:30 a.m., 10 a.m. and 11:30 a.m., also online services, and locations in Goodrich.

▪ Brightmoor Christian Church, 40800 W. 13 Mile Road, Novi, www.brightmoorchurch.org. Sunday worship services at 9 a.m. and 11:15 a.m.

▪ Calvary Chapel Oakland County, 1975 E. Long Lake Road, Troy, 248-457-9673, ccoaklandcounty.com. Worship 7 p.m. Wednesdays and 10 a.m. Sundays.

▪ Calvary Church, 1361 Giddings Road, Pontiac, Sunday worship services are at 10 a.m., https://ccpontiac.org, 248-373-0311.

▪ Calvary Evangelical Lutheran Church, 6805 Bluegrass Drive, Clarkston, calvary-lutheran.org. Sunday worship services are Traditional Worship at 7:55 a.m.; Modern Worship at 9:30 a.m. and 11 a.m.; and livestream at 9:30 a.m. Food pantry (drive-up or curbside pickup) is 9-11 a.m. Wednesdays.

▪ Central Church, 1529 Twelve Mile Road, Madison Heights, www.central-church.cc. Sunday worship services at 10 a.m.

▪ Central Oaks Community Church, 2005 Rochester Road, Royal Oak, www.centraloaks.com, 248-547-7755. Sunday worship services at 11 a.m.

▪ Central United Methodist Church, 3882 Highland Road, Waterford Twp., 248-681-0040, WaterfordCUMC.org. In-person worship at 8:45 a.m. and 10:30 a.m. Sundays and online at 10:30 a.m. at Live.WaterfordCUMC.org.

▪ Central Woodward Christian Church Disciples of Christ, 3955 W. Big Beaver Road, Troy, 248-644-0512, centralwoodwardchristian.com. Sunday worship services are at 10:30 a.m., in person and online at centralwoodwardchristian.com and Facebook at www.facebook.com/Central-Woodward.

▪ Chapel of Our Lady of Orchard Lake, 3535 Commerce Road, West Bloomfield Twp., www.sscms.edu, 248-683-0310.

▪ Christian Tabernacle Church, Southfield, ctabchurch.com, 248-213-4770.

▪ Christ Church Cranbrook, 470 Church Road, Bloomfield Hills, in-person and online worship services, 10 a.m. Sundays, ccc-info.org.

▪ Christ Lutheran Church, Waterford Twp., https://christwaterford.org, 248-673-7331. Sunday worship services at 10 a.m.

▪ Christ Lutheran Church and School, 620 General Motors Road, Milford, www.christlutheranmilford.org. Sunday worship services at 8:30 a.m. and 11 a.m.

▪ Christ, Our Light! Catholic Church, 3077 Glouchester, Troy. Mass times are: Saturday at 4 p.m.; Sunday at 8 a.m., 9:30 a.m. and 11 a.m.; weekday Masses (followed by Rosary recitation) are Tuesday, Wednesday, Thursday at 9 a.m., and Friday at 12:05 p.m., www.coltroy.org, 248-649-5510.

▪ Christ the Good Shepherd Progressive Old Catholic Church, 3947 Twelve Mile Road Berkley, church services: Saturday Mass 4:30 p.m. and Sunday Mass 10:30 a.m., 248-439-0470, www.cgs-occ.org.

▪ Christ the Redeemer Parish, 2700 Waldon Road Orion Township, 248-391-1621, www.ctredeemer.org. Weekend Masses are 5 p.m. Saturdays, and 9 a.m. and 11 a.m. Sundays.

▪ Crown of Life Lutheran Church, 2975 Dutton Road Rochester Hills, www.crownoflifechurch.org, 248-652-7720. Sunday worship services are 9 a.m. and 10:30 a.m.

▪ Church of the Holy Spirit, 3700 Harvey Lake Road, Highland Twp., www.holyspirithighland.com.

▪ The Church of Jesus Christ of Latter-day Saints congregations in Oakland County include: Bloomfield Hills, Clarkston, Commerce Twp., Farmington Hills, Lake Orion, Pontiac (Spanish), Rochester, Troy and White Lake Twp. The congregations host worship services on Sundays. For worship times and locations, visit churchofjesuschrist.org.

▪ Church of the Resurrection, 6490 Clarkston Road, Village of Clarkston, https://clarkstonepiscopal.com, 248-625-2325. Sunday worship services at 10 a.m.

▪ Clarkston Community Church, 6300 Clarkston Road, Clarkston, in-person and online services at 9:15 a.m. and 11 a.m. Sundays, clarkstoncchurch.com, 248-625-1323.

▪ Clarkston United Methodist Church, 6600 Waldon Road, Clarkston, in-person and online faith services, 9 a.m. and 11 a.m. Sundays, clarkstonumc.org, 248-625-1611.

▪ Commerce United Methodist Church, 1155 N. Commerce Road, Commerce Twp., commerceumc.org/media.

▪ Community Bible Church, 1888 Crescent Lake Road, Waterford Twp., https://cbcmi.com, 248-674-4871. Sunday worship services at 11 a.m.

▪ Community Fellowship Seventh-Day Adventist Church, 27800 Southfield Road, Lathrup Village, church services at 11 a.m. Saturdays, http://communityfellowship22.adventistchurchconnect.org, 248-469-8539.

▪ Community Presbyterian Church, 4301 Monroe Ave., Waterford Twp. In-person worship is 10 a.m., Sundays, cpcwaterford.org, 248-673-7805.

▪ Congregation Beth Ahm, 5075 West Maple Road, West Bloomfield Twp., 248-851-6880, cbahm.org.

▪ Congregational Church of Birmingham, UCC, 1000 Cranbrook Road, Bloomfield Hills. Worship services are 10 a.m. Sundays, ccbucc.org, 248-646-4511.

▪ Congregation Shaarey Zedek, 27375 Bell Road, Southfield, offers virtual Jewish religious services including daily morning and evening Minyan services, Shabbat morning services and Youth Shabbat activities, shaareyzedek.org, 248-357-5544.

▪ Congregation Shir Tikvah, 3900 Northfield Parkway, Troy, www.shirtikvah.org.

▪ Cornerstone Baptist Church, Ortonville, in-person worship services, Sundays at 11 a.m. and 6 p.m., Wednesdays at 7 p.m. Also online at Facebook at Cornerstone Baptist Church Ortonville, cbcortonville.com, 248 627-4700.

▪ Cornerstone Church, 4995 N Hickory Ridge Road, Highland, cornerstonehighland.com, 248-887-1600. Worship services at 9 a.m. and 11 a.m. Sundays, 7 p.m. Wednesdays. Livestream at 11 a.m. Sundays YouTube, Facebook, website.

▪ Crossroads Free Will Baptist Church, 4804 White Lake Road, White Lake Twp., https://crossroadswl.org, Sunday worship services at 11 a.m. The church has a Blessing Box that is stocked with non-perishable food items, books and other household items for those in need. Donations welcome.

▪ Destiny Faith Church, 501 University Drive, Pontiac, Destinyfaith.org, 248-322-2200. Worship services at 10 a.m. Sundays and 7 p.m. Wednesdays, in person and online.

▪ Divine Grace Evangelical Lutheran Church, 3000 S. Lapeer Road, Orion Twp., divinegrace.net, Sunday worship services at 8 a.m. and 10:30 a.m., livestream.

▪ Door of Faith Christian Church, Pontiac, online services, 9 a.m. and 11 a.m. Sundays, mydooroffaith.org.

▪ Emmanuel Lutheran Church, 23425 Lahser Road, Southfield, 248-357-1848, emmanuellutheransouthfield.org.

▪ Empowerment Church of Southfield, worship services are 7:30 a.m. and 10:30 a.m. Sundays at new worship center location, Shriner's Silver Garden Events Center, 24350 Southfield Road, Southfield, 248-569-2299, empowerment.mi.org. Virtual worship services, 10:30 a.m. Sundays at empowermentmi.org/stream and on Facebook Live.

▪ Encounter Church, 600 North Campbell Road, Royal Oak, in-person and online services, 11 a.m. Sundays; Prayer and Bible study is 6:30 p.m. Wednesdays, www.encounter360.org.

▪ Evanswood Church of God, 2601 E Square Lake Road, Troy, 248-879-9240.

▪ Faith Church in Rochester Hills offers free meals to the community, 5:30-6:45 p.m. Wednesdays, at the church,160 W Hamlin Road, Rochester Hills, faithchurchrochesterhills.org/sharethetable.

▪ Faith Community Christian Church (meeting at Abiding Presence Lutheran Church), 1550 Walton Blvd., Rochester Hills, 586-703-6249, Reverend Tom Sayers. Traditional service is at 1 p.m., www.faithcommunitychristianchurch.org.

▪ Faith Covenant Church, 35415 W. 14 Mile Road, Farmington Hills, worship services are at 9:30 a.m. and 11a.m., Sundays, 248-661-9191, 4fcc.org.

▪ First Baptist Church, 2601 John R Road, Troy, fbctroy.org.

▪ First Baptist Church, 255 E. Scripps Road, Lake Orion, fbclo.org, 248-693-6203, info@fbclo.org.

▪ First Congregational Church, 5449 Clarkston Road, Clarkston, (just east of Sashabaw Road), 248-394-0200, www.fcclarkston.com, worship services at 10 a.m. Sundays.

▪ First Congregational Church of Rochester UCC, 1315 N. Pine, Rochester, worship services at 10 a.m. Sundays, fccrochester.org, 248-651-6225.

▪ First Congregational Church of Royal Oak, 1314 Northwood Blvd., Royal Oak. Worship services at 10:30 a.m. Sundays, www.fccro.org.

▪ First General Baptist of Waterford, 2933 Frembes Road, Waterford, wgbchurch.com, 248-673-6481, Sunday school at 10 a.m., worship services at 11 a.m. and 6 p.m.

▪ First Missionary Church, 4832 Clintonville Road, Independence Twp., www.fmcclarkston.org, 248-674-3186. Sunday worship services at 11 a.m.

▪ First Presbyterian Church Birmingham, 1669 W. Maple, Birmingham, worship services are Sundays, 8:30 a.m. in person, and 10 a.m. in person and livestream, fpcbirmingham.org, 248-644-2040.

▪ First Presbyterian Church of Pontiac, 99 Wayne Street, Pontiac, fpcpontiac.info.

▪ First Presbyterian Church of Royal Oak, 529 Hendrie Blvd., 248-541-0108. Sunday worship services are at 10:30 a.m., online services available anytime at fpcro.org, 248-541-0108.

▪ First United Methodist Church of Troy, 6363 Livernois, Troy. Church services are 10 a.m. Sundays in person and livestream on YouTube and Facebook, www.FUMCTROY.org, 248-879-6363.

▪ Five Points Community Church, 3411 E Walton Blvd, Auburn Hills, https://5pointscc.org, 248-373-1381. Sunday worship services at 10 a.m.

▪ Good Shepherd Lutheran Church, 1950 S. Baldwin Road, Lake Orion, 248-391-1170, goodshepherdlakeorion.net. Worship service is at 10 a.m. Sundays.

▪ Grace Gospel Fellowship, 65 East Huron Street, Pontiac; in-person and livestream services are 11 a.m. Sundays and 7 p.m. Wednesdays. Livestream services are at www.facebook.com/GraceGospelFellowshipPontiac, 248-334-2187.

▪ Greenfield Presbyterian Church, 2312 Greenfield Road, Berkley, both virtual and in-person worship services are at 9 a.m. and 11 a.m. Sundays, (Memorial Day through Labor Day, services are at 10 a.m. only), youtube.com/user/GreenfieldChurch, greenfieldchurch.com, 248-544-1800.

▪ Grace Church, 220 Bogie Lake Road, White Lake Twp. Sunday services are 9:30 a.m. and 11:15 a.m., Gracechurchinfo.net, 248-887-3700.

▪ Harvestland Church, 5848 Clintonville Road, Independence Twp., https://harvestland.church, 248-391-2063. Sunday worship services at 10:30 a.m.

▪ Hazel Park First United Methodist Church, 313 E. Nine Mile Road, Hazel Park, 248-546-5955, hpfirst.org. Sunday worship services at 11:15 a.m.

▪ Heart of the Hills Christian Church, 5085 Orion Road, Rochester, https://heartofthehills.com, 248-841-1679. Sunday worship services at 10:30 a.m.

▪ Hillside Bible Church, 73 N Church St, Ortonville, 248-627-2513, hillsidebible.org, Sunday worship services at 10:30 a.m.

▪ Hilltop Church of the Nazarene, 21260 Haggerty Road, Northville, hilltopnaz.org, Sunday worship services at 10:30 a.m.

▪ Holly Calvary Church, 15010 N Holly Road, Holly, hollycalvary.org, Sunday worship services at 10 a.m. in person and online, Wednesday worship is at 6:30 p.m.

▪ Holy Spirit Lutheran Church, 4800 Orchard Lake Road, West Bloomfield Twp. In-person worship services at 10 a.m. Sundays, livestream on YouTube youtube.com/@spiritdrivenchurch, 248-682-5441, spiritdrivenchurch.com.

▪ Hope United Methodist Church, 26275 Northwestern Hwy., Southfield, 248-356-1020, hopeumc.org.

▪ Immanuel Congregational Church of Christ, Oxford, 248-628-1610, icucc.org, in-person worship services at 11 a.m. Sundays, and online at facebook.com/oxfordimmanuelucc.

▪ International Christian Church, 3980 Walton Blvd., Rochester Hills, online and in-person services at 11:30 a.m. Sundays, 248-494-8757, myiccglobal.org, facebook.com/icchurch/live.

▪ Islamic Association of Greater Detroit, 879 West Auburn Road, Rochester Hills, www.childrenofabrahamday.org.

▪ Jewel Heart Tibetan Buddhist Learning Center, 27745 Woodward Ave., Berkley, www.jewelheart.org.

▪ Journey Lutheran Church, (joined with Holy Cross Church) 136 S. Washington St., Oxford, in-person and online worship services, 8:45 a.m. and 11 a.m. Sundays, education hour is at 10 a.m., journeylutheran.church, 248-628-2011.

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, April 7, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, April 21, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton: 1925256002 111 ABBEY RD; 1925256001 129 ABBEY RD; 1925177028 139 WIMBLETON DR; 1925180004 144 WIMBLETON DR; 1925251023 147 ABBEY RD; 1925177027 155 WIMBLETON DR; 1925177026 165 WIMBLETON DR; 1925177025 175 WIMBLETON DR; 1925180003 176 WIMBLETON DR; 1925254008 205 WIMBLETON DR; 1925257002 244 WIMBLETON DR; 1925257003 266 WIMBLETON DR; 1925254020 269 WIMBLETON DR; 1925257004 282 WIMBLETON DR; 1925254011 287 WIMBLETON DR; 1925257005 322 WIMBLETON DR; 1925254012 323 WIMBLETON DR; 1925257023 340 WIMBLETON DR; 1925254013 341 WIMBLETON DR; 1925254014 355 WIMBLETON DR; 1925254015 379 WIMBLETON DR; 1925257008 380 WIMBLETON DR; 1925257019 420 WIMBLETON DR; 1925254016 421 WIMBLETON DR; 1925257020 444 WIMBLETON DR; 1925257018 460 WIMBLETON DR; 1925254017 463 WIMBLETON DR; 1925257012 498 WIMBLETON DR; 1925255006 519 WIMBLETON DR; 1925258001 520 WIMBLETON DR; 1925255007 541 WIMBLETON DR; 1925177023 951 TWIN OAKS LN; 1925177022 999 TWIN OAKS LN
Nature of Improvement:	The City intends to replace private sewer and water laterals meeting certain "useful life" criteria in the right-of-way in an effort to protect the public investments being made with this project. This will include the replacement of all sewer laterals that are 50 years of age or older, less than 6-inch diameter, or an unsuitable material. Water services less than the City minimum size of 1-inch diameter, are 60 years of age or older, or an unsuitable material will also be replaced.
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 3/23/2025 & 4/6/2025
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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RSVP to Jennifer: (248) 977-6200

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2. Pre-Diabetic/Urine Glucose Results
3. Acid-Alkaline Score/pH Summary
4. Bowel Toxicity Measurement
5. Body Hydration Grade
6. Dietary/Cellular Nutrient Availability
7. Calcium Score
8. Adrenal Stress Level
9. Thyroid Stress Measurement
10. Vitamin C Count
11. Candida/Yeast Presence
12. White Blood Cell/Infection Levels

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Wimbleton Phase 1 Project

Hearing of Necessity for Sewer and Water Laterals Special Assessment District (SAD)

Engineering Department

Date: April 7, 2025

Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

➢Overview

- Limits of Wimbleton Phase 1 Project are Wimbleton Drive from Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end.
- Project includes:
  - New Water Main: Wimbleton Drive, Abbey Street, and Twin Oaks
  - Sewer Improvements: Wimbleton Drive, Abbey Street, and Twin Oaks
  - Installation of cape seal treatment and new concrete curb and gutter
- 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 Phase 1 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

  Abbey Street:

  - Water: 6” Cast Iron Pipe, installed 1925
  - Proposed Water: 8” Ductile Iron

  Twin Oaks Lane:

  - Water: 2” installed unknown
  - Proposed Water: 8” Ductile Iron

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

➢General Construction Information: Water

Wimbleton Drive, Abbey Street, Twin Oaks Lane

- Almost 100 years old
- Fire Department concern of fire flow on some hydrants on these streets and the streets to the north.
- 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).
- These streets have experienced some water main breaks.

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District





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Existing 6” Water Main on Shirley Street, Installed 1929

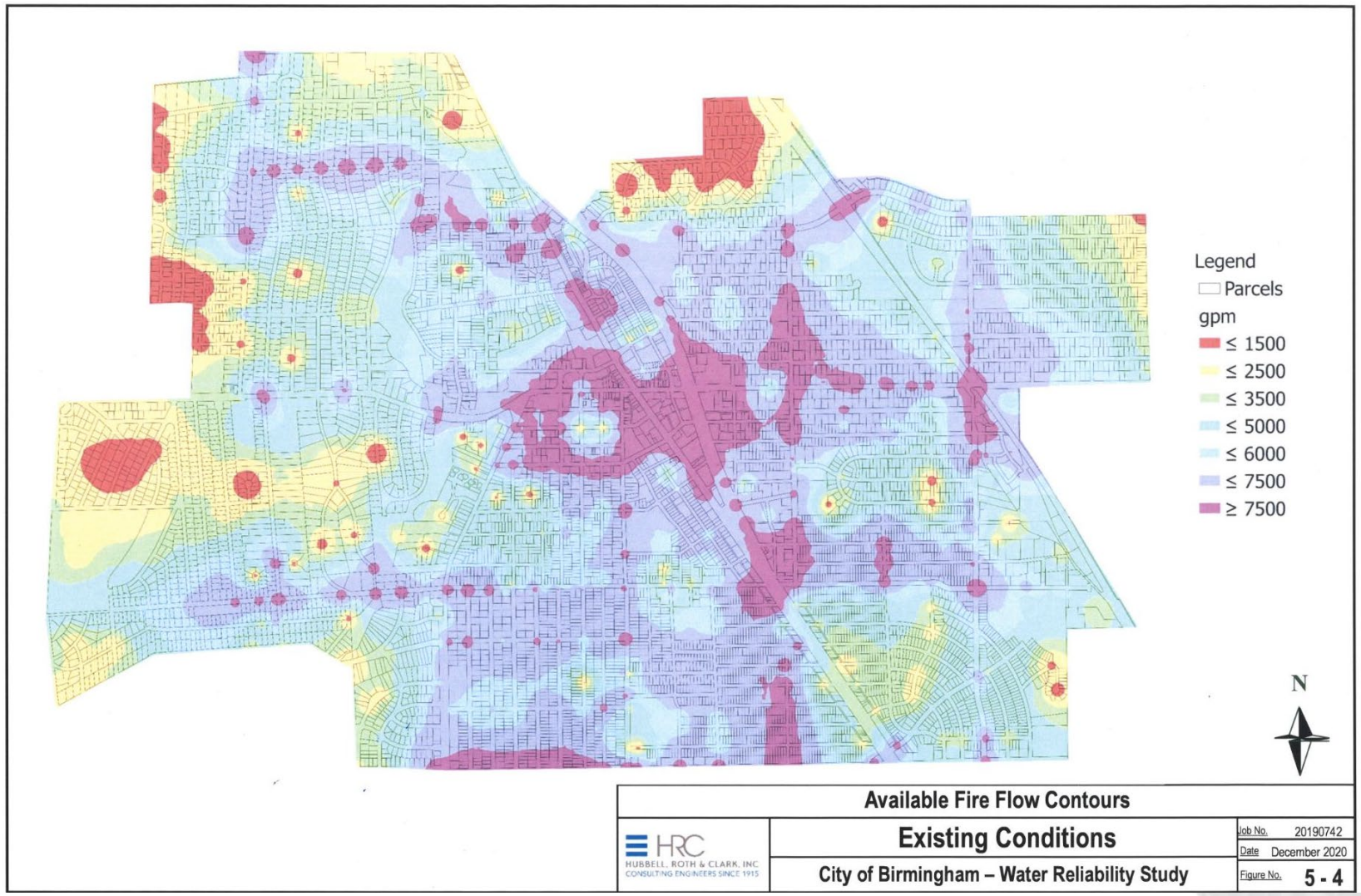
Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District



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Existing Water Main

Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District



Existing Fire Flows Map

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

- General Construction Information: Sewer

  Wimbleton Drive:

  - Existing Sewer:
    - *Woodward to Abbey: OCWRC Sewer: 42" Combined Sewer (Evergreen Farmington Sewer District)*
    - *Abbey to Oxford:*
      - *8" Sanitary Sewer drains west, installed 1926*
      - *12" Combined Sewer drains west, installed 1926*
  - Proposed Sewer: 12"- 42" Storm Sewer and 18" Combined Sewer Repairs

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

- General Construction Information: Sewer

  Abbey Street:

  - Existing Sewer:
    - *8" Sewer drains to the south across Poppleton Park, installed 1923*
  - Proposed Sewer: 10" Storm Sewer and 10" Combined Sewer

  Twin Oaks Lane:

  - Existing Sewer:
    - *8" Sewer drains to the south, installation date unknown*
  - Proposed Sewer: 12"-24" Storm Sewer and 10" Combined Sewer

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

➢General Construction Information: Sewer

Wimbleton Drive, Abbey Street, Twin Oaks Lane

- Portions of the sewer are almost 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 Phase 1 Project
Sewer and Water Lateral Special Assessment District



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Existing Sewer System

Wimbleton Phase 1 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, 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 Phase 1 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, 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 Phase 1 Project
Sewer and Water Lateral Special Assessment District

- SAD:
  - Water Lateral: 100% cost of the property owner
  - Sewer Lateral : 100% cost of the property owner
  - Cost: The cost can be paid back in either a lump sum or over a 10-year period with interest. The interest rate will be confirmed at the Confirmation of Roll.

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

- SAD:
  - Received Bids for Project on March 12, 2025
  - Water:
    - $90 per lineal foot for 1” diameter water service
    - $95 per lineal foot for 1.5” diameter water service
  - Sewer:
    - $100.00 per lineal foot for 6” sewer pipe

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District



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Sewer and Water Lateral SAD Project Limits

Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District



Sewer and Water Lateral SAD Project Limits

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Wimbleton Phase 1 Project
Sewer and Water Lateral Special Assessment District

➢PROPERTIES LOCATED IN SEWER LATERAL SAD:

Sidwell Number	Street Address
1925251022	175 ABBEY RD
1925255006	519 WIMBLETON DR
1925256002	111 ABBEY RD
1925177022	999 TWIN OAKS LN
1925177023	951 TWIN OAKS LN
1925177024	187 WIMBLETON DR
1925177025	175 WIMBLETON DR
1925177026	165 WIMBLETON DR
1925177027	155 WIMBLETON DR
1925177028	139 WIMBLETON DR
1925180003	176 WIMBLETON DR
1925180004	144 WIMBLETON DR
1925251023	147 ABBEY RD

Sidwell Number	Street Address
1925254008	205 WIMBLETON DR
1925254011	287 WIMBLETON DR
1925254012	323 WIMBLETON DR
1925254013	341 WIMBLETON DR
1925254014	355 WIMBLETON DR
1925254015	379 WIMBLETON DR
1925254016	421 WIMBLETON DR
1925254017	463 WIMBLETON DR
1925254019	245 WIMBLETON DR
1925254020	269 WIMBLETON DR
1925256001	129 ABBEY RD
1925257001	202 WIMBLETON DR
1925257002	244 WIMBLETON DR

Sidwell Number	Street Address
1925257003	266 WIMBLETON DR
1925257004	282 WIMBLETON DR
1925257005	322 WIMBLETON DR
1925257008	380 WIMBLETON DR
1925257012	498 WIMBLETON DR
1925257018	460 WIMBLETON DR
1925257019	420 WIMBLETON DR
1925257020	444 WIMBLETON DR
1925257023	340 WIMBLETON DR
1925401001	N/A POPPLETON PARK
1925255007	541 WIMBLETON DR
1925258001	520 WIMBLETON DR

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Wimbleton Phase 1 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 1 Project for sewer and water laterals
  - Should the Commission approve the SAD, a public hearing for confirmation of the roll will be held on April 21, 2025

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MEMORANDUM

Engineering Department

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Melissa A. 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 Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end will be under construction this year. The roads are currently gravel unimproved roads with cape seal treatment on top. Per the City Commission resolution on October 28, 2024, the road will receive concrete curb and gutters with cape seal treatment on top of the roadways, along with the installation of sidewalk sections where none currently exist on Wimbleton.

BACKGROUND:
At the October 28, 2024 City Commission Meeting (Agenda – Video), a resolution was approved for the Wimbleton Phase 1 Project to receive water main replacement, sewer improvements, and installation of concrete curb and gutters with cape seal treatment of the road surfaces within the project area, and installation of sidewalk sections where none currently exist on Wimbleton.

Wimbleton Drive from Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead are currently gravel unimproved roads with cape seal treatment on top. The proposed plans call for 8 inches of aggregate base, cape seal treatment, new concrete curb and gutter, and driveway approaches. The proposed road width will be 26 feet with a reduction to 23 feet at local street intersections.

The City policy has been to defray the costs of converting a road from an unimproved road to an improved road by creating a special assessment district (SAD) consisting of the properties that are uniquely benefitting from the improvements to the public property:

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 costs

The parcels within the project zone that are subject to paving special assessments are highlighted on the attached map. Appended to this report is a list of properties that the department plans to include in the Assessment District, along with the estimated construction costs to be assessed.

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 1 project will defray the costs incurred by the City for the construction of these improvements. One hundred percent of the costs for paving within the ROW will be paid by the property owners. 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 Roll Hearing on April 21, 2025.

SUSTAINABILITY:
N/A

DESIGN CONSIDERATIONS:
Per the previous decision by the City Commission, this project will receive concrete curb and gutter with cape seal treatment of the road surfaces within the project area, and the installation of sidewalk sections where none exist on Wimbleton.

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 2, 2025.

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 1 project. 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 April 21, 2025.

ATTACHMENTS:
- Map of proposed SAD for paving
- Wimbleton Phase 1 project plans
- Spreadsheet with estimated cost of paving
- Clerk’s confirmation of the public hearing notice

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 Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end; and

WHEREAS, The City has previously established a policy requiring converting an unimproved road to an improved road; and

WHEREAS, The City Commission, after the public hearing, has determined that paving Wimbleton Drive from Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end, 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 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 1 Project (Contract #6-25(W)):

Wimbleton Drive - Woodward Ave. to Oxford Road
Abbey Street - Wimbleton south to the dead end
Twin Oaks - Wimbleton north to the dead end

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 improvement, new concrete curb and gutter, 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 (calculated at the rate of $171.20 per front footage for paving, $40.00 per square foot to reinstall salvage brick pavers, $75.00 per square year for remove concrete approach or asphalt approach and install 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 April 21, 2025 and give notice of same.

Paving

Sidwell Number	Street Address	Estimated Total Paving SAD Costs
1925177022	999 TWIN OAKS LN	$5,999.49
1925177023	951 TWIN OAKS LN	$13,013.47
1925177024	187 WIMBLETON DR	$18,768.10
1925177025	175 WIMBLETON DR	$12,203.06
1925177026	165 WIMBLETON DR	$10,702.23
1925177027	155 WIMBLETON DR	$11,733.86
1925177028	139 WIMBLETON DR	$18,522.40
1925180003	176 WIMBLETON DR	$10,311.32
1925180004	144 WIMBLETON DR	$30,852.35
1925251022	175 ABBEY RD	$4,413.47
1925251023	147 ABBEY RD	$26,229.46
1925254008	205 WIMBLETON DR	$10,528.65
1925254011	287 WIMBLETON DR	$11,678.66
1925254012	323 WIMBLETON DR	$10,718.66
1925254013	341 WIMBLETON DR	$10,681.16
1925254014	355 WIMBLETON DR	$11,273.66
1925254015	379 WIMBLETON DR	$9,953.57
1925254016	421 WIMBLETON DR	$9,953.57
1925254017	463 WIMBLETON DR	$17,084.49
1925254019	245 WIMBLETON DR	$11,633.66
1925254020	269 WIMBLETON DR	$10,673.66
1925255006	519 WIMBLETON DR	$15,165.13
1925256001	129 ABBEY RD	$18,049.37
1925256002	111 ABBEY RD	$10,439.70
1925257001	202 WIMBLETON DR	$15,318.98
1925257002	244 WIMBLETON DR	$12,151.34
1925257003	266 WIMBLETON DR	$10,427.63
1925257004	282 WIMBLETON DR	$9,991.07
1925257005	322 WIMBLETON DR	$9,968.57
1925257008	380 WIMBLETON DR	$9,991.07
1925257012	498 WIMBLETON DR	$6,660.87
1925257018	460 WIMBLETON DR	$10,126.07
1925257019	420 WIMBLETON DR	$10,043.57
1925257020	444 WIMBLETON DR	$11,731.07
1925257023	340 WIMBLETON DR	$18,984.65
1925258001	520 WIMBLETON DR	$6,660.87
1925401001	N/A POPPLETON PARK	$22,426.88 *

* City Property – 100% costs paid by the City

Wimbleton Drive Project Area



Limits of Projects

Properties Within Paving SAD

8B

Wimbleton Drive Project Area



Limits of Projects

Properties Within Paving SAD

BIRMINGHAM

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ENGINEERING DEPARTMENT

WIMBLETON DRIVE PAVING PROJECT

CONTRACT #6-25(W)

SHEET INDEX

COVER SHEET (WIMBLETON DRIVE PAVING PROJECT)
C01 Utility Plan - Wimbleton Drive - P.O.B. to Sta. 4+50
C02 Utility Plan - Wimbleton Drive - Sta. 4+50 to 9+00
C03 Utility Plan - Wimbleton Drive - Sta. 9+00 to 13+00
C04 Utility Plan - Wimbleton Drive - Sta. 13+00 to P.O.E.
C05 Utility Plan - Twin Oaks Lane - P.O.B. to P.O.E.
C06 Utility Plan - Abbey Street - P.O.B. to P.O.E.
C07 Watermain Hydrant Profiles
C08 Sewer Profiles (1 of 2)
C09 Sewer Profiles (2 of 2)
C10 Utility Service Plan - P.O.B. to Sta. 9+00
C11 Utility Service Plan - Sta. 9+00 to P.O.E.
C12 Utility Service Plan - Twin Oaks Lane & Abbey Street
C13 Paving and Grading - Wimbleton - P.O.B. to Sta. 4+50
C14 Paving and Grading - Wimbleton - Sta. 4+50 to Sta. 9+00
C15 Paving and Grading - Wimbleton - Sta. 9+00 to Sta. 13+00
C16 Paving and Grading - Wimbleton - Sta. 13+00 to P.O.E.
C17 Paving and Grading - Twin Oaks Lane - P.O.B. to P.O.E.
C18 Paving and Grading - Abbey Street - P.O.B. to P.O.E.
C19 Intersection and Sidewalk Grading Details
C20 Existing and Proposed Road Cross-Sections
C21 Advanced Warning Signage (AWS) Traffic Diagram
C22 Notes and Details
C23 Notes and Details
Q1 Quantities

CITY OF BIRMINGHAM - WATER MAIN STANDARD DETAILS
CITY OF BIRMINGHAM - SEWER STANDARD DETAILS

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.

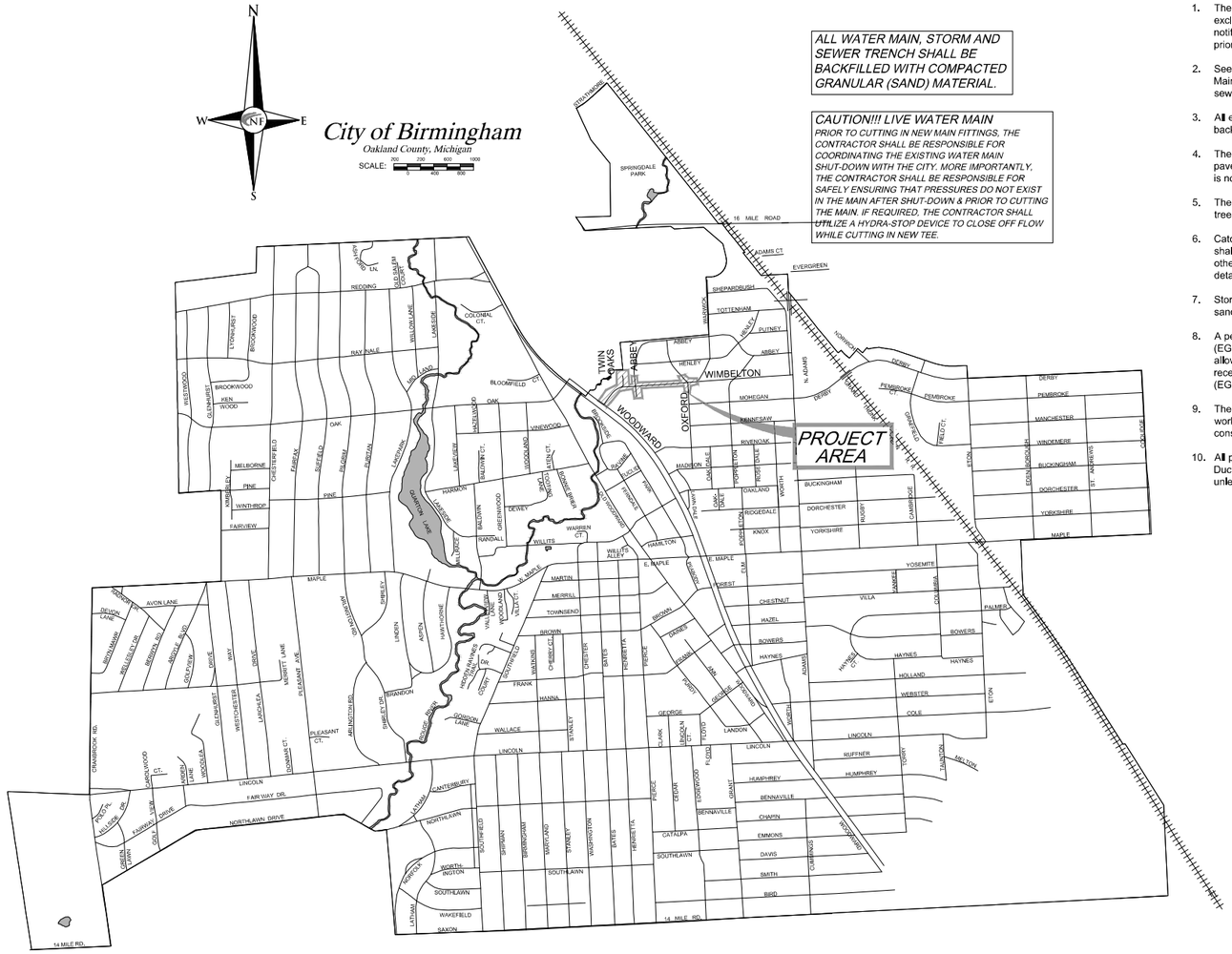
Know what's below Call before you dig.

BENCHMARK NOTE

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

N W E S CNT

City of Birmingham
Oakland County, Michigan
SCALE: 200 0 200 400 600 1000


PROJECT AREA
WIMBLETON
TWIN OAKS
ABBEY
WOODWARD
OXFORD
16 MILE ROAD
14 MILE RD.
SPRINGDALE PARK
ADAMS CT
EVERGREEN
SHEPARDBUSH
TOTTENHAM
PUTNEY
HENLEY
MOHEGAN
RUNNEMEDE
RIVERDALE
MADISON
BRIDGEDALE
KNOX
BUCKINGHAM
DORCHESTER
YORKSHIRE
DERBY
PEMBROKE
MANCHESTER
WINDEMERE
MAPLE
YOSEMITE
VILLA
PALMER
BOWERS
HAYNES
HOLLAND
WEBSTER
COLE
LINCOLN
RUFFNER
HUMPHREY
BENNAVILLE
CHAPIN
EMMONS
DAWS
SMITH
BIRD
CATALPA
SOUTHLAWN
NORTHLAWN
FAIRWAY DR.
CANTERBURY
WAKEFIELD
SAXON
LATHAM
NORTHINGTON
COLONIAL CT.
BLOOMFIELD CT.
WILLITS
WARREN CT.
HAMILTON
WILLITS ALLEY
E. MAPLE
MARTIN
MERRILL
TOWNSEND
BROWN
FRANK
HANNA
GEORGE
WALLACE
LANDON
STANLEY
PIERCE
OLIVER
SMITH
HENRIETTA
BATES
HUNTINGTON
WASHINGTON
BIRMINGHAM
BAYLAND
STANLEY
SHIRMAN
SOUTHFIELD
GRANT
FLOYD
DORCHESTER
CUMMINGS
DUNN
TAUNTON
MELVOIL
ETON
CAMBRIDGE
COLUMBIA
CHESTNUT
HAZEL
CHURCH
ELM
OAK
MAPLE
WOODWARD
ELMWOOD
WALLACE
VILLAGE
WOODLAND
WOODLAWN
WINDHAM
CHESTER CT.
GREYBER
SMITH
HENRIETTA
PIERCE
ADAMS
HAYNES CT.
HAYNES
ARMSTRONG
WILLOW
LINCOLN CT.
FLOYD
GRANT
DORCHESTER
CUMMINGS
DUNN
TAUNTON
MELVOIL
ETON
CAMBRIDGE
COLUMBI

UTILITY CROSSING SCHEDULE

01A EX. 3" GAS B/P 757.40
PR. 42" STM T/P 752.43
VERTICAL CLEARANCE=4.97' FT

01B PR. 12" W.M. B/P 758.53
EX. 42" COMB. T/P 756.10
VERTICAL CLEARANCE=2.43 FT
*UTILIZE VERT. BENDS AS REQ. TO CROSS EX. COMB.

01C PR. 42" STM B/P 757.75
EX. 42" COMB. T/P 754.22
VERTICAL CLEARANCE=1.53 FT

01D PR. 42" STM B/P 757.61
PR. 12" W.M. T/P 756.08
VERTICAL CLEARANCE=1.53 FT
*UTILIZE VERT. DUPRE AS REQ. TO CROSS PR. STM

01E PR. 12" W.M. B/P 760.97
PR. 10" COMB. T/P 756.37
EX. 2" W.M. VLV. (ABANDON)
EX. 12" COMB. T/P 757.02 (ABANDON)
VERTICAL CLEARANCE=4.40 FT

01F PR. 24" STM B/P 750.54
EX. 42" COMB T/P 750.24
(INSTALL CONC. SADDLE ABOVE EX. COMB. SEWER PER DETAIL)
VERTICAL CLEARANCE=0.30 FT

01G EX. 16" W.M. B/P 754.98
PR. 24" STM T/P 753.00
VERTICAL CLEARANCE=1.98 FT

01H EX. 3" GAS B/P 756.93
PR. 24" STM T/P 752.64
VERTICAL CLEARANCE=4.29 FT

05A (SEE SHEET C05)
05B (SEE SHEET C05)
05C (SEE SHEET C05)
05F (SEE SHEET C05)
05G (SEE SHEET C05)

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.

DE-WATERING NOTE:

BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

SEWER STRUCTURE SCHEDULE

206 MAINTAIN
0+20.71 28.15'N
COMB. MH 206
RIM 758.58
42" INV NE 737.23 (MAINTAIN)
60" INV W 737.23 (MAINTAIN)
7" INV 737.23 (MAINTAIN)

122 4+04.83 0.90'S
COMB. MH 122
RIM 769.00
12" INV N 755.50
42" INV E 753.90
42" INV W 753.70
(SEE SHEET C05)

30A 4+04.57 60.44' N
SANITARY MH 30A
RIM 768.93
8" INV N 758.93
10" INV SE 758.73
8" INV SW 758.93
(SEE SHEET C05)

29A 4+01.11 177.27'N
SANITARY MH 29A
RIM 767.64
8" INV N 759.64
8" INV S 759.34
(SEE SHEET C05)

206A ADJUST
0+36.57 19.21' N
COMB. MH 206A
RIM 758.54
PR. RIM XXX
42" INV NE 746.34 (DROP) (MAINTAIN)
24" INV NE 739.84 (DROP) (MAINTAIN)
36" INV SE 739.94 (MAINTAIN)
42" INV SW 739.14 (MAINTAIN)

30 4+12.08 51.64' N
COMB. MH 30
RIM 769.48
8" INV N 758.78
12" INV S 758.63
10" INV NW 758.63
(SEE SHEET C05)

29 4+08.41 175.27'N
COMB. MH 29
RIM 767.74
8" INV S. 762.64
8" INV S. 759.34
(BOTTOM)
(SEE SHEET C05)

WATER MAIN SCHEDULE

66 MAINTAIN
0+17.94 41.68'S
GATE VALVE 66
RIM 759.68
16" T/PIPE 754.38 (MAINTAIN)

26 ADJUST & CONNECT EAST OF VALVE
1+53.45 4.87'S
GATE VALVE 26
RIM 760.76
T/PIPE E-W 756.36

HYDRANT & ASSEMBLY
STA. 1+78.77' 7.65' S
F.G. 761.70
PR. T/PIPE 756.20

4 REMOVE
1+47.33 18.02'S
HYDRANT 4 761.35'

PR. 12" GATE VALVE IN WELL
PR. STA. 4+26.80' 9.50' N
PR. RIM. 768.45
PR. T/PIPE 763.05

HYDRANT & ASSEMBLY
STA. 4+36.36' 9.50' N
PR. F.G. 769.25
PR. T/PIPE 763.25

(SEE SHEET C06)

STORM STRUCTURE SCHEDULE

31 REMOVE
0+95.53 26.16'N
STORM MH 31(R)
NOT SHOT

31a REMOVE
0+93.27 31.77' N
CATCH BASIN 31a
RIM 759.00
10" INV SE 753.90 (REMOVE)

29a 4+09.51 160.29' N
C.B. BEEHIVE 29a
RIM 767.20
8" INV W 764.60
8" INV N 763.95
(SEE SHEET C05)

29b 3+98.21 160.52'N
STORM MH 29b
RIM 767.14
T/DIRT 764.94
(SEE SHEET C05)

Storm Drainage Structure Schedule

Structure Name	Structure Details
#30 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 768.20 PR. 42" NW. INV. 758.20 PR. 42" E. INV. 758.20
#31 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 758.10 PR. 42" W. INV. 749.00 PR. 42" NE. INV. 750.70
#31A PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 760.92 PR. 42" SW. INV. 752.40 PR. 42" NE. INV. 753.10
#31B PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 765.05 PR. 42" SW. INV. 754.90 PR. 42" E. INV. 755.70
#31C PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 766.95 PR. 12" NE. INV. 761.90 PR. 42" W. INV. 756.35 PR. 42" SE. INV. 757.90
#32A PR. 6' STORM MANHOLE	PR. RIM 758.38 PR. 36" E. INV. 752.00 PR. 24" S. INV. 748.00 PR. 42" W. INV. 748.00
#32B PR. 6' STORM MANHOLE TEMP. BULKHEAD FOR 24" (SE.) (INC.)	PR. RIM 758.67 PR. 24" N. INV. 748.25 PR. 24" SE. INV. 750.50 PR. 18" NE. INV. 748.25
#32C PR. 10' CONTECH SCX-10 WATER QUALITY STRUCTURE (OR APPROVED EQUAL)	PR. RIM 758.61 PR. 18" SW. INV. 748.45 PR. 18" N. INV. 748.45
#32D PR. 6' STORM MANHOLE W/ 2' SUMP & ELEVATED 36" DIA. OVERFLOW	PR. RIM 759.01 PR. 18" S. INV. 748.65 PR. 42" E. INV. 748.65 PR. 36" W. INV. 752.31

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. BITUMINOUS CAPESEAL
PR. 18" MD. CONC. CURB & GUTTER
SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

WIMBLETON DRIVE PROFILE

SCALE: H 1" = 20' V 1"=2'

MATCHLINE 4+50

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
Paving Project
Contract #6-25(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 - P.O.B. to Sta. 4+50

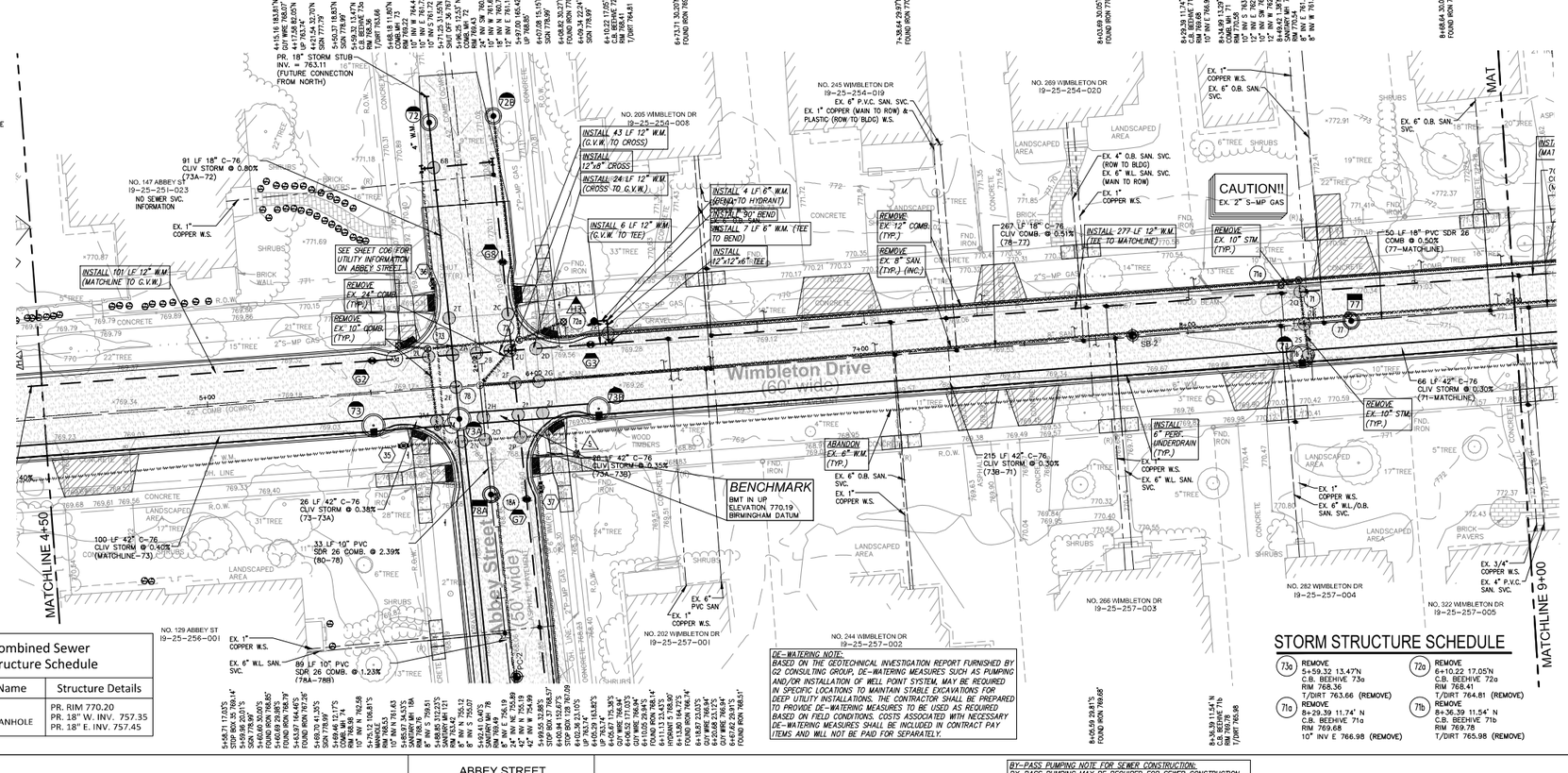
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C01

\2000-2000 Files\2000-FILES\2310\Office\Construction Documents\2310_UTL.dwg 3/5/2025 8:42 AM



SEWER STRUCTURE SCHEDULE

(73) REMOVE
5+68.18 11.80'N
COMB. MH 73
RIM 769.22
10" INV W 764.42 (REMOVE)
10" INV E 761.72 (REMOVE)
10" INV S 761.72 (CALC.) (REMOVE)

(18A) REMOVE
5+85.97 34.53'S
SANITARY MH 18A
RIM 768.76
8" INV S 759.51 (ABANDONED)

(72) REMOVE
5+96.25 12.53' N
COMB. MH 72
RIM 769.43
24" INV SW 760.33 (REMOVE)
10" INV W 761.63 (REMOVE)
18" INV N 760.73 (REMOVE)
12" INV E 761.13 (REMOVE)
8" INV NE V.I.F. (REMOVE)

(77) REMOVE
8+49.42 1.38'N
SANITARY MH 77
RIM 770.54
8" INV E 761.34 (REMOVE)
8" INV W 761.24 (REMOVE)

(74) REMOVE
5+69.46 12.17'S
COMB. MH 74
RIM 768.98
10" INV N 762.58 (REMOVE)

(78) TAP & ADJUST
5+92.41 0.40'S
SANITARY MH 78
RIM 769.49
PR. RIM XXX
8" INV E 756.19 (REMOVE)
24" INV NE 755.89 (MAINTAIN)
42" INV N 755.19 (MAINTAIN)
42" INV W 754.99 (MAINTAIN)
PR. 18" INV E XXXX (TAP)
PR. 10" INV S XXXX (TAP)

(71) REMOVE
8+34.99 13.29'N
COMB. MH 71
RIM 770.58
10" INV S 763.48 (REMOVE)
12" INV E 762.38 (REMOVE)
10" INV SW 765.78 (REMOVE)
12" INV W 762.38 (REMOVE)

WATER MAIN SCHEDULE

(35) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
5+58.71 17.03'S
STOP BOX 35 769.14'

(37) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
5+99.55 32.88'S
STOP BOX 37 768.57'

(62) PR. 12" GATE VALVE IN WELL
PR. STA. 5+51.09' 8.97' N
PR. RIM 769.35
PR. T/PIPE 761.25

(63) PR. 12" GATE VALVE IN WELL
PR. STA. 6+17.91' 9.97' N
PR. RIM 768.65
PR. T/PIPE 761.90

(36) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
5+71.25 31.55'N
SHUT OFF 36 767.09'

(5) REMOVE
6+11.13 23.43'S
HYDRANT 5 768.90'

(61) HYDRANT & ASSEMBLY
STA. 6+18.50' 6.15' N
PR. F.G. 769.45
PR. T/PIPE 763.45

(67) (SEE SHEET C06)

(69) (SEE SHEET C06)

UTILITY CROSSING SCHEDULE

02A PR. 18" STM B/P 762.48
PR. 12" W.M. T/P 760.93
VERTICAL CLEARANCE:1.55 FT

02B PR. 12" W.M. B/P 760.25
EX. 42" COMB. T/P 758.72
VERTICAL CLEARANCE:1.53 FT

02C EX. 3" GAS B/P 767.51
PR. 8" W.M. T/P 761.72
VERTICAL CLEARANCE:5.79 FT

02D EX. 2" GAS B/P 767.22
PR. 12" W.M. T/P 761.56
VERTICAL CLEARANCE:5.66 FT

02E PR. 18" STM B/P 762.40
EX. 42" COMB. T/P 758.45
VERTICAL CLEARANCE:3.95 FT

02F PR. 8" SAN. B/P 759.34
PR. 18" COMB. T/P 757.55
*UTILIZE VERT. BENDS AS REQ. TO CROSS PR. COMB. SEWER
VERTICAL CLEARANCE:1.79 FT

02G EX. 2" GAS B/P 767.22
PR. 18" COMB. T/P 757.59
VERTICAL CLEARANCE:9.63 FT

02H PR. 42" STM B/P 760.28
PR. 10" COMB. T/P 757.57
VERTICAL CLEARANCE:2.71 FT

02I PR. 42" STM B/P 760.31
PR. 8" W.M. T/P 758.43
*UTILIZE VERT. BENDS AS REQ. TO CROSS PR. STM SEWER
VERTICAL CLEARANCE:1.88 FT

02J EX. 2" GAS B/P 767.18
PR. 42" STM T/P 763.84
VERTICAL CLEARANCE:3.34 FT

02K EX. 12" COMB. B/P 761.27 (REMOVE)
PR. 8" W.M. T/P 761.50
VERTICAL CLEARANCE:0.00 FT

02L PR. 12" W.M. B/P 760.00
EX. 10" COMB. T/P V.I.F. (REMOVE)

EX. 4" W.M. T/P V.I.F. (ABANDON)

02M EX. 10" COMB. B/P V.I.F. (REMOVE)
EX. 4" W.M. B/P V.I.F. (ABANDON)
PR. 42" STM B/P 764.10

02N EX. 8" W.M. B/P V.I.F. (ABANDON)
PR. 24" STM T/P 763.71

02O EX. 8" W.M. B/P V.I.F. (ABANDON)
EX. 10" COMB. T/P 757.71

02P EX. 8" W.M. B/P V.I.F. (ABANDON)
PR. 8" W.M. T/P 758.27

02Q PR. 12" W.M. B/P 763.59
EX. 10" STM T/P V.I.F. (REMOVE)

02R EX. 10" STM B/P V.I.F. (REMOVE)
PR. 42" STM T/P 764.54

02S EX. 10" STM B/P V.I.F. (REMOVE)
PR. 42" STM T/P 764.64

02T EX. 2" GAS B/P 767.53
PR. 18" STM T/P 764.07
VERTICAL CLEARANCE:3.46 FT

02U PR. 12" W.M. B/P 760.41
EX. 24" COMB. T/P 758.84 (REMOVE)
VERTICAL CLEARANCE:1.47 FT

06B (SEE SHEET C06)

STORM STRUCTURE SCHEDULE

(73a) REMOVE
5+59.32 13.47'N
C.B. BEEHIVE 73a
RIM 768.36
T/DIRT 763.66 (REMOVE)

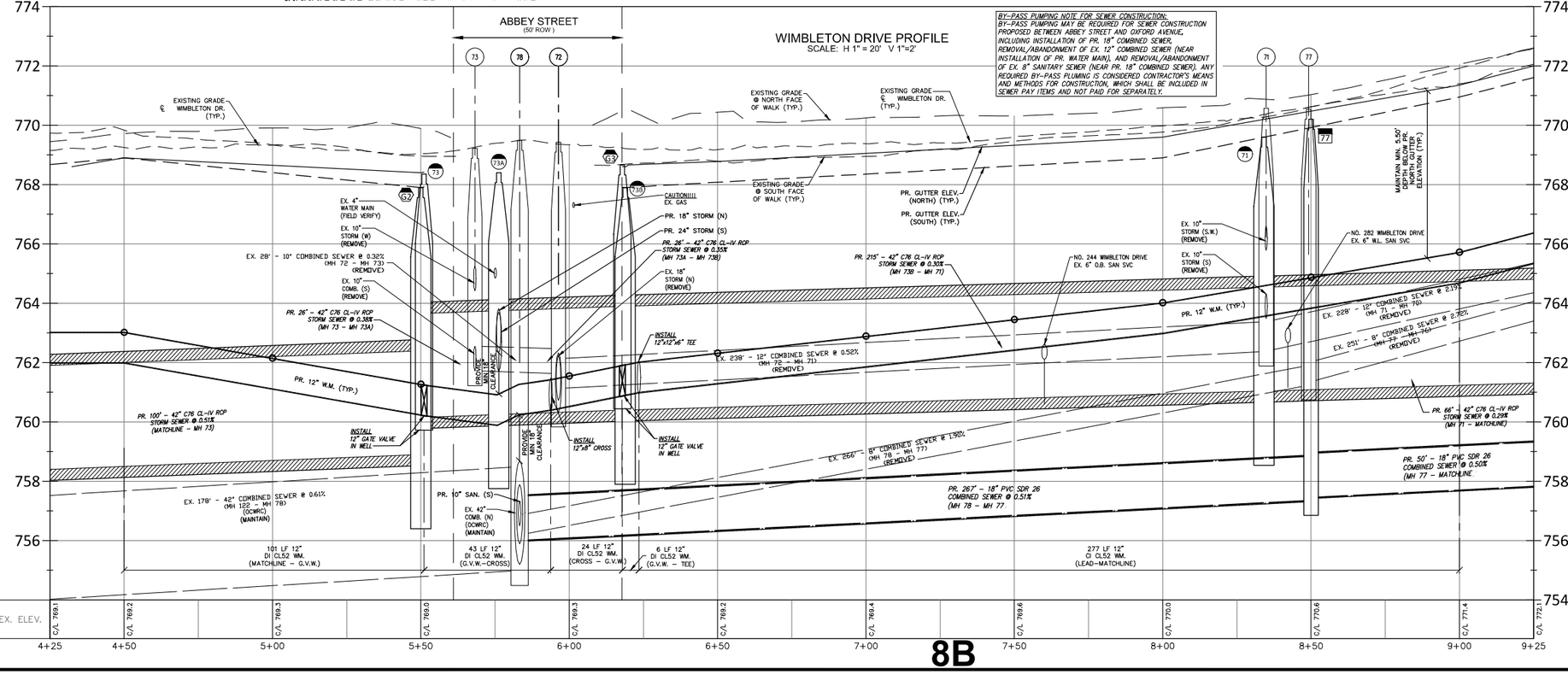
(71a) REMOVE
8+29.39 11.74' N
C.B. BEEHIVE 71a
RIM 769.68
10" INV E 766.98 (REMOVE)

(72a) REMOVE
6+10.22 17.05'N
C.B. BEEHIVE 72a
RIM 768.41
T/DIRT 764.81 (REMOVE)

(71b) REMOVE
8+36.39 11.54' N
C.B. BEEHIVE 71b
RIM 769.78
T/DIRT 765.98 (REMOVE)

00 Combined Sewer Structure Schedule	
Structure Name	Structure Details
#77 PR. 4' COMB. MANHOLE	PR. RIM 770.20 PR. 18" W. INV. 757.35 PR. 18" E. INV. 757.45

00 Storm Drainage Structure Schedule	
Structure Name	Structure Details
#71 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 769.60 PR. 42" W. INV. 761.04 PR. 42" E. INV. 761.04
#73 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 767.90 PR. 42" W. INV. 758.90 PR. 42" E. INV. 760.15
#73A PR. 6' STORM MANHOLE	PR. RIM 768.40 PR. 42" W. INV. 760.25 PR. 42" E. INV. 760.25 PR. 24" S. INV. 761.70 PR. 18" N. INV. 762.32
#73B PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 767.90 PR. 42" W. INV. 760.40 PR. 42" E. INV. 760.40
#75 PR. 5' STORM MANHOLE W/ 2' SUMP	PR. RIM 767.16 PR. 24" N. INV. 762.00 PR. 12" E. INV. 762.25 PR. 24" S. INV. 762.10
#75a PR. 2' STORM INLET	PR. RIM 766.50 PR. 12" W. INV. 762.50



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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. 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
x000.00 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
Paving Project
Contract #6-25(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+50 to 9+00

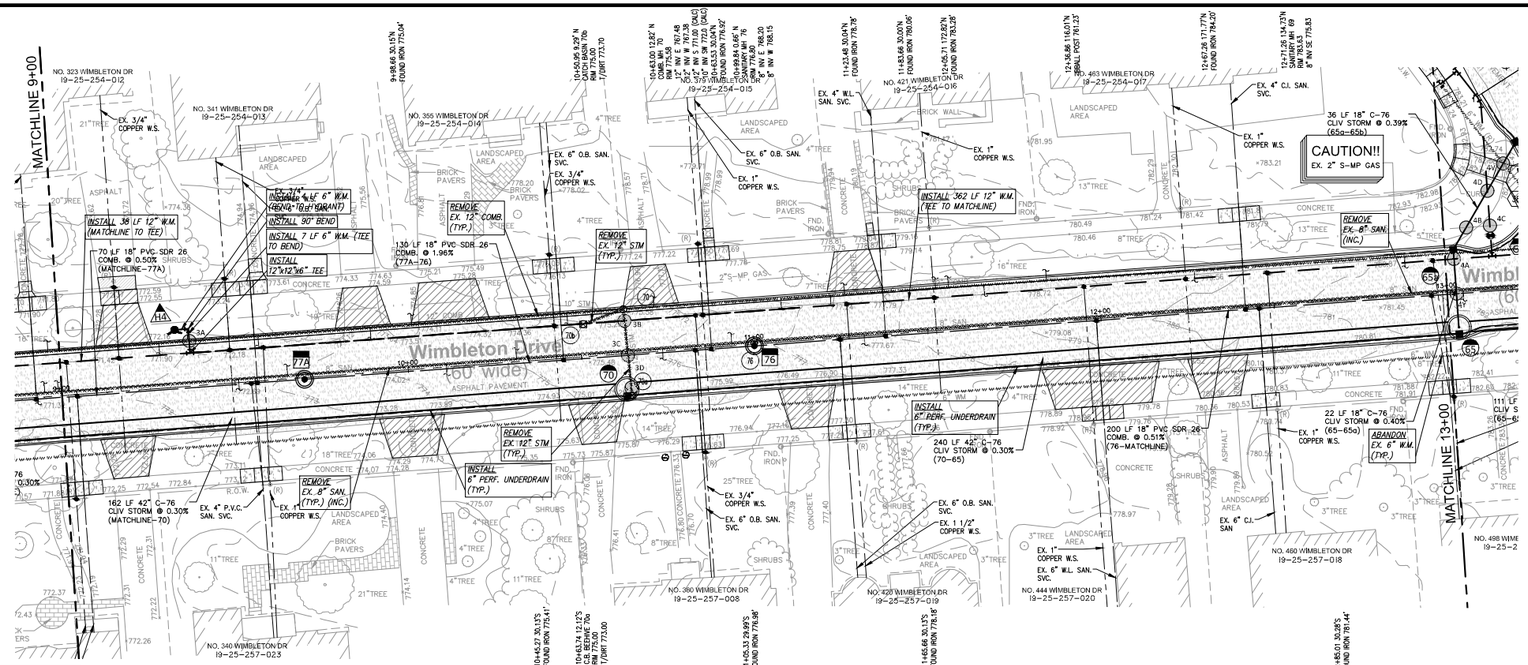
811 Know what's below Call before you dig.

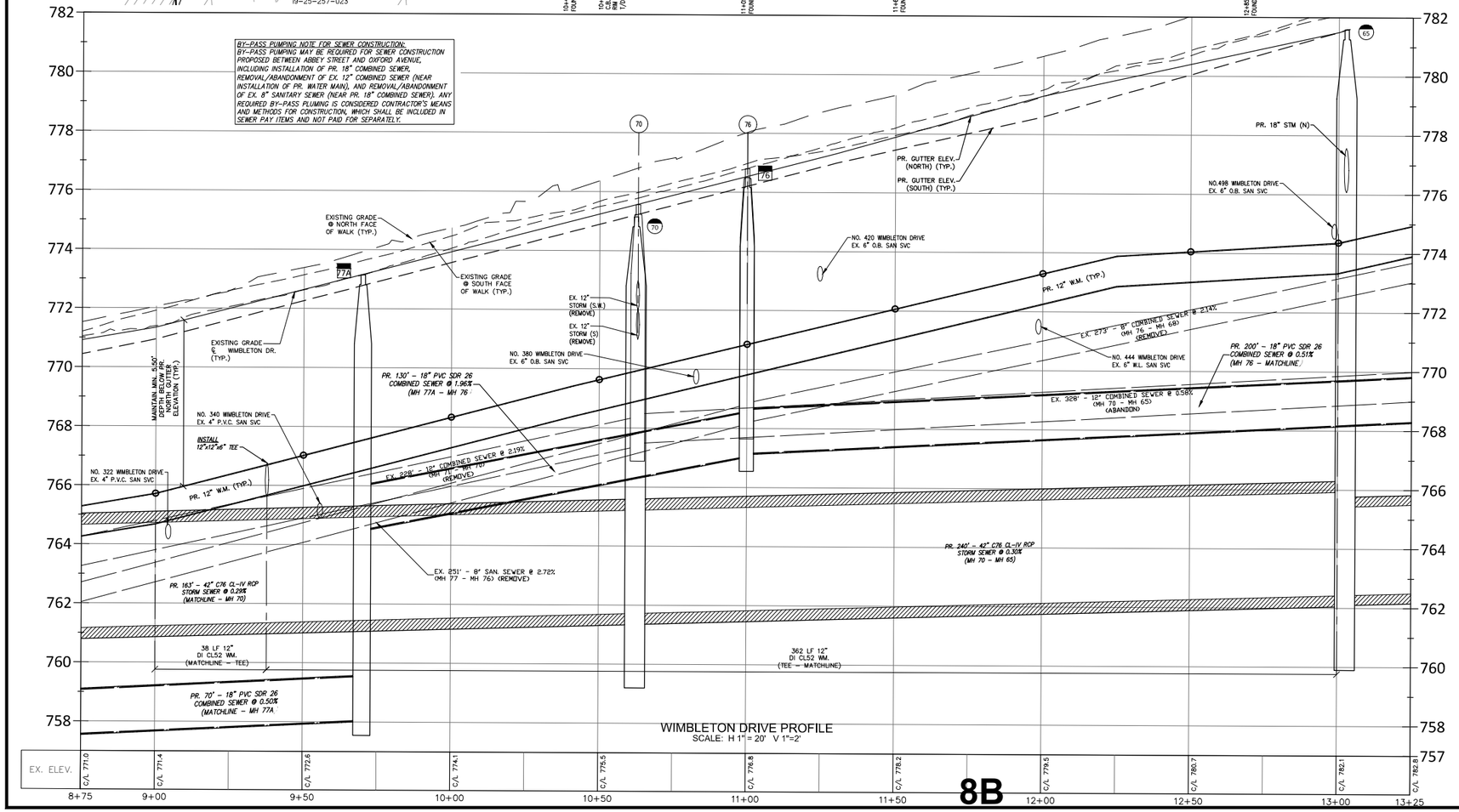
DATE	ISSUED/REVISED
10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
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NFE JOB NO. O310
SHEET NO. C02

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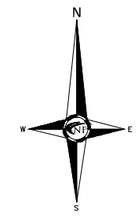
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WIMBLETON DRIVE PROFILE
SCALE: H 1"= 20' V 1"=2'

8B



DE-WATERING NOTE:
BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY O2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

WATER MAIN SCHEDULE

(A) HYDRANT & ASSEMBLY
STA. 9+33.85 16.59' N
PR. F.G. 772.90
PR. T/PIPE 767.40

SEWER STRUCTURE SCHEDULE

(70) REMOVE
10+63.00 12.82' N
COMB. MH 70
RIM 775.58
12" INV E 767.48 (ABANDON)
12" INV W 767.38 (REMOVE)
12" INV S 771.00 (CALC) (REMOVE)
10" INV SW 772.0 (CALC) (REMOVE)

(76) REMOVE
10+99.84 0.66' N
SANITARY MH 76
RIM 776.80
8" INV E 768.20 (REMOVE)
8" INV W 768.15 (REMOVE)

STORM STRUCTURE SCHEDULE

(70b) REMOVE
10+50.95 9.29' N
CATCH BASIN 70b
RIM 775.00
T/DIRT 773.70 (REMOVE)

(70a) REMOVE
10+63.74 12.12'S
C.B. BEEHIVE 70a
RIM 775.00
T/DIRT 773.00 (REMOVE)

(00) Storm Drainage Structure Schedule

Structure Name	Structure Details
#70 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 775.15 PR. 42" W. INV. 761.72 PR. 42" E. INV. 761.72

(00) Combined Sewer Structure Schedule

Structure Name	Structure Details
#76 PR. 4' COMB. MANHOLE	PR. RIM 776.50 PR. 18" W. INV. 767.05 PR. 18" E. INV. 767.15
#77A PR. 5' COMB. MANHOLE W/ INT. DROP CONNECTION	PR. RIM 773.15 PR. 18" W. INV. 758.05 PR. 18" E. INV. 764.50

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. (3" HMA ON 8" 21AA)
PR. BITUMINOUS CAPSEAL
PR. 18" MD. CONC. CURB & GUTTER
SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

UTILITY CROSSING SCHEDULE

03A PR. 6" W.M. B/P 765.93
EX. 12" COMB. T/P 765.63 (REMOVE)
VERTICAL CLEARANCE=0.30 FT

03B PR. 12" W.M. B/P 769.93
EX. 12" STM T/P V.I.F. (REMOVE)

03C EX. 12" STM B/P V.I.F. (REMOVE)
PR. 18" COMB. T/P 767.83

03D EX. 12" STM. B/P V.I.F. (REMOVE)
PR 42" STM T/P 765.02

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
Paving Project
Contract #6-25(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 13+00

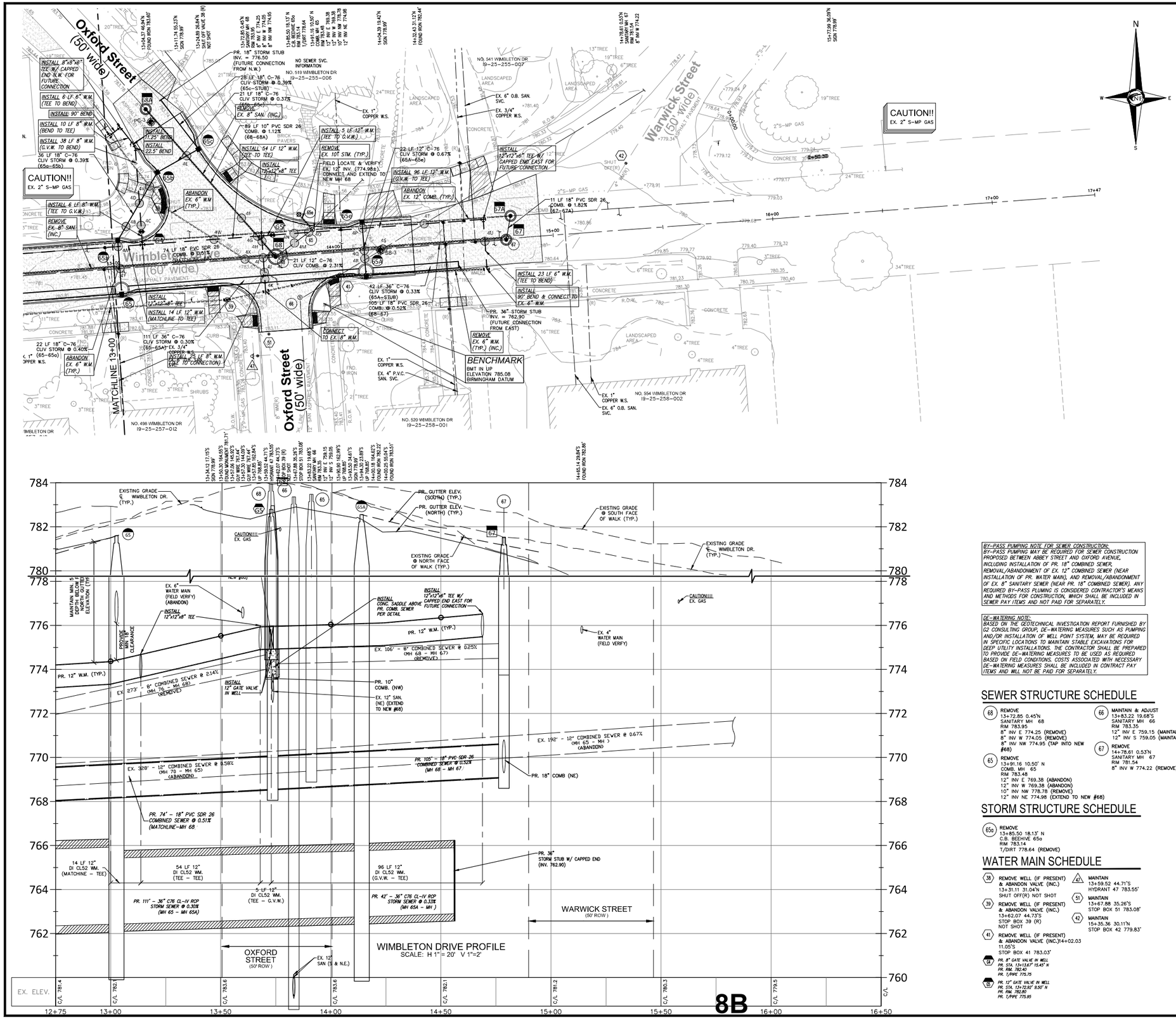
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DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
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NFE JOB NO. O310
SHEET NO. C03

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UTILITY CROSSING SCHEDULE

04A PR. 12" STM B/P 776.17 PR. 12" W.M. T/P 774.41 VERTICAL CLEARANCE:1.76 FT

04B EX. 2" GAS B/P 780.29 PR. 18" STM T/P 777.70 VERTICAL CLEARANCE:2.59 FT

04C EX. 2" GAS B/P 780.50 PR. 8" W.M. T/P 774.45 VERTICAL CLEARANCE:6.05 FT

04D PR. 18" STM B/P 778.25 PR. 8" W.M. T/P 774.72 VERTICAL CLEARANCE:3.53 FT

04E PR. 18" STM B/P 776.37 PR. 10" COMB. T/P 774.50 VERTICAL CLEARANCE:1.87 FT

04F EX. 2" GAS B/P 781.70 PR. 10" COMB. T/P 773.97 VERTICAL CLEARANCE:7.40 FT

04G PR. 12" W.M. B/P 774.90 PR. 10" COMB. T/P 773.97 (INSTALL CONC. SADDLE ABOVE PR. COMB. SEWER PER DETAIL) EX. 12" COMB. T/P V.I.F. (ABANDON) EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:0.95 FT

04H PR. 8" W.M. B/P 774.92 PR. 10" COMB. T/P 773.94 (INSTALL CONC. SADDLE ABOVE PR. COMB. SEWER PER DETAIL) EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:0.98 FT

04I PR. 8" W.M. B/P 774.92 PR. 18" COMB. T/P 770.02 EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:4.90 FT

04J EX. 2" GAS B/P 781.71 PR. 8" W.M. T/P 775.09 EX. 6" W.M. T/P V.I.F. (ABANDON) VERTICAL CLEARANCE:6.12 FT

04K PR. 8" W.M. B/P 774.92 PR. 42" STM T/P 763.62 VERTICAL CLEARANCE:11.30 FT

04L EX. 2" GAS B/P 781.06 PR. 18" COMB. T/P 770.05 EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:11.01 FT

04M EX. 2" GAS B/P 781.80 PR. 12" W.M. T/P 775.76 VERTICAL CLEARANCE:6.04 FT

04N EX. 2" GAS B/P 781.61 PR. 12" W.M. T/P 775.97 VERTICAL CLEARANCE:5.64 FT

04O PR. 12" W.M. B/P 774.99 PR. 12" STM. T/P 772.01 V.I.F. VERTICAL CLEARANCE:2.01 FT

04P PR. 12" STM B/P 778.35 PR. 12" W.M. T/P 776.07 VERTICAL CLEARANCE:2.28 FT

04Q PR. 12" STM B/P 778.27 PR. 18" COMB. T/P 770.26 EX. 8" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:8.01 FT

04R PR. 12" STM B/P 778.25 EX. 12" SAN. T/P 760.13 VERTICAL CLEARANCE:18.12 FT

04S PR. 18" COMB. B/P 768.79 EX. 12" SAN. T/P 760.13 VERTICAL CLEARANCE:8.66 FT

04T PR. 12" W.M. B/P 775.28 EX. 12" SAN. T/P 760.13 VERTICAL CLEARANCE:15.15 FT

04U PR. 6" W.M. B/P 776.03 PR. 18" COMB. T/P 770.54 EX. 12" SAN. T/P V.I.F. (REMOVE) VERTICAL CLEARANCE:5.49 FT

04V PR. 18" STM B/P 775.19 EX. 6" W.M. T/P V.I.F. (ABANDON)

04W PR. 12" W.M. B/P 774.42 EX. 6" W.M. T/P V.I.F. (ABANDON)

04X EX. 6" W.M. B/P V.I.F. (ABANDON) PR. 18" COMB. T/P 769.98

04Y PR. 18" STM B/P 778.12 PR. 18" COMB. T/P 769.69 EX. 8" SAN. T/P V.I.F. (REMOVE)

BY-PASS PUMPING NOTE FOR SEWER CONSTRUCTION:
BY-PASS PUMPING MAY BE REQUIRED FOR SEWER CONSTRUCTION PROPOSED BETWEEN ABBEY STREET AND OXFORD AVENUE, INCLUDING INSTALLATION OF PR. 18" COMBINED SEWER, REMOVAL/ABANDONMENT OF EX. 12" COMBINED SEWER (NEAR INSTALLATION OF PR. WATER MAIN), AND REMOVAL/ABANDONMENT OF EX. 8" SANITARY SEWER (NEAR PR. 18" COMBINED SEWER). ANY REQUIRED BY-PASS PLUMING IS CONSIDERED CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION, WHICH SHALL BE INCLUDED IN SEWER PAY ITEMS AND NOT PAID FOR SEPARATELY.

DE-WATERING NOTE:
BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

SEWER STRUCTURE SCHEDULE

(68) REMOVE
13+72.85 0.45'N
SANITARY MH 68
RIM 783.95
8" INV E 774.25 (REMOVE)
8" INV W 774.05 (REMOVE)
8" INV NW 774.95 (TAP INTO NEW #68)

(65) REMOVE
13+91.16 10.50' N
COMB. MH 65
RIM 783.48
12" INV E 769.38 (ABANDON)
12" INV W 769.38 (ABANDON)
10" INV NW 778.78 (REMOVE)
12" INV NE 774.98 (EXTEND TO NEW #68)

(66) MAINTAIN & ADJUST
13+83.22 19.68'S
SANITARY MH 66
RIM 783.35
12" INV E 759.15 (MAINTAIN)
12" INV S 759.05 (MAINTAIN)

(67) REMOVE
14+78.61 0.53'N
SANITARY MH 67
RIM 781.54
8" INV W 774.22 (REMOVE)

STORM STRUCTURE SCHEDULE

(65a) REMOVE
13+85.50 18.13' N
C.B. BEEHIVE 65a
RIM 783.14
T/DIRT 778.64 (REMOVE)

WATER MAIN SCHEDULE

(38) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
13+31.11 31.04'N
SHUT OFF(R) NOT SHOT

(39) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
13+62.07 44.73'S
STOP BOX 39 (R)
NOT SHOT

(41) REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)14+02.03
11.05'S
STOP BOX 41 783.03'

(47) MAINTAIN
13+59.52 44.71'S
HYDRANT 47 783.55'

(51) MAINTAIN
13+67.88 35.26'S
STOP BOX 51 783.08'

(42) MAINTAIN
15+35.36 30.11'N
STOP BOX 42 779.83'

(64) PR. 8" GATE VALVE IN WELL
PR. STA. 13+13.67 15.45" N
PR. RIM. 782.40
PR. T/PIPE 775.75

(62) PR. 12" GATE VALVE IN WELL
PR. STA. 13+72.92' 9.50" N
PR. RIM. 782.60
PR. T/PIPE 775.95

Storm Drainage Structure Schedule (00)

Structure Name	Structure Details
#65 PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 781.59 PR. 42" W. INV. 762.43 PR. 36" E. INV. 762.43 PR. 18" N. INV. 776.08
#65a PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 781.59 PR. 18" S. INV. 776.17 PR. 18" NE. INV. 776.17
#65A PR. 6' STORM CATCH BASIN W/ 2' SUMP & OFFSET GRATE (PER DETAIL)	PR. RIM 782.55 PR. 36" W. INV. 762.76 PR. 36" E. INV. 762.76 PR. 12" N. INV. 778.20
#65b PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 782.45 PR. 18" SW. INV. 776.31 PR. 18" NE. INV. 776.31
#65c PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 782.65 PR. 18" SW. INV. 776.39 PR. 18" NW. INV. 776.39
#65e PR. 2' STORM INLET	PR. RIM 782.35 PR. 12" S. INV. 778.35

Combined Sewer Structure Schedule (00)

Structure Name	Structure Details
#67 PR. 4' COMB. MANHOLE	PR. RIM 781.50 PR. 18" W. INV. 769.10 PR. 18" N. INV. 769.30
#67A PR. 4' DIA. COMB. MANHOLE (CONSTRUCT ONLINE & RECONNECT EX. 12" COMB EAST INV. 770.00, V.I.F.)	PR. RIM 781.18 PR. 18" S. INV. 769.50
#68 PR. 6' COMB. MANHOLE W/ TWO INT. DROP CONNECTIONS	PR. RIM 782.96 PR. 18" W. INV. 768.55 PR. 18" E. INV. 768.55 PR. 12" NE. INV. 772.50 PR. 10" NW. INV. 773.00
#68A PR. 4' DIA. COMB. MANHOLE (CONSTRUCT ONLINE & RECONNECT EX. 8" COMB N.W. INV. 775.40, V.I.F.)	PR. RIM 783.04 PR. 10" SE. INV. 774.00

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
- (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 9" 21AA)
- PR. BITUMINOUS CAPESEAL
- PR. 18" NO. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS

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
Paving Project
Contract #6-25(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

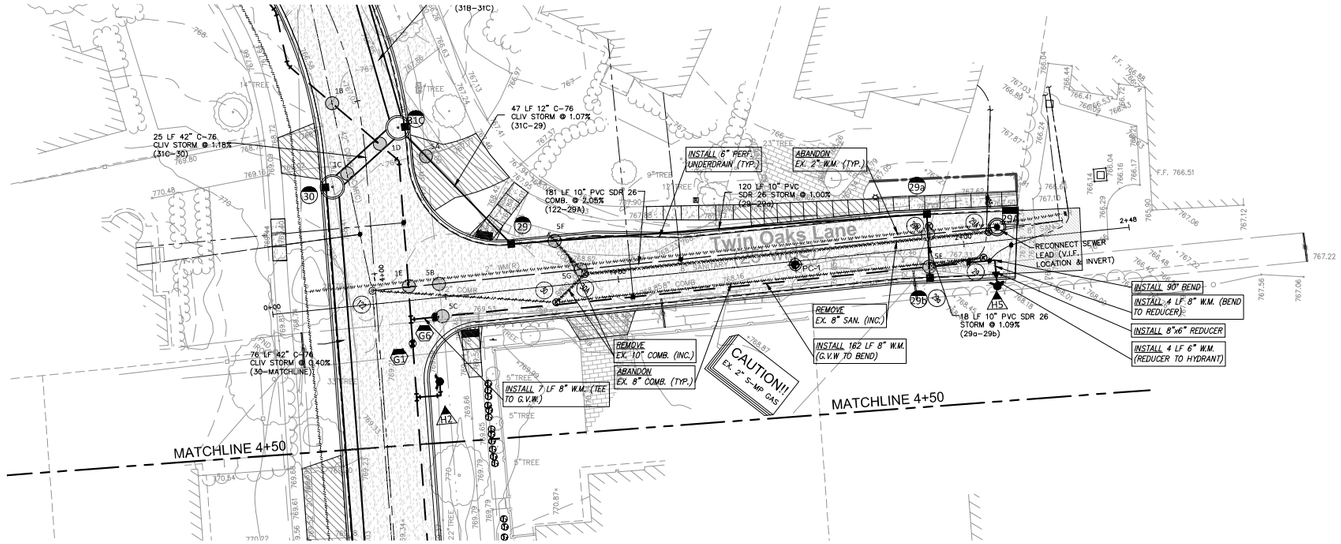
SHEET
Utility Plan - Wimbleton Drive - Sta. 13+00 to P.O.E.

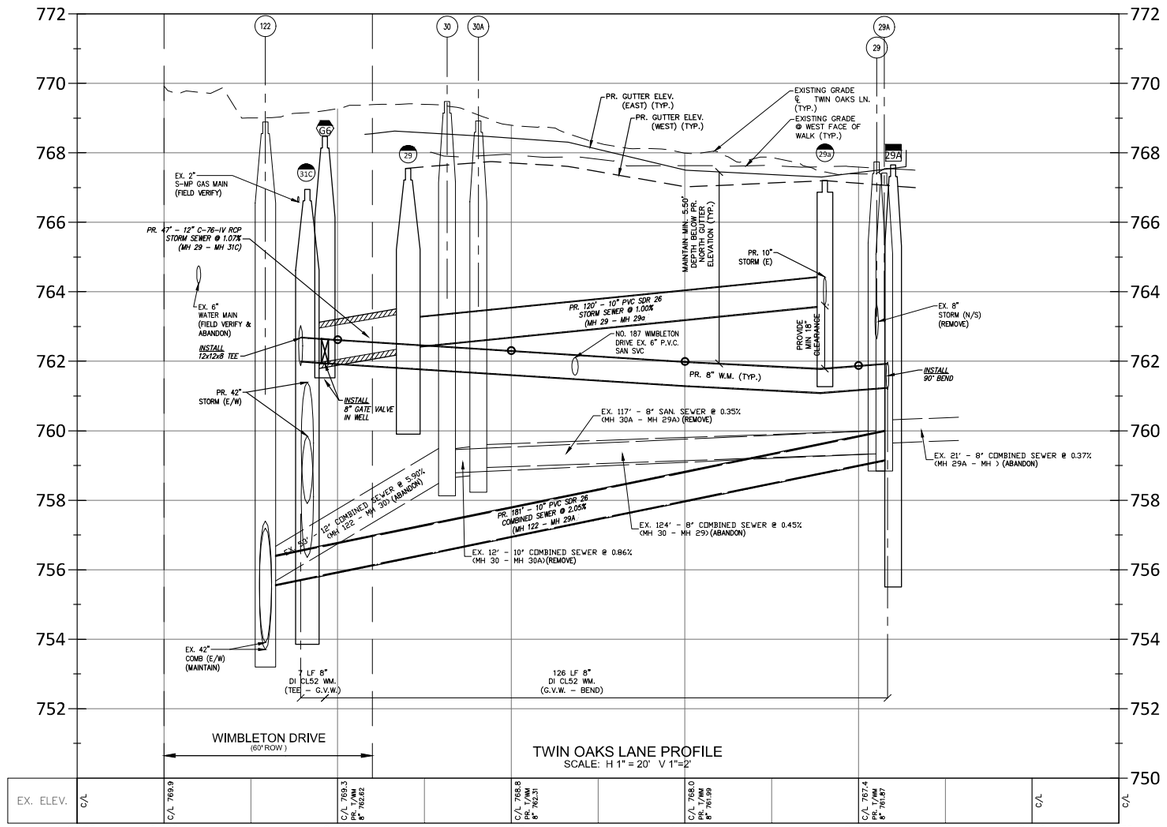
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. O310
SHEET NO. C04

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8B



BY-PASS PUMPING NOTE FOR SEWER CONSTRUCTION:
BY-PASS PUMPING MAY BE REQUIRED FOR SEWER CONSTRUCTION PROPOSED TWIN OAKS LANE, INCLUDING INSTALLATION OF PR. 10" COMBINED SEWER, AND REMOVAL/ABANDONMENT OF EX. 8" AND 12" SEWERS (NEAR INSTALLATION OF PR. WATER MAIN AND 10" COMBINED SEWER). ANY REQUIRED BY-PASS PLUMING IS CONSIDERED CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION, WHICH SHALL BE INCLUDED IN SEWER PAY ITEMS AND NOT PAID FOR SEPARATELY.

DE-WATERING NOTE:
BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

UTILITY CROSSING SCHEDULE

05A EX. 2" GAS B/P 766.02
PR. 12" STM T/P 763.90
VERTICAL CLEARANCE:3.12 FT

05B EX. 2" GAS. B/P 766.22
PR. 10" SAN. T/P 756.72
VERTICAL CLEARANCE:9.50 FT

05C EX. 2" GAS B/P 766.41
PR. 8" W.M. T/P 762.62 FT.
VERTICAL CLEARANCE:3.79 FT

05D PR. 10" STM B/P 763.69
PR. 10" COMB T/P 756.62
EX. 8" SAN T/P 759.95 (REMOVE)
EX. 2" W.M. T/P V.I.F. (ABANDON)
VERTICAL CLEARANCE:4.06 FT

05E PR. 10" STM B/P 763.80
PR. 8" W.M. T/P 761.77
EX. 8" COMB. T/P 759.95 (ABANDON)
VERTICAL CLEARANCE:2.03 FT

05F PR. 10" STM B/P 762.53
EX. 8" COMB. T/P V.I.F (REMOVE)

05G EX. 8" COMB. B/P V.I.F. (REMOVE)
PR. 10" COMB. T/P 757.57

01B (SEE SHEET C01)
01C (SEE SHEET C01)
01D (SEE SHEET C01)
01E (SEE SHEET C01)

SEWER STRUCTURE SCHEDULE

(122) TAP & ADJUST
0+29.22 3.89' N
COMB. MH 122
RIM 769.00
PR. RIM XX
12" INV N 755.50 (REMOVE)
PR. 10" INV N 755.50 (TAP)
42" INV E 753.90 (MAINTAIN)
42" INV W 753.70 (MAINTAIN)

(30) REMOVE
0+81.54 4.80' S
COMB. MH 30
RIM 769.48
8" INV N 758.78 (ABANDON)
12" INV S 758.63 (ABANDON)
10" INV NW 758.63 (REMOVE)

(30A) REMOVE
0+90.54 2.46' N
SANITARY MH 30A
RIM 768.93
8" INV N 758.93 (REMOVE)
10" INV SE 758.73 (REMOVE)
8" INV SW 758.93 (INVESTIGATE / REMOVE)

(29) REMOVE
2+05.23 4.50' S
COMB. MH 29
RIM 767.74
8" INV S. 762.64 (REMOVE)
8" INV. S. 759.34 (ABANDON) (BOTTOM)

(29A) REMOVE & INSTALL NEW 29A
2+07.43 2.74' N
SANITARY MH 29A
RIM 767.64
PR. RIM 767.20
8" INV N 759.64 (RECONNECT TO NEW 29A)
8" INV S 759.34 (REMOVE)

STORM STRUCTURE SCHEDULE

(29a) REMOVE
1+90.14 5.28' S
C.B. BEEHIVE 29a
RIM 767.20
8" INV W 764.60 (REMOVE)
8" INV N 763.95 (REMOVE)

(29b) REMOVE
1+90.56 6.17' N
STORM MH 29b
RIM 767.14
T/DIRT 764.94 (REMOVE)

WATER MAIN SCHEDULE

(GV) PR. 8" GATE VALVE IN WELL
PR. STA. 0+46.36' 5.50' S
PR. RIM. 768.41
PR. T/PIPE 762.60

(HY) HYDRANT & ASSEMBLY
STA. 2+08.40 13.06' S
PR. F.G. 768.15
PR. T/PIPE 762.65

(V) (SEE SHEET C01)

(VB) (SEE SHEET C01)

UTILITY NOTE
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(00) Storm Drainage Structure Schedule

Structure Name	Structure Details
#29 PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 767.55 PR. 10" N. INV. 762.40 PR. 12" SW. INV. 762.40
#29a PR. 4' STORM CATCH BASIN W/ 2' SUMP	PR. RIM 767.20 PR. 10" S. INV. 763.60 PR. 10" E. INV. 763.60
#29b PR. 2' STORM INLET	PR. RIM 767.30 PR. 10" W. INV. 763.80

(00) Combined Sewer Structure Schedule

Structure Name	Structure Details
#29A PR. 4' COMB. MANHOLE (CONSTRUCT ONLINE, RECONNECT EX. OR REPLACEMENT 8" SAN SVC. NORTH INV. 759.64, V.I.F.)	PR. RIM 767.65 PR. 10" S. INV. 759.20

LEGEND

- CLEAN-OUT
- SWR. SVC. (PER VIDEO INSP.)
- MANHOLE COMB SAN
- EXISTING SAN/COMB SEWER
- CWB CWW HYDRANT
- EXISTING WATER MAIN
- RYCB MANHOLE CB END SECTION
- EXISTING STORM SEWER
- ELEC. METER ELEC. ELECTRIC BARRIER TELEPHONE MANHOLE
- EXISTING BURIED CABLES
- GAS METER GAS GAS BARRIER GAS VALVE
- EXISTING GAS MAIN
- UTILITY POLE LIGHT POLE STRAIN 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
- PR. FULL-DEPTH ASPH. (3" HMA ON 8" 21AA)
- PUMP
- SIGN
- POST/BOLLARD
- PR. BITUMINOUS CAPESEAL
- PARKING METER
- MAIL BOX
- PR. 18" MD. CONC. CURB & GUTTER
- ROCK/BOULDER
- SPRINKLER VALVE BOX
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
- SPRINKLER HEAD
- FOUND PROPERTY MARKER
- ×000.00 GROUND ELEVATION

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SEAL
STATE OF MICHIGAN
PAUL TULIKANGAS
ENGINEER NO. 0579929
LICENSED PROFESSIONAL ENGINEER

PROJECT
City of Birmingham
Wimbleton Drive
Paving Project
Contract #6-25(W)

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151 Martin Street
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PROJECT LOCATION
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Oakland County, Michigan

SHEET
Utility Plan - Twin Oaks Lane - P.O.B. to P.O.E.

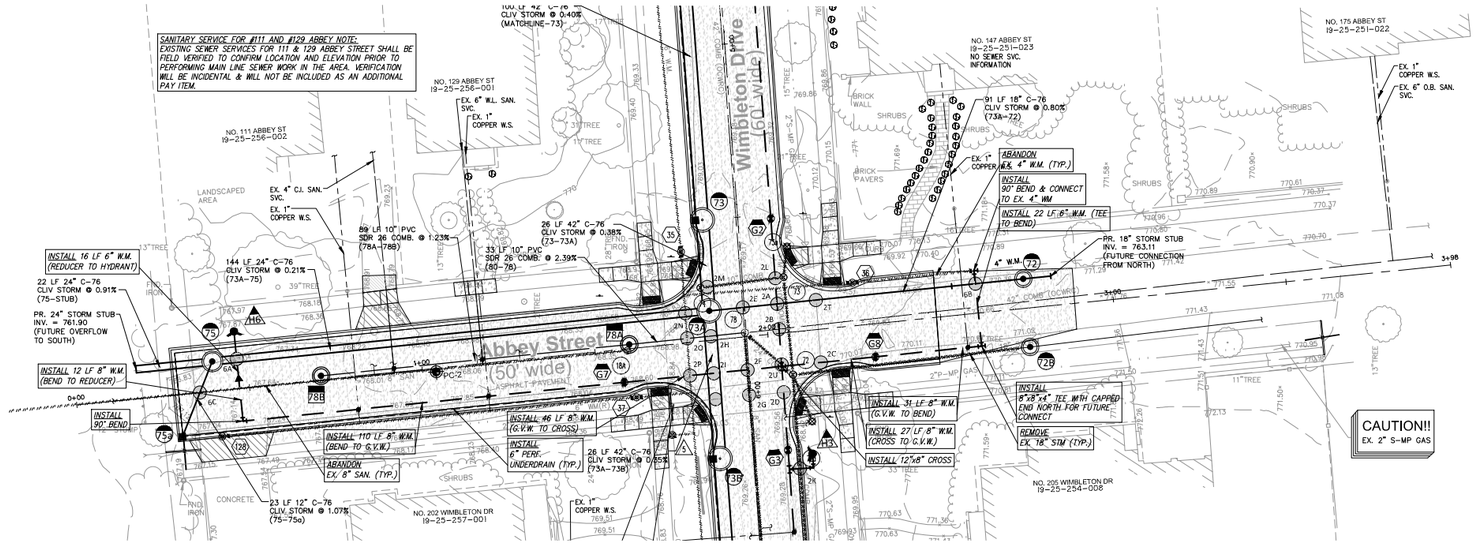
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. O310
SHEET NO. C05

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UTILITY CROSSING SCHEDULE

06A	PR. 18" STM B/P 762.06 PR. 6" W.M. T/P 760.50 VERTICAL CLEARANCE:1.56 FT	02H	(SEE SHEET C02)
06B	PR. 18" STM B/P 762.94 PR. 8" W.M. T/P 761.25 VERTICAL CLEARANCE:1.69 FT	02I	(SEE SHEET C02)
		02J	(SEE SHEET C02)
06C	PR. 12" STM B/P 762.35 EX. 8" SAN. T/P V.I.F. (ABANDON)	02K	(SEE SHEET C02)
		02L	(SEE SHEET C02)
02A	(SEE SHEET C02)	02M	(SEE SHEET C02)
02B	(SEE SHEET C02)	02N	(SEE SHEET C02)
02C	(SEE SHEET C02)	02O	(SEE SHEET C02)
02D	(SEE SHEET C02)	02P	(SEE SHEET C02)
02E	(SEE SHEET C02)	02T	(SEE SHEET C02)
02F	(SEE SHEET C02)	02U	(SEE SHEET C02)
02G	(SEE SHEET C02)		

WATER MAIN SCHEDULE

128 REMOVE WELL (IF PRESENT) & ABANDON VALVE (INC.)
0+40.74 13.30'S
STOP BOX 128 767.09'

18 HYDRANT & ASSEMBLY
STA. 0+47.17 16.60' R
PR. F.G. 768.15
PR. T/PIPE 762.15

67 PR. 8" GATE VALVE IN WELL
PR. STA. 1+57.48' 8.50' E
PR. RIM. 769.25
PR. T/PIPE 759.40

78 PR. 8" GATE VALVE IN WELL
PR. STA. 2+30.19' 9.50' E
PR. RIM. 769.23
PR. T/PIPE 761.65

Storm Drainage Structure Schedule

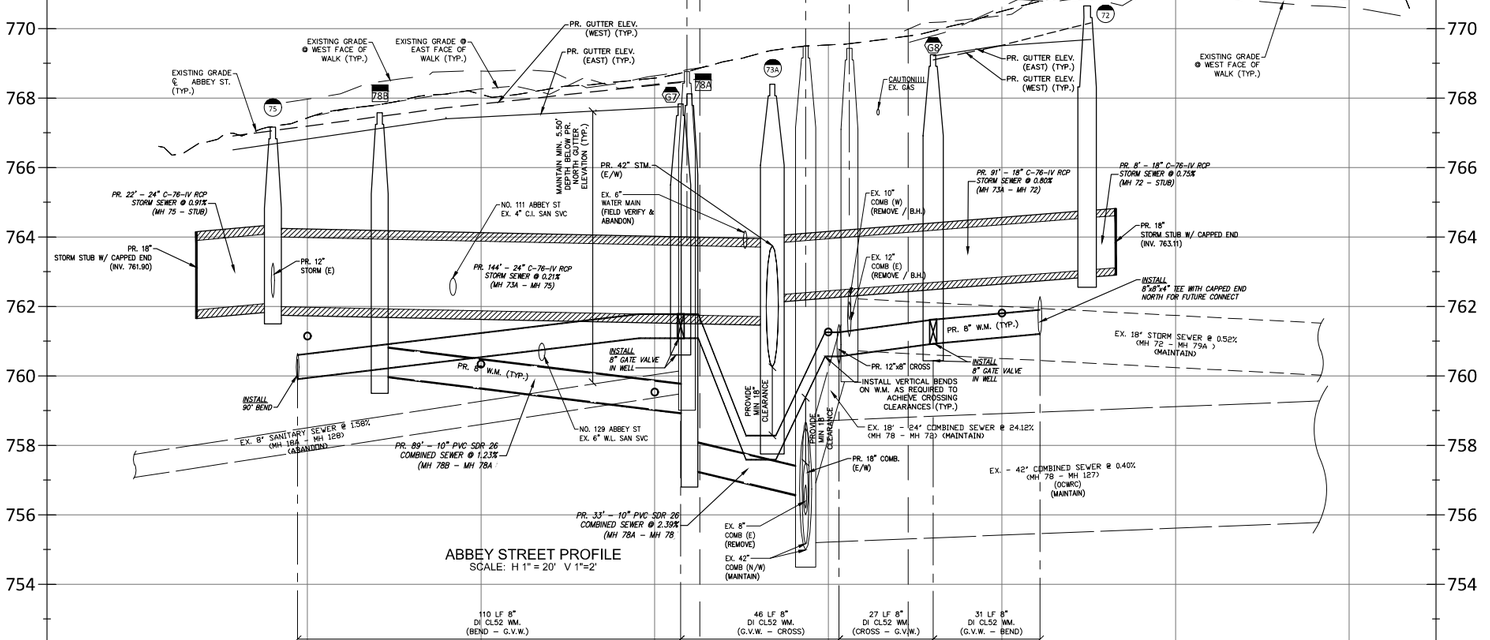
Structure Name	Structure Details
#72 PR. 4' STORM MANHOLE	PR. RIM 770.65 PR. 18" S. INV. 763.05 PR. 18" N. INV. 763.05
#72B PR. 4' DIA. STORM MANHOLE (CONSTRUCT ONLINE & RECONNECT EX. 18" STM NORTH INV. 760.35, V.I.F.)	PR. RIM 771.05
#75 PR. 5' STORM MANHOLE W/ 2' SUMP	PR. RIM 767.16 PR. 24" N. INV. 762.00 PR. 12" E. INV. 762.25 PR. 24" S. INV. 762.10
#75a PR. 2' STORM INLET	PR. RIM 766.50 PR. 12" W. INV. 762.50

Combined Sewer Structure Schedule

Structure Name	Structure Details
#78A PR. 4' COMB. MANHOLE	PR. RIM 768.12 PR. 10" S. INV. 758.90 PR. 10" N. INV. 757.30
#78B PR. 4' COMB. MANHOLE	PR. RIM 767.58 PR. 10" N. INV. 760.00

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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. 4" CONC. SIDEWALK OR DRIVE APPROACH
- PR. 4" CONC. SIDEWALK
- PR. FULL-DEPTH ASPH. (3" HMA ON 8" 21AA)
- PR. BITUMINOUS CAPSEAL
- 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
x000.00 GROUND ELEVATION

DE-WATERING NOTE:
BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FURNISHED BY G2 CONSULTING GROUP, DE-WATERING MEASURES SUCH AS PUMPING AND/OR INSTALLATION OF WELL POINT SYSTEM, MAY BE REQUIRED IN SPECIFIC LOCATIONS TO MAINTAIN STABLE EXCAVATIONS FOR DEEP UTILITY INSTALLATIONS. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE DE-WATERING MEASURES TO BE USED AS REQUIRED BASED ON FIELD CONDITIONS. COSTS ASSOCIATED WITH NECESSARY DE-WATERING MEASURES SHALL BE INCLUDED IN CONTRACT PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

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PROJECT

City of Birmingham
Wimbleton Drive
Paving Project
Contract #6-25(W)

CLIENT

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SHEET

Utility Plan - Abbey Street - P.O.B. to P.O.E.

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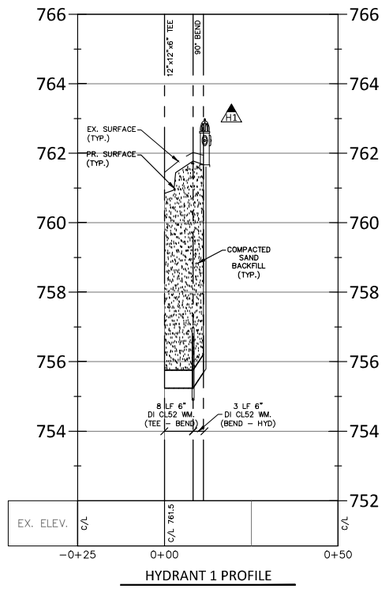
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

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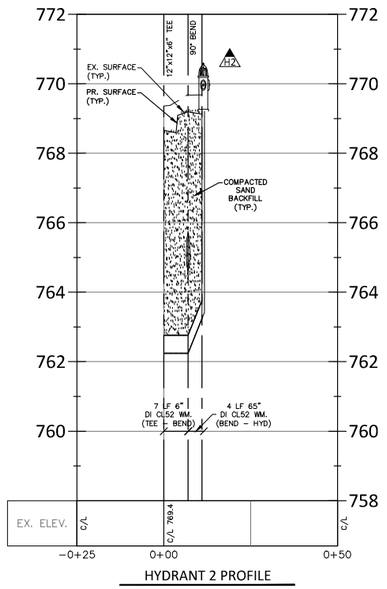
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SHEET NO. C06

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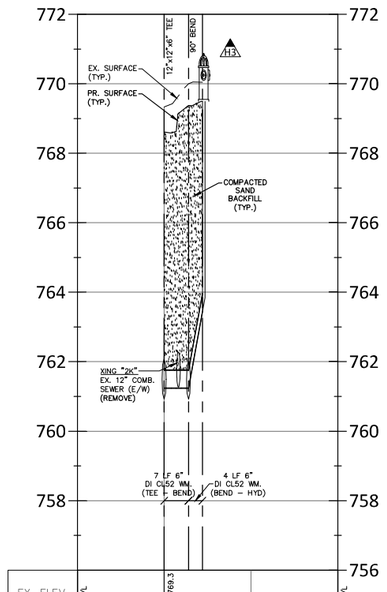
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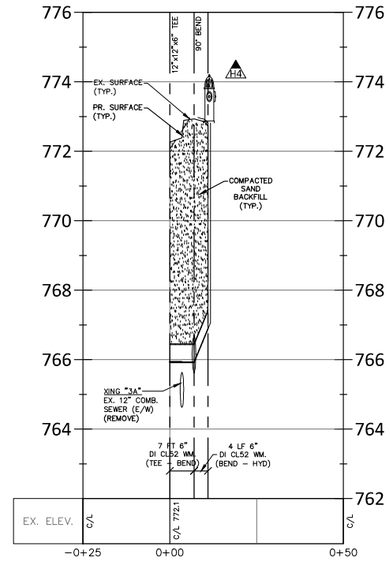
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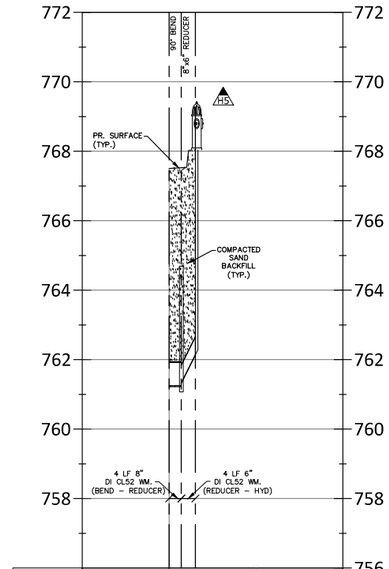
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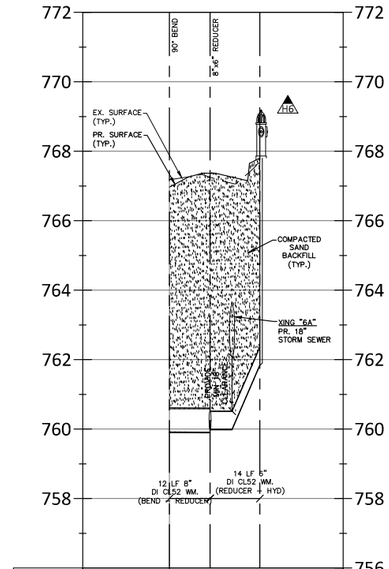
HYDRANT 3 PROFILE



HYDRANT 4 PROFILE



HYDRANT 5 PROFILE



HYDRANT 6 PROFILE

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SHEET

Watermain Hydrant Profiles

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APPROVED BY: P. Tulikangas

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NFE JOB NO. O310

SHEET NO. C07

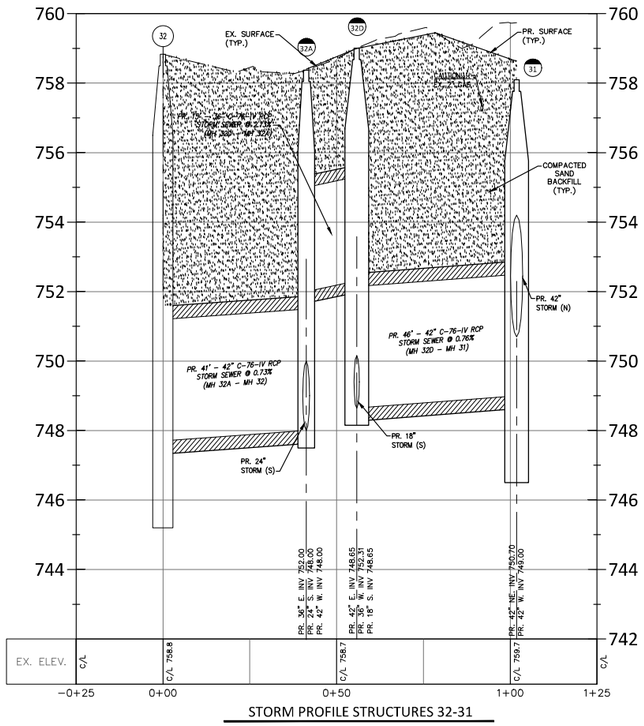
UTILITY NOTE

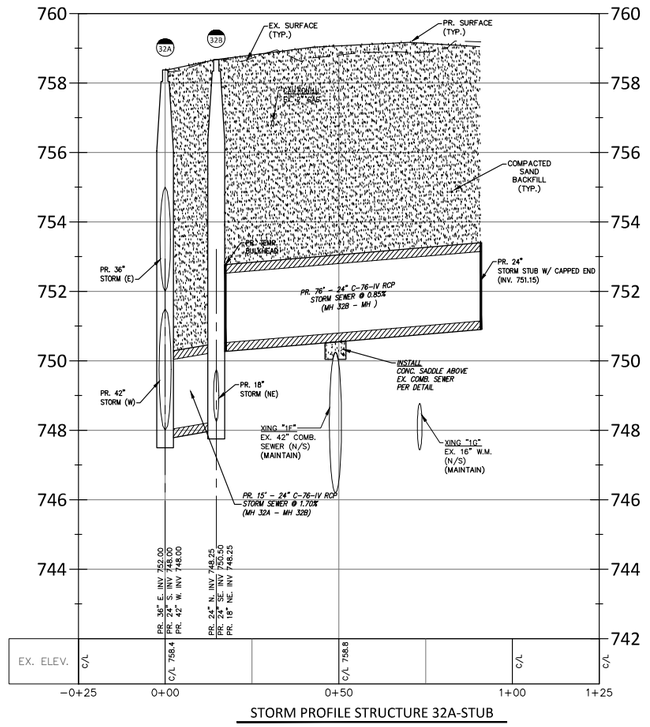
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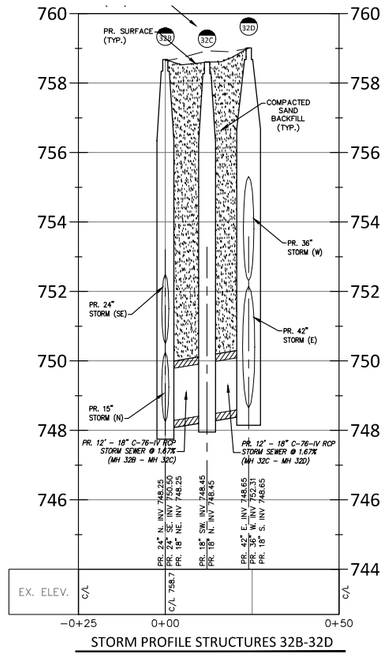
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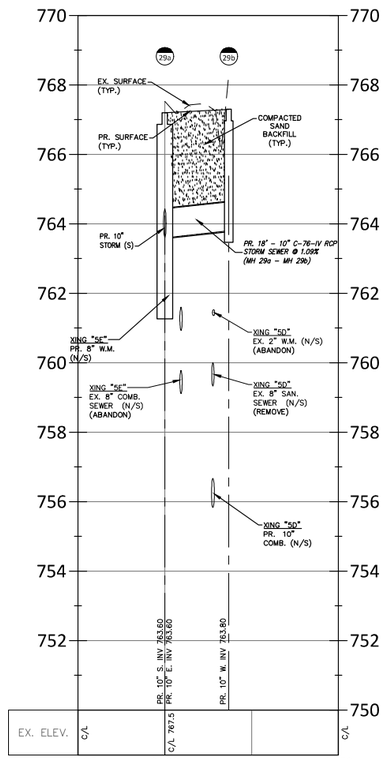
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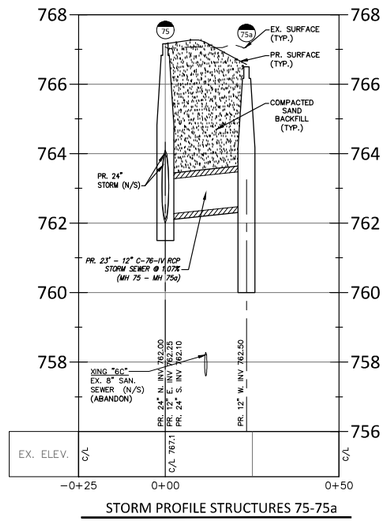
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SHEET
Sewer Profiles (1 of 2)

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DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C08

UTILITY NOTE

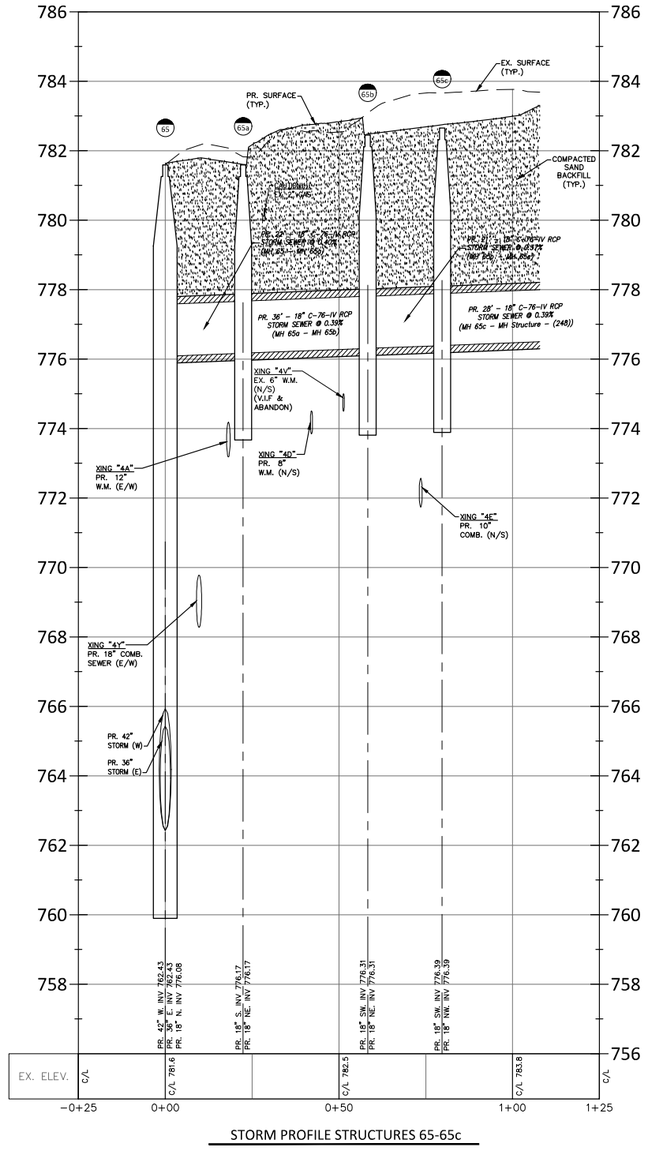
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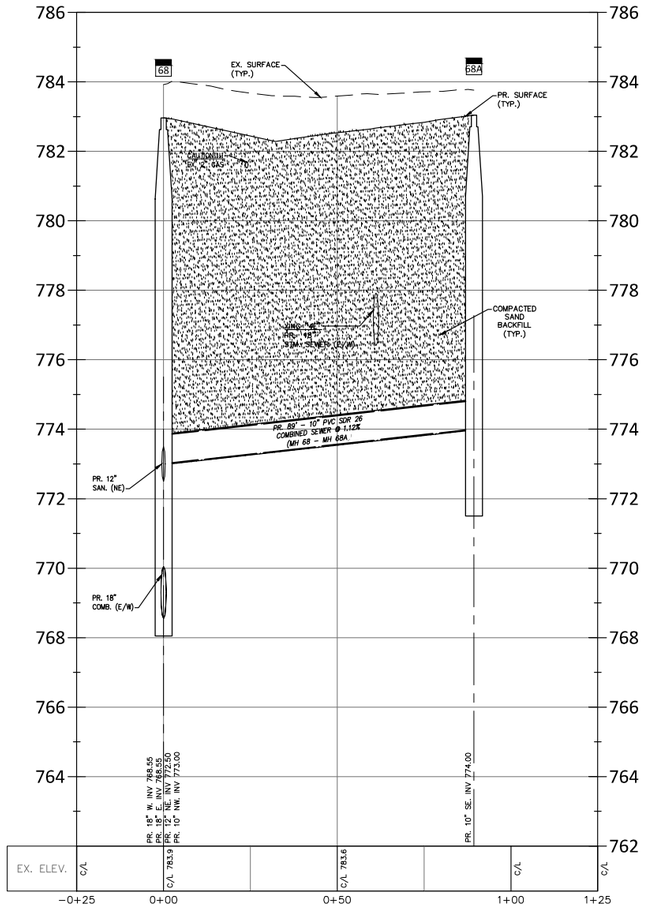
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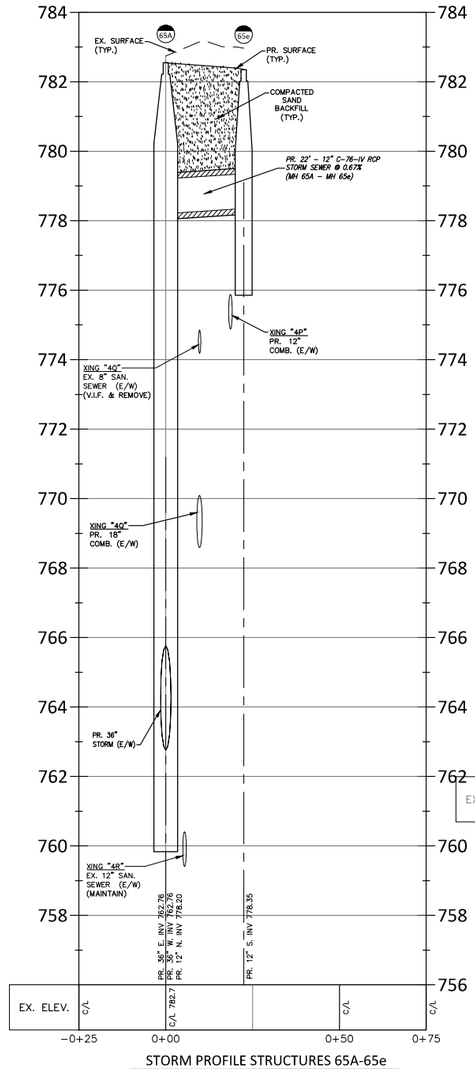
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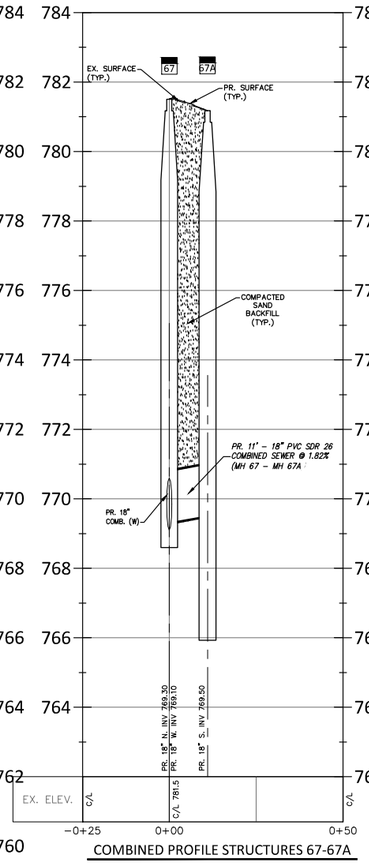
8B

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SHEET

Sewer Profiles (2 of 2)

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DRAWN BY: L. Gross

DESIGNED BY: P. Tulikangas

APPROVED BY: P. Tulikangas

DATE: February 20, 2025

SCALE: 1" = 20' / 1"=2'

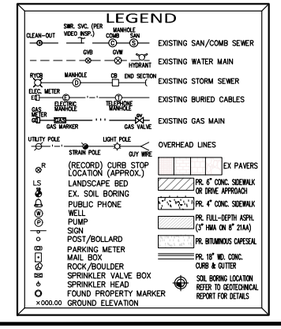
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NFE JOB NO. O310

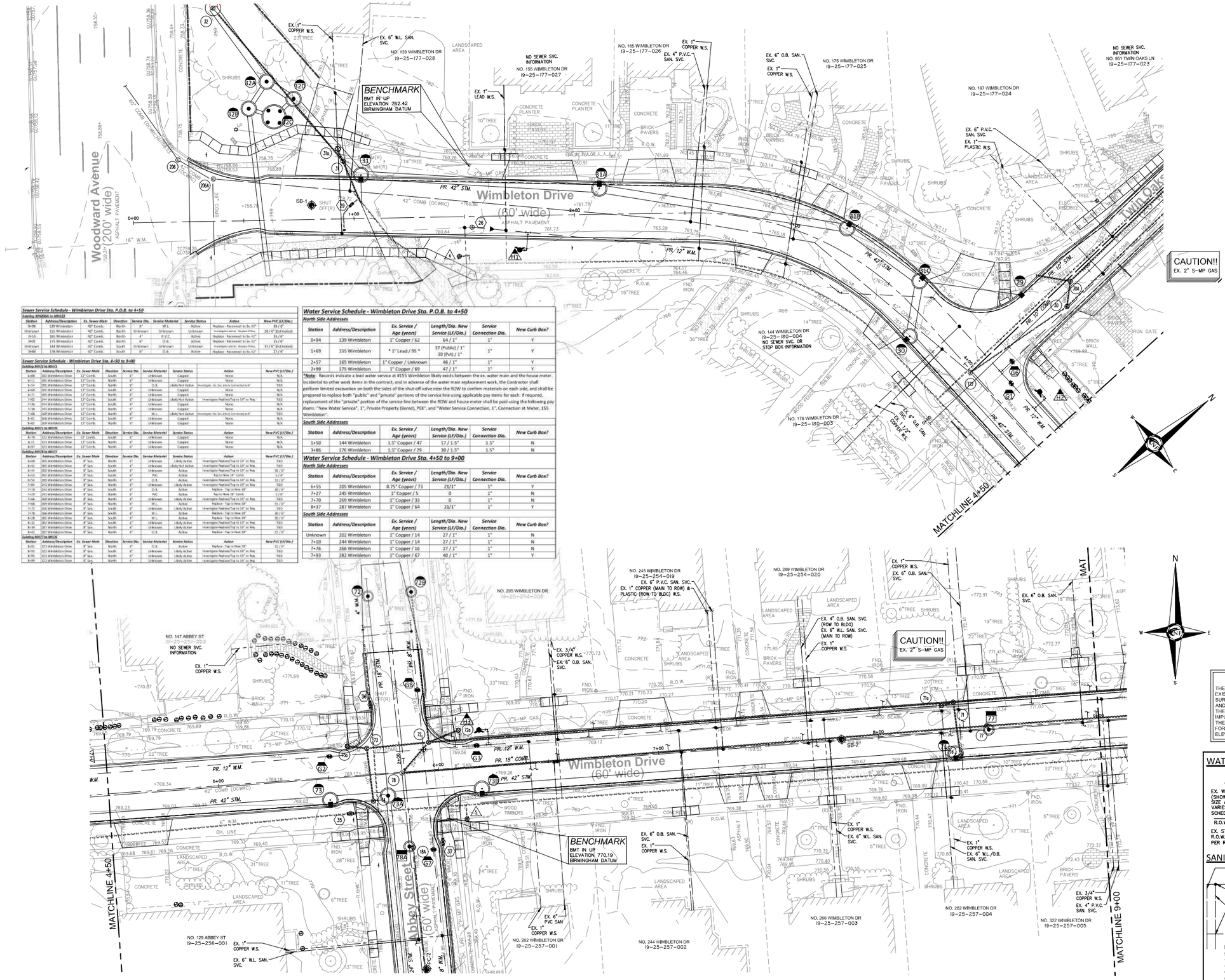
SHEET NO. C09

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.



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Sewer Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+50

Existing MH2044 to MH122

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+98	139 Wimbleton	42" Comb.	North	8"	W.L.	Active	Replace - Reconnect to Ex. 42"	35 / 6"
Unknown	155 Wimbleton	42" Comb.	North	Unknown	Unknown	Unknown	Investigate Lateral - Replace if Req.	28 / 6" (Estimated)
2+55	165 Wimbleton	42" Comb.	North	4"	P.V.C.	Active	Replace - Reconnect to Ex. 42"	35 / 6"
3+01	175 Wimbleton	42" Comb.	North	6"	O.B.	Active	Replace - Reconnect to Ex. 42"	35 / 6"
Unknown	144 Wimbleton	42" Comb.	South	Unknown	Unknown	Unknown	Investigate Lateral - Replace if Req.	35 / 6" (Estimated)
3+88	176 Wimbleton	42" Comb.	South	6"	O.B.	Active	Replace - Reconnect to Ex. 42"	37 / 6"

Sewer Service Schedule - Wimbleton Drive Sta. 4+50 to 9+00

Existing MH72 to MH73

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
4+08	202 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
4+11	205 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
4+54	205 Wimbleton Drive	12" Comb.	North	6"	O.B.	Likely Not Active	Investigate - Ex. Svc Likely Connected to MH	TBD
4+69	200 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
4+71	205 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
5+02	244 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Not Active	Investigate - Replace/Tap to 18" as Req.	TBD
5+36	244 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
5+38	245 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
5+68	260 Wimbleton Drive	12" Comb.	North	6"	W.L.	Likely Not Active	Investigate - Ex. Svc Likely Connected to MH	TBD
8+01	266 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
8+02	269 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A

Existing MH72 to MH70

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+70	321 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
8+72	323 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
8+97	323 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A

Existing MH73 to MH77

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
6+40	205 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
6+52	200 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Not Active	Investigate - Replace/Tap to 18" as Req.	TBD
6+44	202 Wimbleton Drive	8" San.	South	6"	Unknown	Active	Investigate - Replace/Tap to 18" as Req.	30 / 6"
6+53	202 Wimbleton Drive	8" San.	South	6"	PVC	Active	Tap to New 18" Comb.	5 / 6"
6+54	205 Wimbleton Drive	8" San.	North	6"	O.B.	Active	Investigate - Replace/Tap to 18" as Req.	31 / 6"
7+04	245 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
7+10	244 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"
7+29	245 Wimbleton Drive	8" San.	North	6"	PVC	Active	Tap to New 18" Comb.	5 / 6"
7+66	269 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
7+68	269 Wimbleton Drive	8" San.	North	6"	W.L.	Active	Replace - Tap to New 18"	31 / 6"
7+73	266 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
7+76	266 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	30 / 6"
8+08	282 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	30 / 6"
8+32	282 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
8+99	282 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD

Existing MH72 to MH76

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
8+92	323 Wimbleton Drive	8" San.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
8+93	321 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
8+95	323 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD
8+99	323 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate - Replace/Tap to 18" as Req.	TBD

Water Service Schedule - Wimbleton Drive Sta. P.O.B. to 4+50

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+94	139 Wimbleton	1" Copper / 62	64 / 1"	1"	Y
1+69	155 Wimbleton	* 1" Lead / 95 *	37 (Public) / 1" 30 (Pvt) / 1"	1"	Y
2+57	165 Wimbleton	1" Copper / Unknown	46 / 1"	1"	Y
2+99	175 Wimbleton	1" Copper / 69	47 / 1"	1"	Y

***Note**: Records indicate a lead water service at #155 Wimbleton likely exists between the ex. water main and the house meter. Incidental to other work items in the contract, and in advance of the water main replacement work, 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, 155 Wimbleton".

South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
1+50	144 Wimbleton	1.5" Copper / 47	17 / 1.5"	1.5"	N
3+86	176 Wimbleton	1.5" Copper / 29	30 / 1.5"	1.5"	N

Water Service Schedule - Wimbleton Drive Sta. 4+50 to 9+00

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
6+55	205 Wimbleton	0.75" Copper / 73	21/1"	1"	Y
7+27	245 Wimbleton	1" Copper / 5	0	1"	N
7+70	269 Wimbleton	1" Copper / 33	0	1"	N
8+37	287 Wimbleton	1" Copper / 64	21/1"	1"	Y

South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
Unknown	202 Wimbleton	1" Copper / 14	27 / 1"	1"	N
7+10	244 Wimbleton	1" Copper / 14	27 / 1"	1"	N
7+76	266 Wimbleton	1" Copper / 16	27 / 1"	1"	N
7+93	282 Wimbleton	1" Copper / 67	40 / 1"	1"	Y

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
Paving Project
Contract #6-25(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

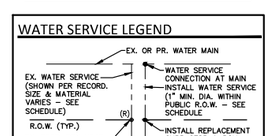
SHEET
Utility Service Plan -
P.O.B. to Sta. 9+00

811
Know what's below
Call before you dig.

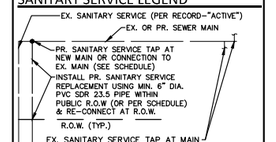
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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

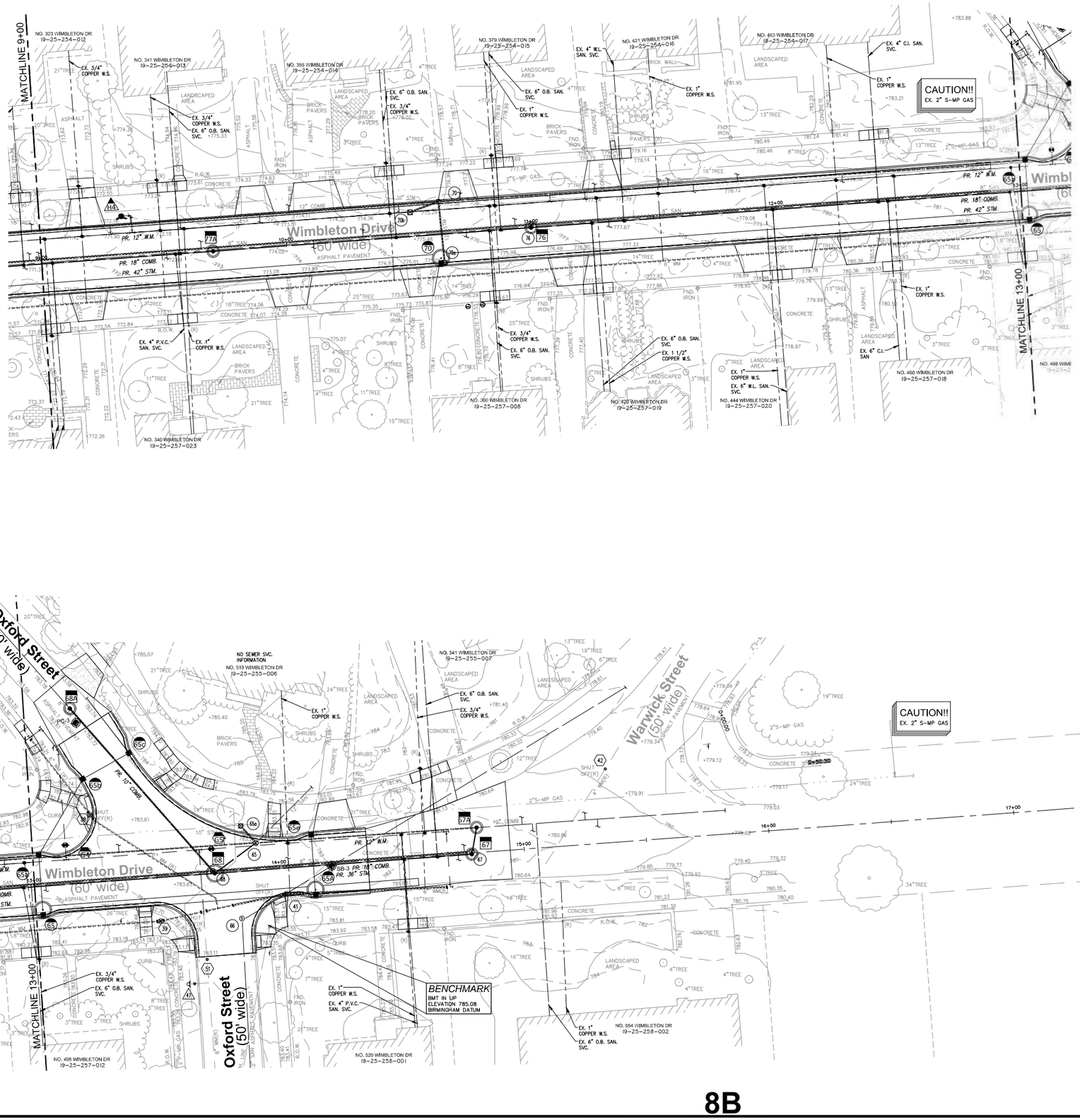
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

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NFE JOB NO. O310
SHEET NO. C10

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Sewer Service Schedule - Wimbleton Drive Sta. 9+00 to 13+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Existing MH/Tr to MH/Tr								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
9+29	340 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
9+38	341 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
9+57	341 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
9+58	340 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Not Active	Investigate-Replace/Tap to 18" as Req.	TBD
9+91	340 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
10+02	355 Wimbleton Drive	12" Comb.	North	6"	Unknown	Likely Not Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+45	355 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
10+47	380 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
Existing MH/Tr to MH/Tr								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
10+72	379 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
10+88	379 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	31 / 6"
11+08	420 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
11+23	420 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+27	421 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
11+53	421 Wimbleton Drive	12" Comb.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+67	421 Wimbleton Drive	12" Comb.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+67	444 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
11+85	463 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
12+28	460 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
12+42	463 Wimbleton Drive	12" Comb.	North	4"	C.I.	Active	Replace - Tap to New 18"	31/ 6"
12+88	496 Wimbleton Drive	12" Comb.	South	6"	Unknown	Capped	None	N/A
Existing MH/Tr to MH/Tr								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
9+04	322 Wimbleton Drive	8" San.	South	4"	PVC	Active	Replace - Tap to New 18"	30 / 6"
9+51	340 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
9+65	341 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+11	340 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+31	355 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+73	380 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
10+83	380 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"
10+93	379 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
Existing MH/Tr to MH68								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
11+25	420 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"
11+32	420 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
11+99	444 Wimbleton Drive	8" San.	South	6"	W.L.	Active	Replace - Tap to New 18"	30 / 6"
12+46	460 Wimbleton Drive	8" San.	South	6"	C.I.	Active	Replace - Tap to New 18"	30 / 6"
12+99	498 Wimbleton Drive	8" San.	South	6"	O.B.	Active	Replace - Tap to New 18"	30 / 6"

Sewer Service Schedule - Wimbleton Drive Sta. 13+00 to P.O.E.

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Existing MH/Tr to MH65								
13+35	519 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
13+78	519 Wimbleton Drive	12" Comb.	North	6"	Unknown	Capped	None	N/A
Existing MH66 to MH61								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
14+51	520 Wimbleton Drive	12" Comb.	South	4"	PVC	Active	Replace - Tap to New 18"	30 / 6"
14+64	541 Wimbleton Drive	12" Comb.	North	6"	O.B.	Active	Replace - Tap to New 18"	38 / 6"
Existing MH/Tr to MH68								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
13+05	498 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
Existing MH68 to MH67								
Station	*Address/Description*	*Ex. Sewer Main*	*Direction*	*Service Dia.*	*Service Material*	*Service Status*	*Action*	*New PVC (LF/Dia.)*
14+04	519 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
14+73	554 Wimbleton Drive	8" San.	South	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD
14+76	541 Wimbleton Drive	8" San.	North	6"	Unknown	Likely Active	Investigate-Replace/Tap to 18" as Req.	TBD

Water Service Schedule - Wimbleton Drive Sta. 9+00 to 13+00

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
9+17	323 Wimbleton	0.75" Copper / 73	21/1"	1"	Y
9+43	341 Wimbleton	0.75" Copper / 75	21/1"	1"	Y
10+43	355 Wimbleton	0.75" Copper / 69	23/1"	1"	Y
10+86	379 Wimbleton	1" Copper / 63	21/1"	1"	Y
11+53	421 Wimbleton	1" Copper / 5	0	1"	N
12+25	463 Wimbleton	1" Copper / 33	0	1"	N

South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
9+02	322 Wimbleton	0.75" Copper / 72	40 / 1"	1"	Y
9+59	340 Wimbleton	1" Copper / 36	28 / 1"	1"	N
10+84	380 Wimbleton	0.75" Copper / 67	40 / 1"	1"	Y
11+27	420 Wimbleton	1.5" Copper / 24	28 / 1.5"	1.5"	N
11+96	444 Wimbleton	1" Copper / 38	28 / 1"	1"	N
12+49	460 Wimbleton	1" Copper / 4	28 / 1"	1"	N
13+08	498 Wimbleton	0.75" Copper / 72	40 / 1"	1"	Y

Water Service Schedule - Wimbleton Drive Sta. 13+00 to P.O.E.

North Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
14+04	519 Wimbleton	1" Copper / 5	0	1"	N
14+59	541 Wimbleton	0.75" Copper / 46	27/1"	1"	Y

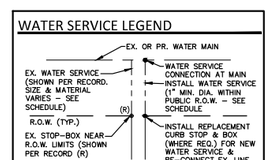
South Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
14+51	520 Wimbleton	1" Copper / 69	40 / 1"	1"	Y

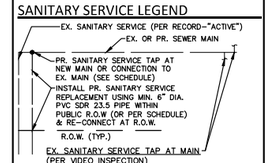
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WATER SERVICE LEGEND



SANITARY SERVICE LEGEND



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
Paving Project
Contract #6-25(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.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

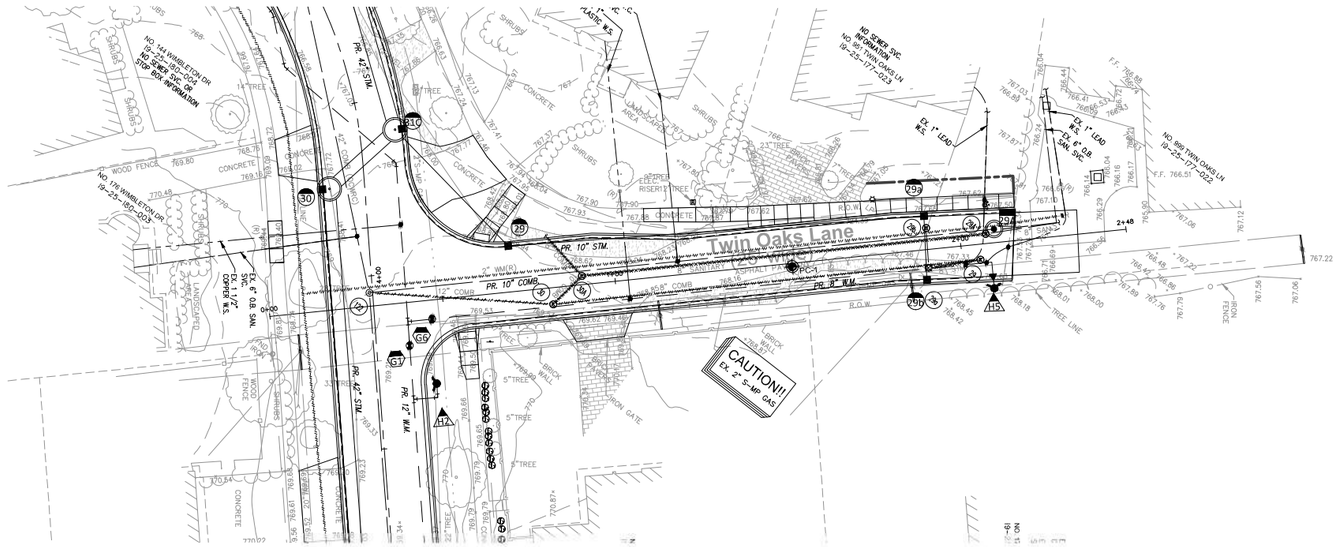
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

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NFE JOB NO. O310
SHEET NO. C11

8B

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Sewer Service Schedule - Twin Oaks Lane Sta. P.O.B. to P.O.E.

Existing MH18A to MH29B

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
1+59	187 Wimbleton	8" San.	West	6"	P.V.C.	Active	Tap new 10" Comb.	5 / 6"
Unknown	951 Twin Oaks	Unknown	West	Unknown	D.B.	Active	Investigate Lateral - Replace 10" Comb.	30 / 6" (Estimated)
2+08	999 Twin Oaks	8" San.	West	6"	D.B.	Active	Verify Lateral - Extend & Replace 10" Comb.	20 / 6"

Sewer Service Schedule - Abbey Street Sta. P.O.B. to P.O.E.

Existing MH18A to MH22

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
0+92	111 Abbey	8" San.	West	4"	C.I.	Active	Replace - Tap to New 10"	24 / 6"
1+18	129 Abbey	8" San.	West	6"	W.I.	Active	Replace - Tap to New 10"	24 / 6"

Existing MH29 to MH22

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
Unknown	147 Abbey	42" Comb.	West	Unknown	Unknown	Unknown	Investigate Lateral - Replace if Req.	24 / 6" (Estimated)

Water Service Schedule - Twin Oaks Lane Sta. P.O.B. to P.O.E.

West Side Addresses

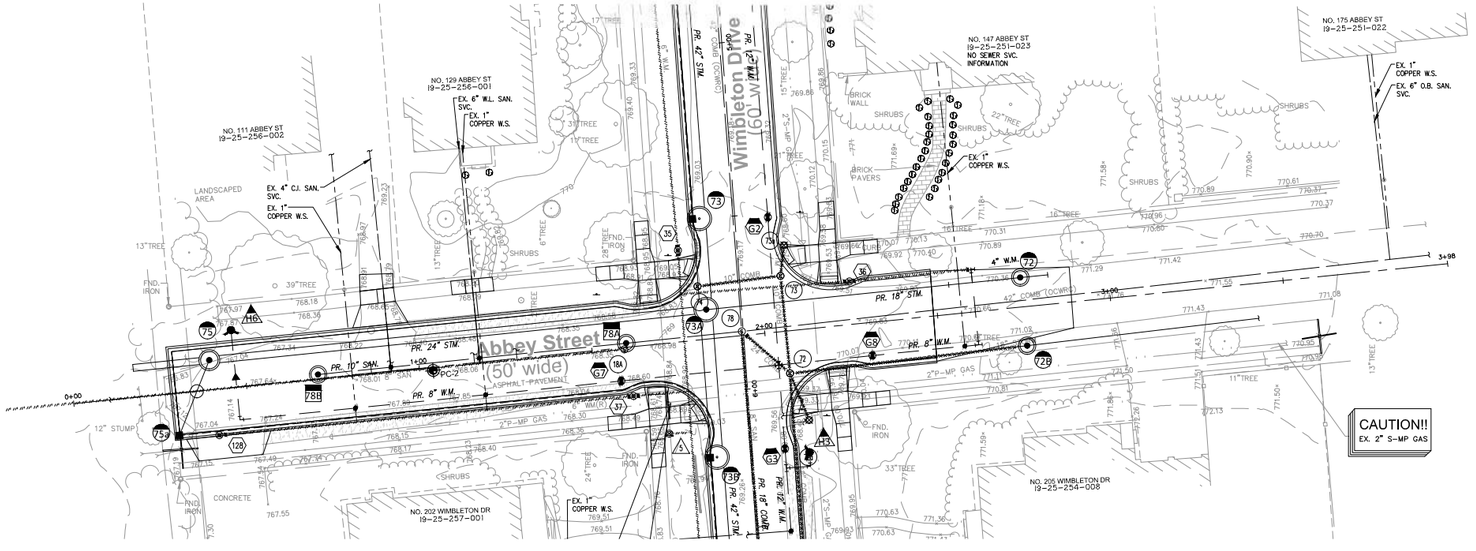
Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
1+04	187 Wimbleton	1" PEX / 6	11 / 1" (PEX)	1"	N
2+06	951 Twin Oaks	" 1" Lead / 77 "	21 (Public) / 1" 40 (Pvt.) / 1"	1"	Y
2+08	999 Twin Oaks	" 1" Lead / 70 "	8 (Public) / 1" 65 (Pvt.) / 1"	1"	Y

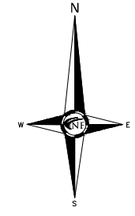
Note: Records indicate that lead water services at 4951 & 4999 Twin Oaks Lane likely exist between the ex. water main and the house meter. Incidental to other work items in the contract, and in advance of the water main replacement work, the Contractor shall perform limited excavation on both the sides 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 mater shall be paid using the following pay items: "New Water Service", 1", Private Property (Bored), PEX", and "Water Service Connection, 1", Connection at Meter, 951 (or 999) Twin Oaks".

Water Service Schedule - Abbey Street Sta. P.O.B. to P.O.E.

West Side Addresses

Station	Address/Description	Ex. Service / Age (years)	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
0+81	111 Abbey	1" Copper / 4	0	1"	N
1+69	129 Abbey	1" Copper / 57	0	1"	N
2+57	147 Abbey	1" Copper / 45	46 / 1"	1"	Y



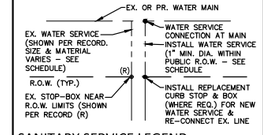


SANITARY SERVICE NOTE:
EXISTING SEWER SERVICES FOR 111 & 129 ABBEY STREET SHALL BE FIELD VERIFIED TO CONFIRM LOCATION AND ELEVATION PRIOR TO PERFORMING MAIN LINE SEWER WORK IN THE AREA. VERIFICATION WILL BE INCIDENTAL & WILL NOT BE INCLUDED AS AN ADDITIONAL PAY ITEM.

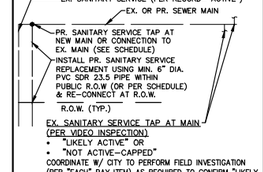
UTILITY NOTE

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



NF ENGINEERS
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LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
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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
Paving Project
Contract #6-25(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 - Twin Oaks Lane & Abbey Street

811 Know what's below Call before you dig.

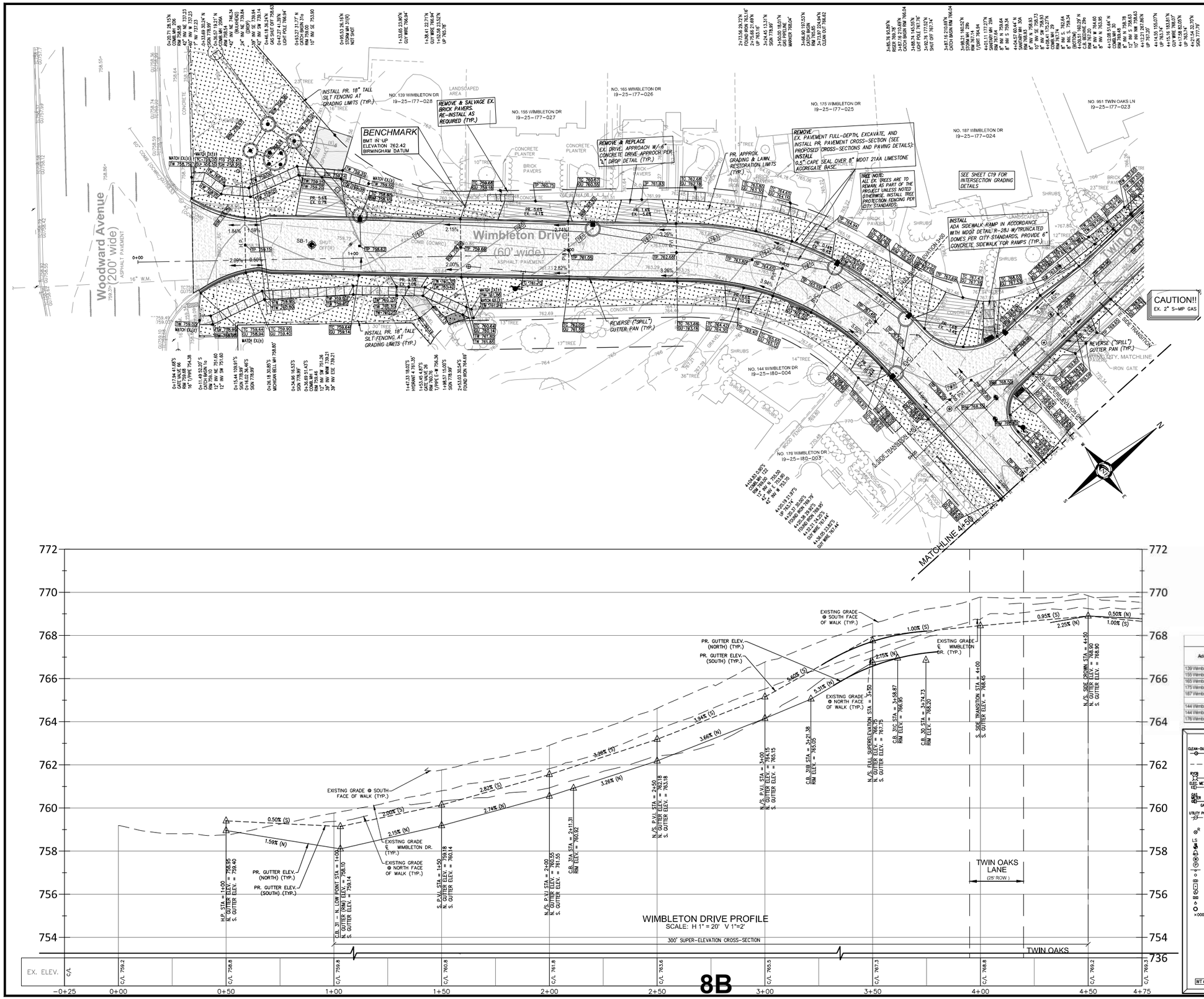
DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. O310
SHEET NO. C12

8B

\2020-2000 Files\2000-FILES\2010\Office\Construction Documents\2010_UTL.dwg 3/5/2025 8:49 AM



Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
139 Wimbleton	17.6	23.6	18.1	41.3	1.5
155 Wimbleton	28.5	34.5	9.0	31.6	1.5
165 Wimbleton	18.9	24.6	10.7	25.7	1.5
175 Wimbleton	10.0	16.0	11.2	16.2	1.5
187 Wimbleton	15.9	23.4	22.4	42.5	1.5
144 Wimbleton (S/W)	11.4	17.4	5.0	8.0	1.5
144 Wimbleton (N/E)	11.7	17.7	10.0	16.5	1.5
176 Wimbleton	10.3	16.3	11.1	16.2	1.5

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. (7" HMA ON 6" 21AA)
- PR. BITUMINOUS OVERSEAL
- PR. 18" NO. CONC. CURB & GUTTER
- SOIL BORING LOCATION REFER TO GEOTECHNICAL REPORT FOR DETAILS
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- 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 and Grading - Wimbleton - P.O.B. to Sta. 4+50

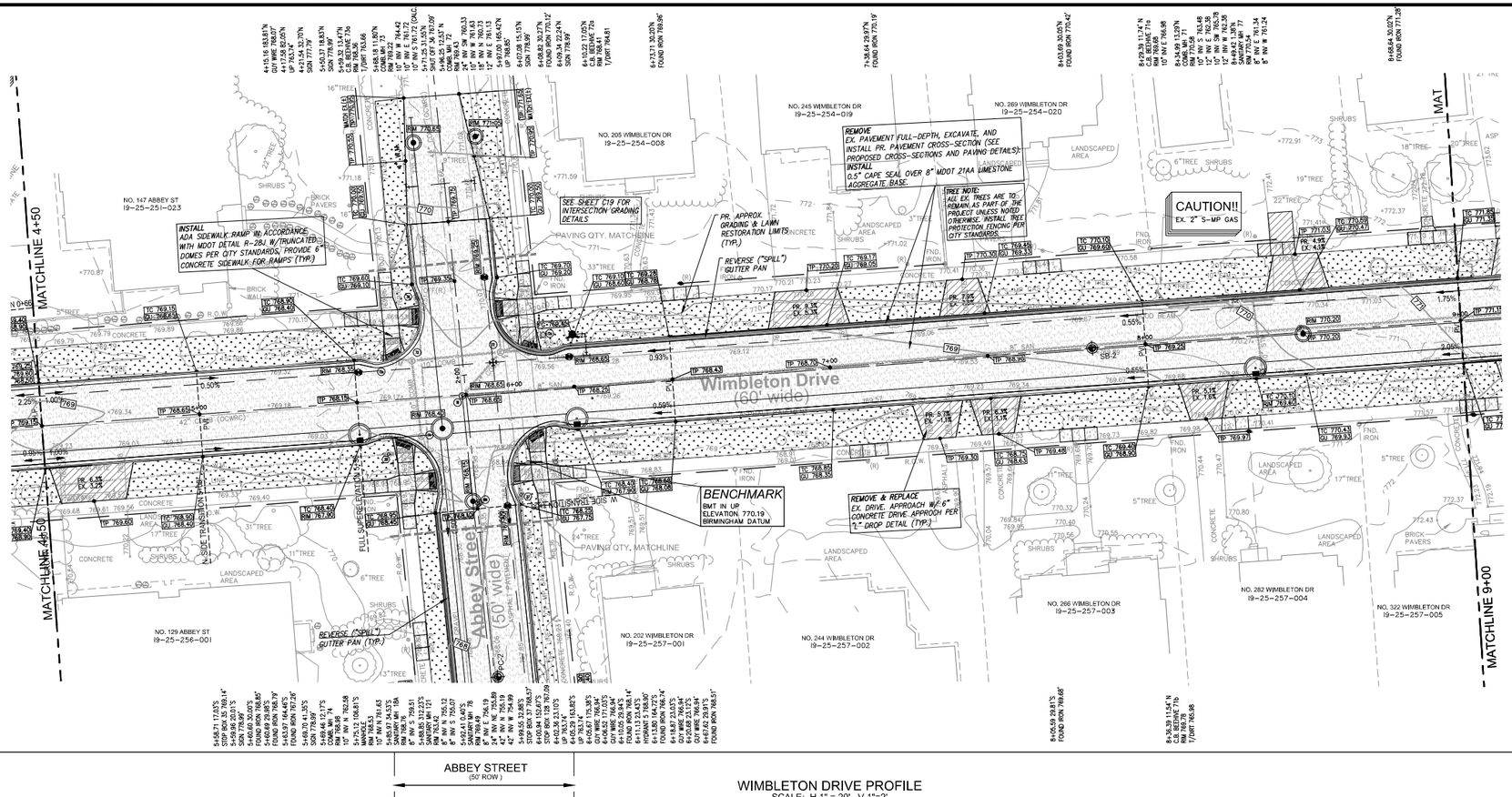
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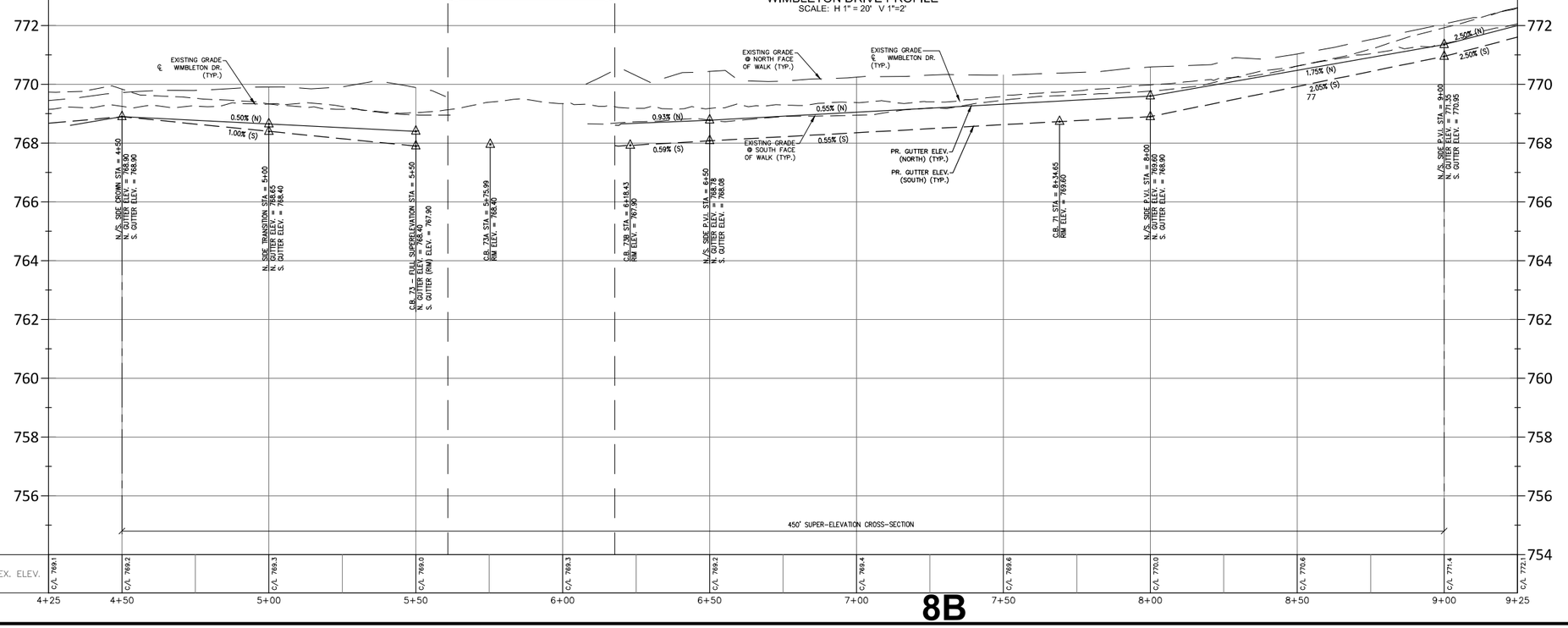
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APPROVED BY: P. Tulikangas
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SCALE: 1" = 20' / 1"=2'

NFE JOB NO. 0310
SHEET NO. C13

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Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
245 Wimbleton	19.9	25.9	11.4	29.0	1.5
269 Wimbleton	10.0	16.0	11.2	16.2	1.5
287 Wimbleton	13.9	19.9	11.4	29.6	1.5
129 Abbey	20.5	26.5	11.4	29.8	1.5
224 Wimbleton	10.0	16.0	11.4	16.5	1.5
266 Wimbleton	10.2	16.2	11.4	16.8	1.5
282 Wimbleton	10.0	16.0	11.6	16.8	1.5

LEGEND

- EXISTING SAN./COMB. SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING BURIED CABLES
- EXISTING GAS MAIN
- OVERHEAD LINES
- EX. PAVERS
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- PR. BITUMINOUS CAPESEAL
- PR. 18" NO. CONC. CURB & GUTTER
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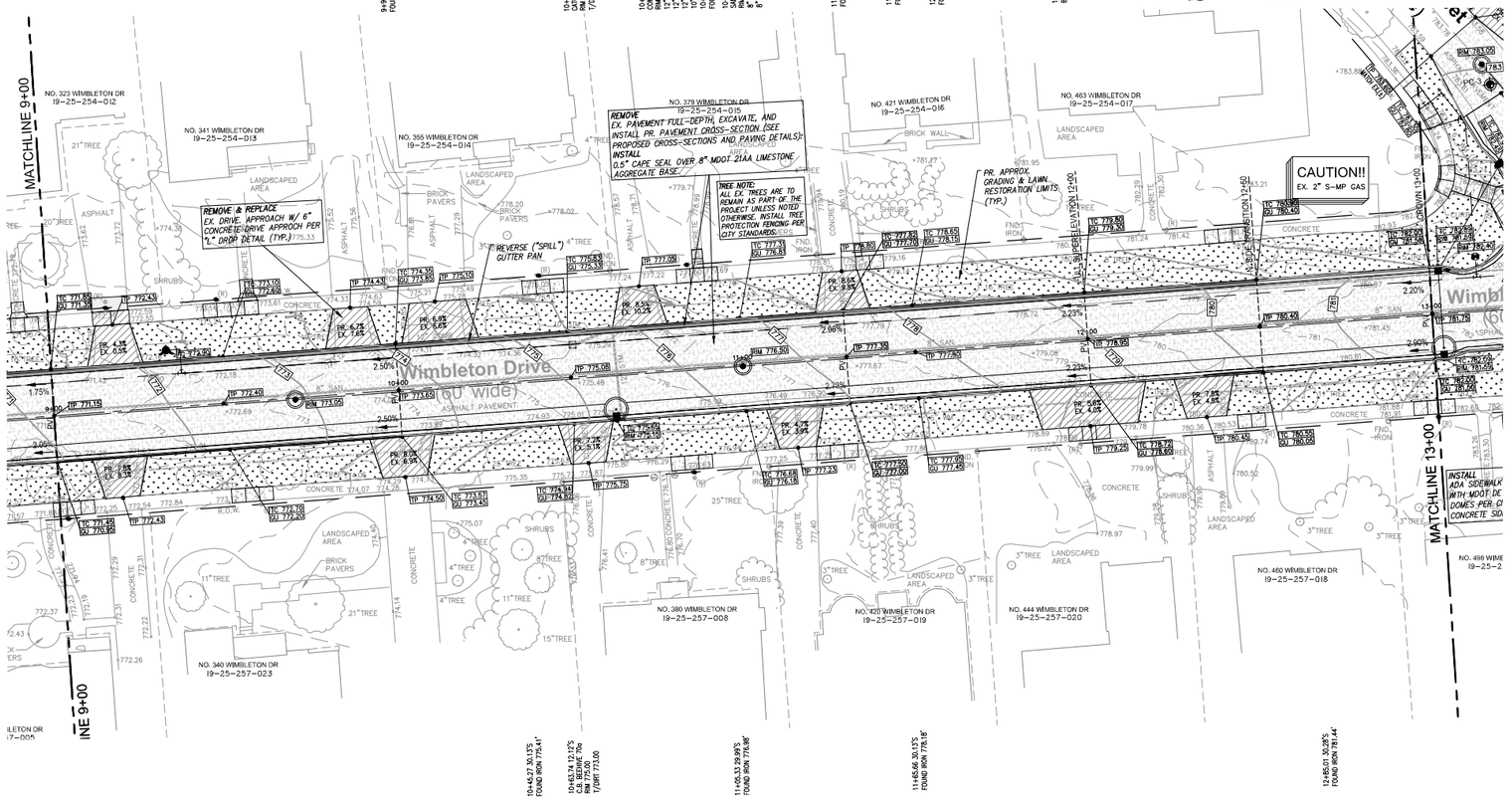
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NFE JOB NO. O310
SHEET NO. C14

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8B

Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
323 Wimbleton	10.1	16.1	11.5	16.8	1.5
341 Wimbleton	10.0	16.0	11.3	16.3	1.5
355 Wimbleton	16.3	22.3	11.3	24.2	1.5
379 Wimbleton	10.0	16.0	11.3	16.3	1.5
421 Wimbleton	10.0	16.0	11.3	16.3	1.5
322 Wimbleton	10.0	19.0	11.5	16.5	1.5
340 Wimbleton	12.9	18.9	11.5	20.3	1.5
360 Wimbleton	10.0	16.0	11.7	16.8	1.5
420 Wimbleton	10.5	16.5	11.7	17.5	1.5
444 Wimbleton	27.8	33.8	11.7	40.0	1.5
460 Wimbleton	11.5	17.5	11.6	18.6	1.5

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
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- x000.00 GROUND ELEVATION
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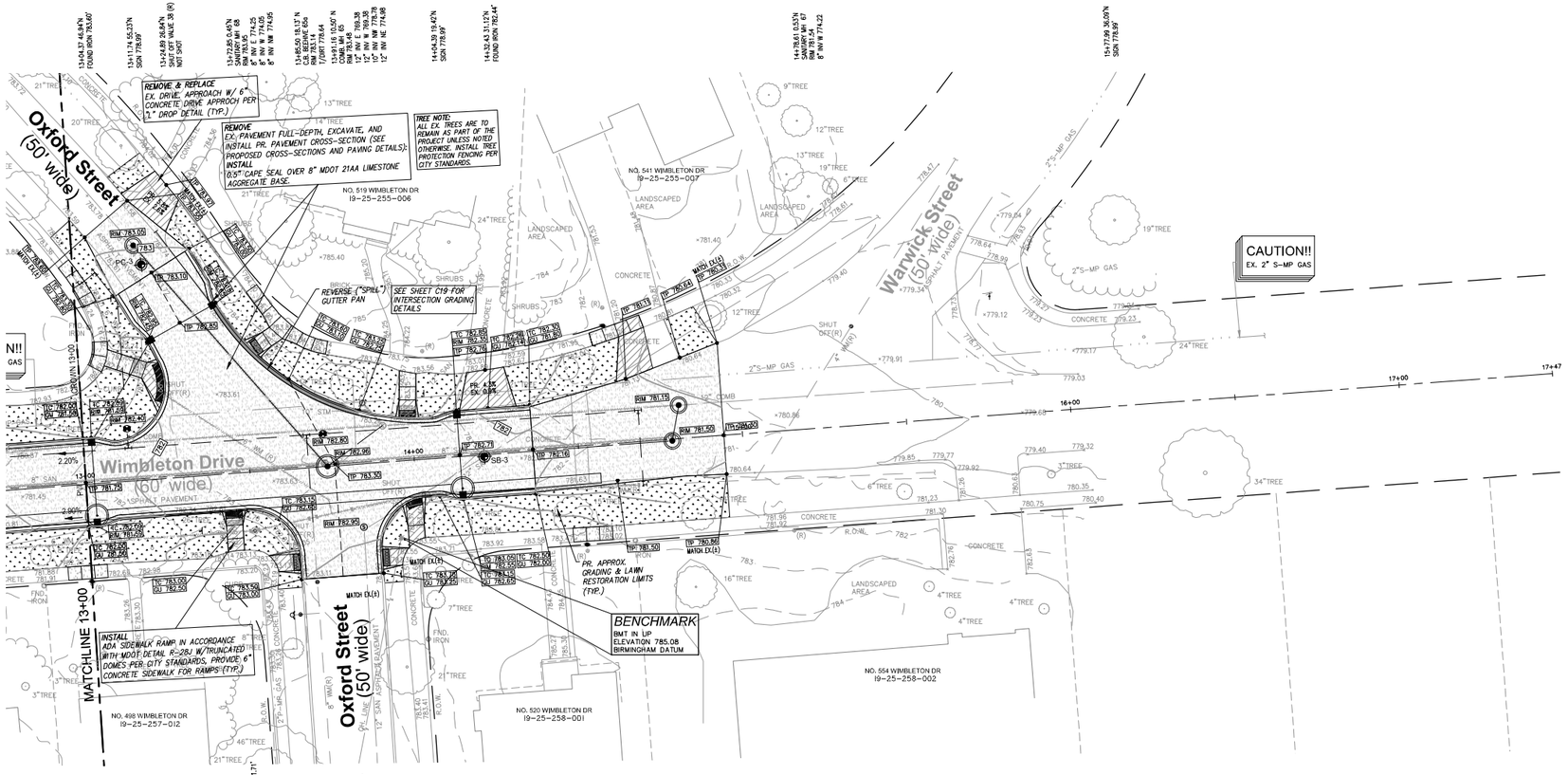
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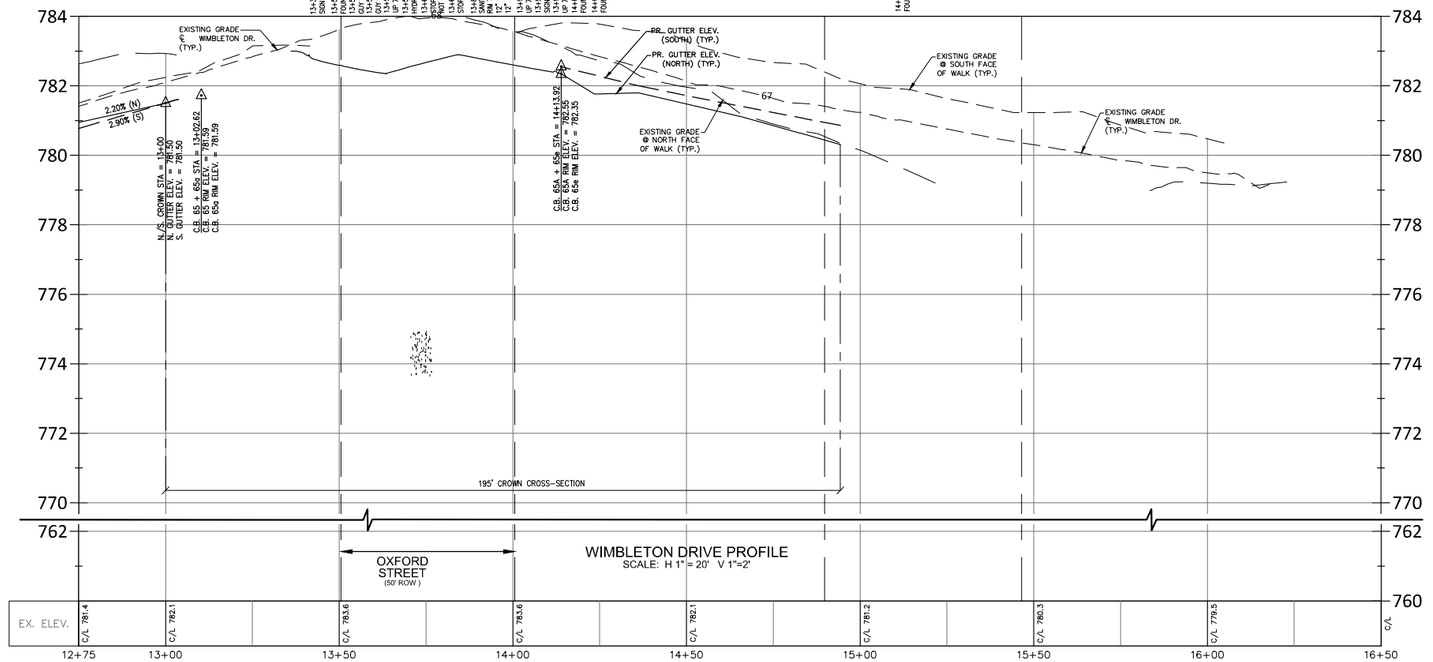
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DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
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NFE JOB NO. O310
SHEET NO. C15

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Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
950 Oxford	11.3	17.8	11.1	17.9	1.5
519 Wimbleton	11.3	17.3	11.6	18.5	1.5
541 Wimbleton	8.0	11.8	12.7	13.9	1.5

LEGEND

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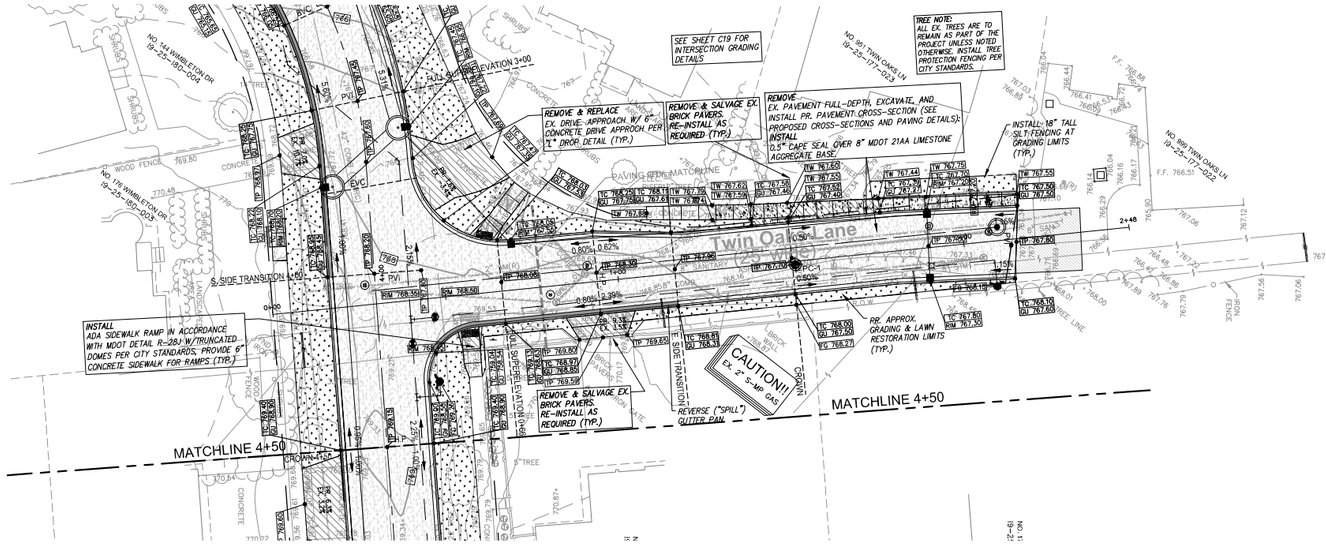
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NFE JOB NO. O310
SHEET NO. C16

\2020-2000 Final\2020-FILES\2310\Office\Construction Documents\2310_P2D2.dwg 3/5/2025 9:02 AM





Driveway Schedule					
Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
147 Abbey	13.8	20.1	6.7	12.6	1.5

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- EXISTING STORM SEWER
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- EXISTING GAS MAIN
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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 - Twin Oaks Lane - P.O.B. to P.O.E.

811 Know what's below Call before you dig.

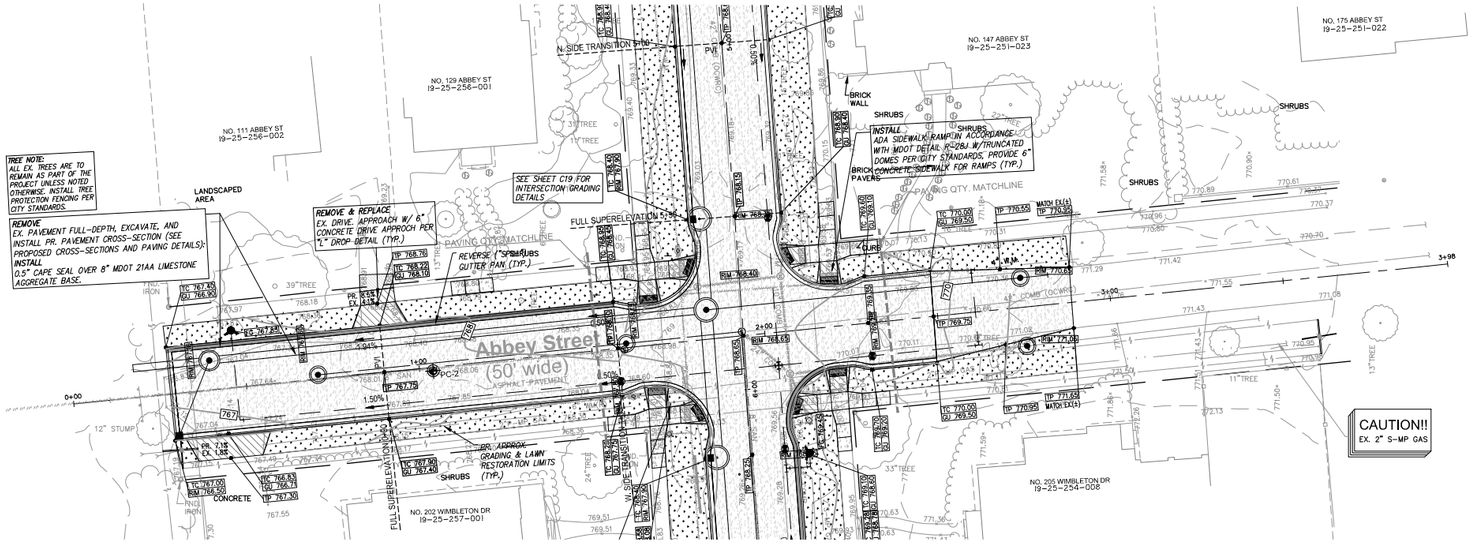
DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

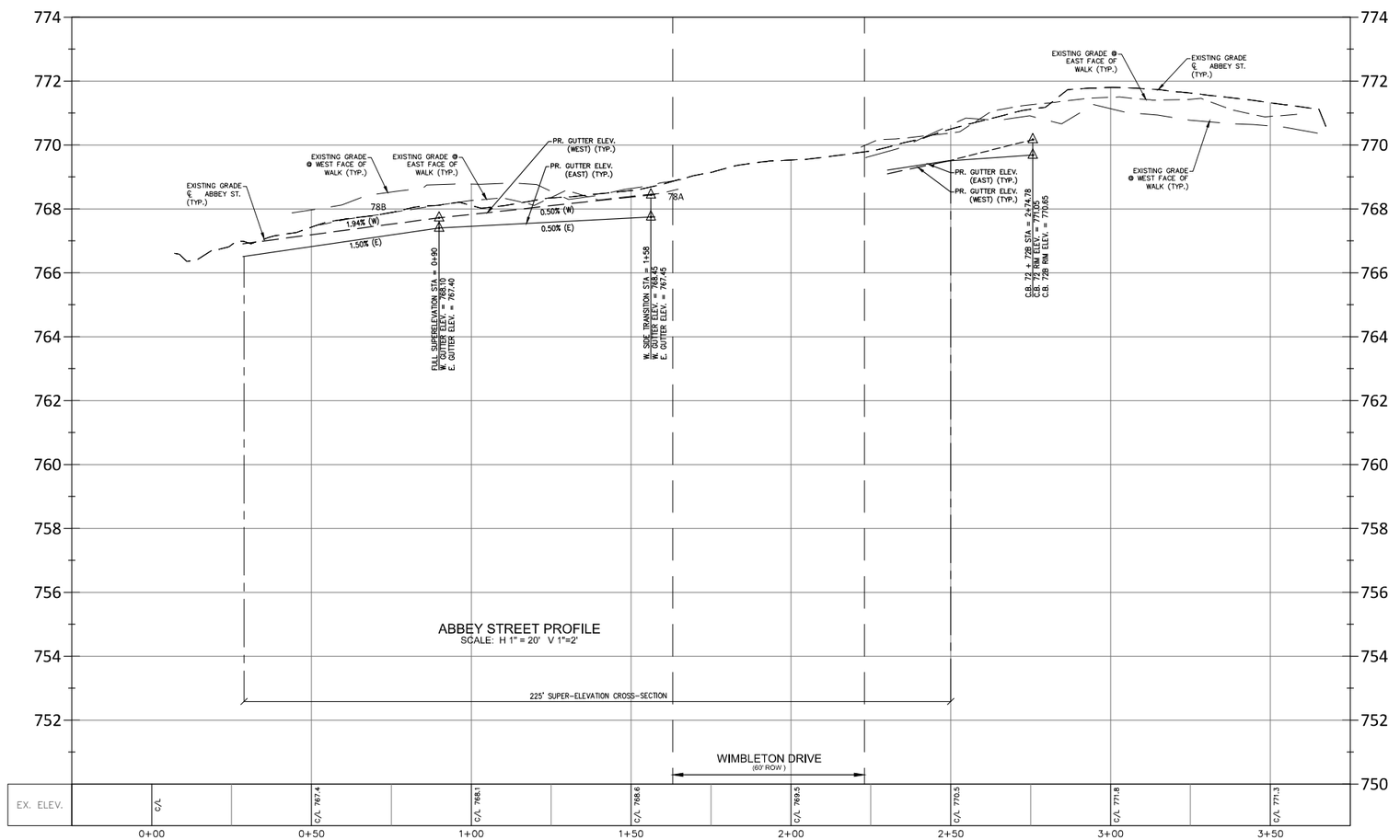
DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: 1" = 20' / 1"=2'

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NFE JOB NO. O310
SHEET NO. C17

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8B

Driveway Schedule

Address	Width @ Walk (ft)	Width @ Curb (ft)	Length of Apron (ft)	Area (sy)	Curb Height (in)
111 Abbey	10.0	16.0	6.4	9.2	1.5
202 Wimbleton	18.5	24.5	6.6	15.8	1.5

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 8" 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

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
Paving Project
Contract #6-25(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 - Abbey Street - P.O.B. to P.O.E.

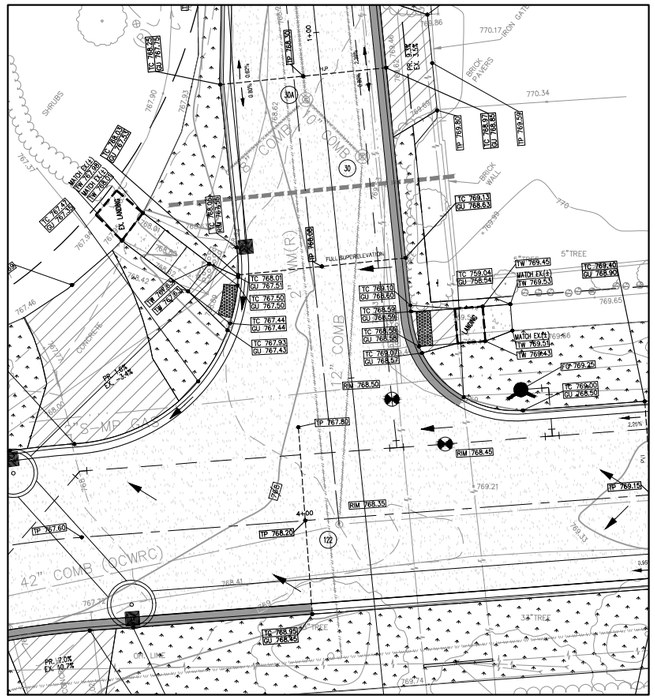
811 Know what's **below** **Call** before you dig.

DATE	ISSUED/REVISED
10-23-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
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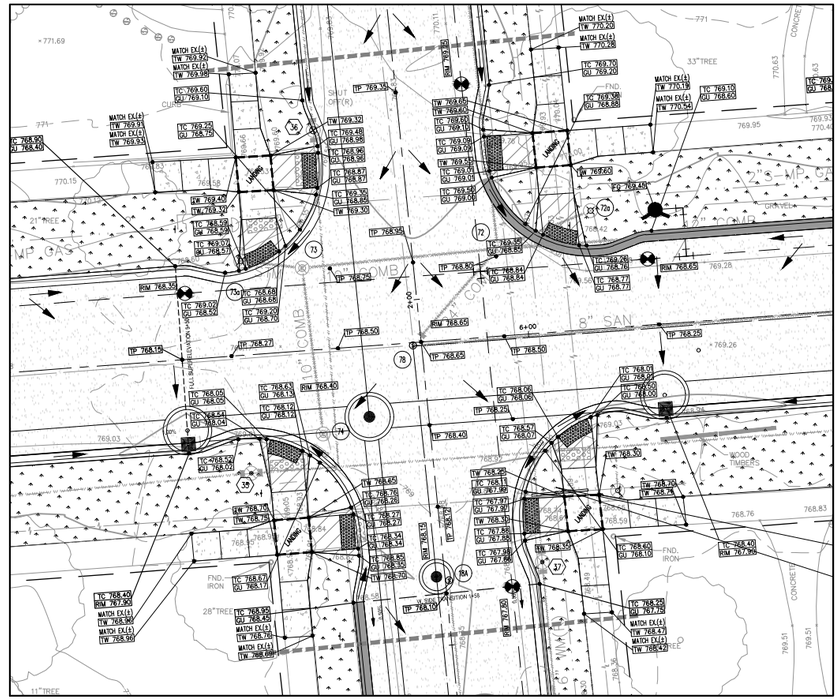
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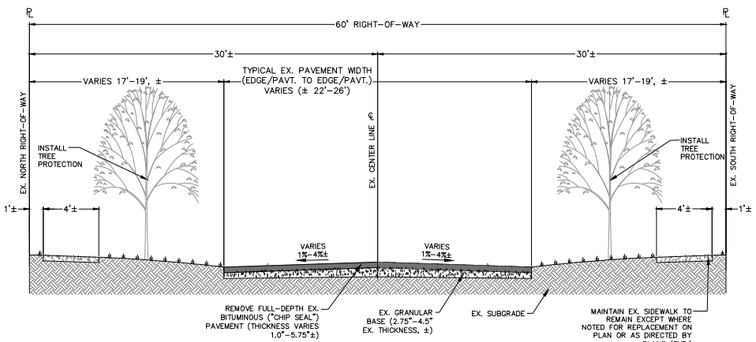
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SHEET NO. C18

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CROSSING AT WIMBLETON DRIVE AND TWIN OAKS LANE


42" COMB (OCWRC)
10" COMB
8" SAN
6" WM (R)
SHUT OFF(R)
EX. LANDING
LANDING
SHRUBS
BRICK PAVERS
CONCRETE
WOOD TIMBERS
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FND.
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RIM 768.30
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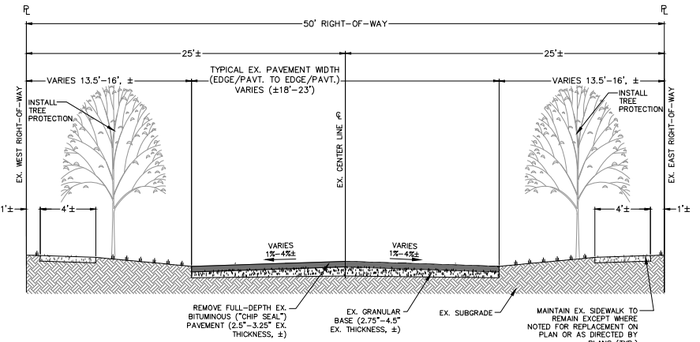
EXISTING BITUMINOUS PAVEMENT SECTION

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 9/20/24, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



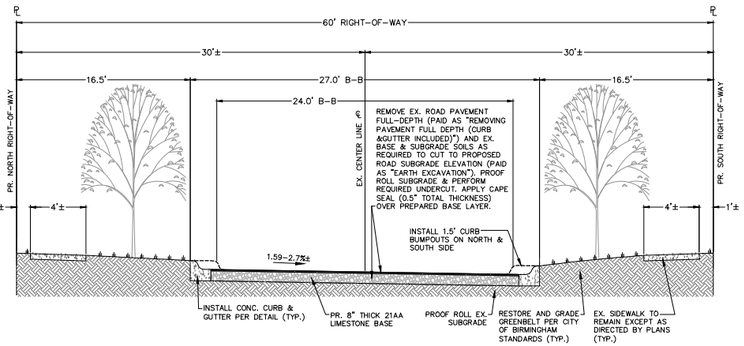
EXISTING BITUMINOUS PAVEMENT SECTION

N.T.S.

ABBEY STREET

APPLIES TO: STA. P.O.B. TO STA. P.O.E

NOTE: REFER TO GEOTECHNICAL INVESTIGATION REPORT BY G2 CONSULTING GROUP, DATED 9/20/24, AND INCLUDED IN PROJECT SPECIFICATIONS, FOR COMPLETE INFORMATION ON EXISTING PAVEMENTS AND SOILS WITHIN PROJECT LIMITS



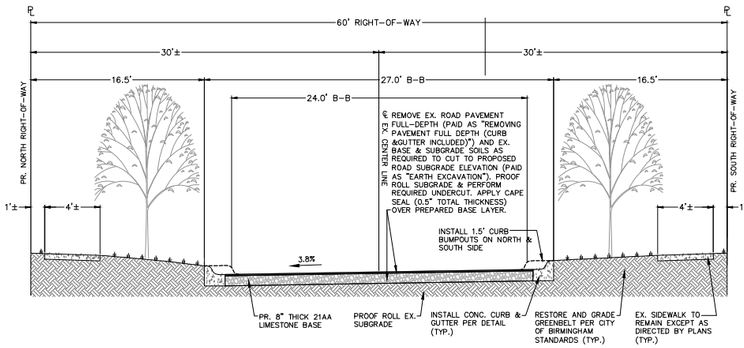
PROPOSED SUPER-ELEVATED PAVEMENT SECTION

N.T.S.

WIMBLETON DRIVE

APPLIES TO: STA. 5+50 TO STA. 12+00

NOTE: TRANSITION FROM SUPER-ELEVATION TO CROWN OCCURS BETWEEN STA. 12+00 & STA. 13+00



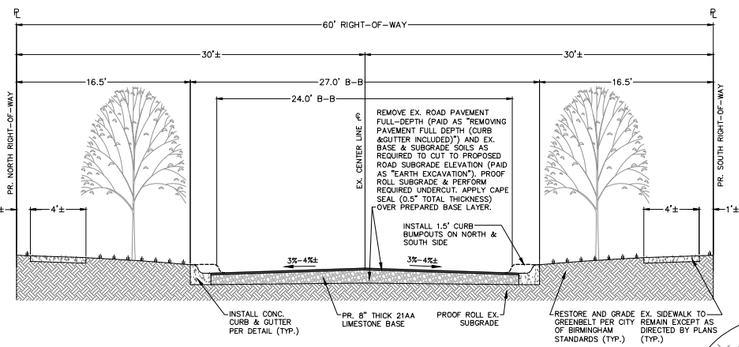
PROPOSED SUPER-ELEVATED PAVEMENT SECTION

N.T.S.

WIMBLETON DRIVE

APPLIES TO: STA. P.O.B. TO STA. 3+50

NOTE: TRANSITION FROM SUPER-ELEVATION TO CROWN OCCURS BETWEEN STA. 3+50 & STA. 4+25

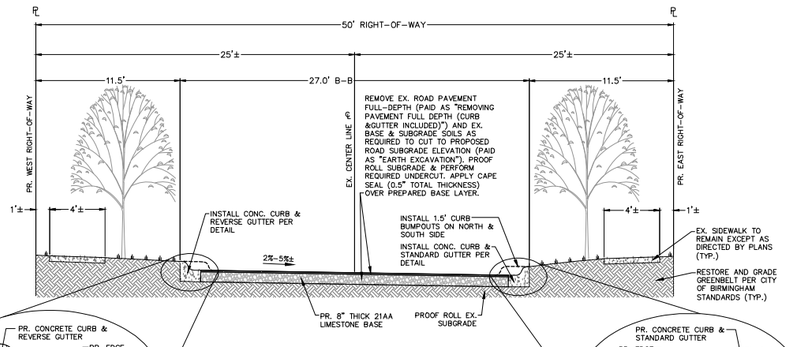


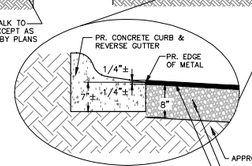
PROPOSED CROWN PAVEMENT SECTION

N.T.S.

WIMBLETON DRIVE

APPLIES TO: STA. 4+25 TO STA. 5+00
STA. 13+00 TO STA. P.O.E.





TYPICAL DETAIL

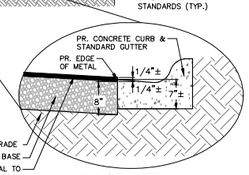
TYP. FOR ALL STREETS

PROPOSED SUPER-ELEVATED PAVEMENT SECTION

N.T.S.

ABBEY STREET

APPLIES TO: STA. 0+25 TO STA. 2+00



TYPICAL DETAIL

TYP. FOR ALL STREETS

8B

UTILITIES

AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL EXPOSE AND VERIFY EXISTING UTILITIES FOR LOCATION, SIZE, DEPTH, MATERIAL AND CONFIGURATION PRIOR TO CONSTRUCTION. COSTS FOR EXPLORATORY EXCAVATION IS AN INCIDENTAL COST AND SHALL NOT BE CONSIDERED AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING UTILITIES WHICH DO NOT MATCH THE PLANS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. ANY FIELD CHANGES OF THE PROPOSED UTILITIES SHALL BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

DAMAGE TO PRIVATE PROPERTY

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AND ARE PART OF THE CONTRACT DOCUMENTS.

DEWATERING OF TRENCH AND EXCAVATIONS

IF NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION DESIGN DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF GROUND WATER DEWATERING SYSTEMS IS BEYOND THE SCOPE OF DESIGN FOR THESE DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND PROVIDING APPROPRIATE EXCAVATION DEWATERING SYSTEMS FOR USE DURING CONSTRUCTION.

THE DEWATERING METHOD SELECTED BY THE CONTRACTOR WILL NOT ADVERSELY AFFECT ADJACENT PAVEMENTS OR STRUCTURES PRIOR TO BEGINNING DEWATERING CONDITIONS. MEANS AND METHODS OF DEWATERING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE CONSIDERED INCLUDED IN THE WORK OF CONSTRUCTING THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

BY-PASS PUMPING

FROM TIME TO TIME IT MAY BE NECESSARY FOR THE CONTRACTOR TO BY-PASS PUMP TO COMPLETE THE WORK INDICATED ON THE PLANS. THE COST OF BY-PASS PUMPING, THE METHODS, EQUIPMENT AND MEANS OF PROVIDING THAT WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK WHETHER SPECIFICALLY CALLED OUT ON THE PLANS OR NOT.

MEANS AND METHODS FOR PIPE CONSTRUCTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEANS AND METHODS FOR CONSTRUCTING THE UNDERGROUND PIPE SYSTEMS PROPOSED ON THE PLANS, INCLUDING BUT NOT LIMITED TO THE NEED FOR SHORING/BRACING OF TRENCHES, DEWATERING OF TRENCHES, SCHEDULING THE WORK AT OFF PEAK HOURS, AND/OR MAINTAINING EXISTING FLOWS THAT MAY BE ENCOUNTERED VIA PUMPING, BY-PASS PIPING OR OTHER MEANS. THE CONTRACTOR SHALL NOT BE PAID ANY ADDITIONAL COMPENSATION TO IMPLEMENT ANY MEANS AND METHODS TO SATISFACTORILY COMPLETE THE CONSTRUCTION.

PAVEMENT REMOVAL

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. PAVEMENT CORE SAMPLES ARE FOR INFORMATIONAL PURPOSES ONLY AS TO THE THICKNESS OF THE PAVEMENT AT THE LOCATION OF THE SAMPLE. THE OWNER AND ENGINEER MAKE NO REPRESENTATION, WARRANTY OR GUARANTY THAT THE SAMPLES ACCURATELY REFLECT THE PAVEMENT THICKNESS ON THE PROJECT.

MAINTENANCE OF TRAFFIC

DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL ACCOMMODATE BOTH VEHICULAR AND PEDESTRIAN TRAFFIC IN THE ROAD RIGHTS OF WAY. THE CONTRACTOR'S EQUIPMENT AND OPERATIONS ON PUBLIC STREETS SHALL BE GOVERNED BY ALL APPLICABLE LOCAL, COUNTY AND STATE ORDINANCES, REGULATIONS AND LAWS. THE CONTRACTOR SHALL OBTAIN AND SATISFY ANY AND ALL PERMIT REQUIREMENTS BY THE LOCAL, COUNTY AND STATE GOVERNMENTAL AGENCIES.

IN ADDITION, WHERE THE WORK REQUIRES THE CLOSURE OF ONE OR MORE LANES OR IS WITHIN THE INFLUENCE OF THE ROAD OR PEDESTRIAN RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDOT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

COMPENSATION FOR TRAFFIC CONTROL SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC TRAFFIC CONTROL ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

IRRIGATION

THE CONTRACTOR SHALL MAINTAIN OR REPAIR ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA UNLESS THE DRAWINGS CALL FOR THE IRRIGATION SYSTEM TO BE REMOVED. THE OWNER AND NFE MAKE NO REPRESENTATIONS, WARRANTY OR GUARANTY AS TO THE LOCATION OF THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT THE IRRIGATION SYSTEM DURING CONSTRUCTION ACTIVITIES. COMPENSATION FOR MAINTAINING OR REPAIRING EXISTING IRRIGATIONS SYSTEMS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC IRRIGATION SYSTEM REPAIR ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

SUB-SOIL CONDITIONS

ANY SOIL BORING PROVIDED BY THE OWNER AND/OR ENGINEER IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION IS NOT OFFERED AS EVIDENCE OF GROUND CONDITIONS THROUGHOUT THE PROJECT AND ONLY REFLECT THE GROUND CONDITIONS AT THE LOCATION OF THE BORING ON THE DATE THEY WERE TAKEN.

THE ACCURACY AND RELIABILITY OF THE SOIL LOGS AND REPORT ARE NOT WARRANTED OR GUARANTEED IN ANY WAY BY THE OWNER OR ENGINEER AS TO THE SUB-SOIL CONDITIONS FOUND ON THE SITE. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION AND SUB-SOIL INVESTIGATION AND SECURE OTHER SUCH INFORMATION AS THE CONTRACTOR CONSIDERS NECESSARY TO DO THE WORK PROPOSED AND IN PREPARATION OF THEIR BID.

SUBGRADE UNDERCUTTING AND PREPARTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY AND ALL SOILS WHICH DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SUBGRADE IN CONFORMANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS. THE MEANS AND METHODS USED TO ACHIEVE THE REQUIRED RESULT SHALL REST SOLELY WITH THE CONTRACTOR.

ANY AREAS OF UNDERCUTTING THAT RESULT IN ADDITIONAL OR EXTRA WORK BECAUSE THEY COULD NOT BE IDENTIFIED BY THE CONTRACTOR'S PRE-BID SITE OBSERVATION OR ARE NOT SET FORTH IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE ANY EXTRA WORK IS PERFORMED. THE CONTRACTOR SHALL MAKE A REQUEST FOR ANY ADDITIONAL COMPENSATION FOR THE UNDERCUTTING IN WRITING AND THE REQUEST SHALL CONFORM TO THE CONTRACT'S CHANGE ORDER PROVISIONS.

STRUCTURE BACKFILL

STRUCTURAL BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PROJECT PLANS, SPECIFICATIONS OR AS REQUIRED BY THE COMMUNITY, GOVERNMENT AGENCY OR UTILITY THAT HAS JURISDICTION OVER THE WORK.

TRENCH BACKFILL

TRENCH BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PLANS AND/OR SPECIFICATIONS. TRENCH BACKFILL SHALL ALSO BE INSTALLED IN CONFORMANCE WITH THE COMMUNITY REQUIREMENTS OR AGENCY/UTILITY GOVERNING SAID TRENCH CONSTRUCTION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.

EARTH BALANCE / GRADING

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER THE SITE EARTHWORK BALANCES OR NOT. ANY EXCESS CUT MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR. IN A LIKE MANNER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT APPROVED FILL MATERIAL AND PLACE IT AS REQUIRED TO ATTAIN THE SITE GRADE AND COMPACTION REQUIREMENTS PER THE ENGINEER'S PLAN AND ALL APPLICABLE GOVERNMENTAL STANDARDS. THE ENGINEER AND OWNER MAKE NO REPRESENTATION AS TO THE QUANTITIES THAT MAY BE NEEDED TO CREATE A BALANCED EARTHWORK CONDITION OR THAT THE SITE EARTHWORK IS BALANCED.

SOIL EROSION / SEDIMENTATION CONTROL

THE CONTRACTOR SHALL OBTAIN THE REQUIRED SOIL EROSION PERMIT AND SATISFY ALL REGULATORY REQUIREMENTS FOR CONTROLLING SOIL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR INSPECTION OR APPROVAL OF THE CONTRACTOR'S WORK IN CONNECTION WITH SATISFYING THE SOIL EROSION PERMIT REQUIREMENTS UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS.

NF ENGINEERS
CIVIL ENGINEERS
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
Paving Project
Contract #6-25(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

Existing and Proposed
Road Cross-Sections

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross

DESIGNED BY: P. Tulikangas

APPROVED BY: P. Tulikangas

DATE: February 20, 2024

SCALE: N.T.S.

NFE JOB NO. O310

SHEET NO. C20

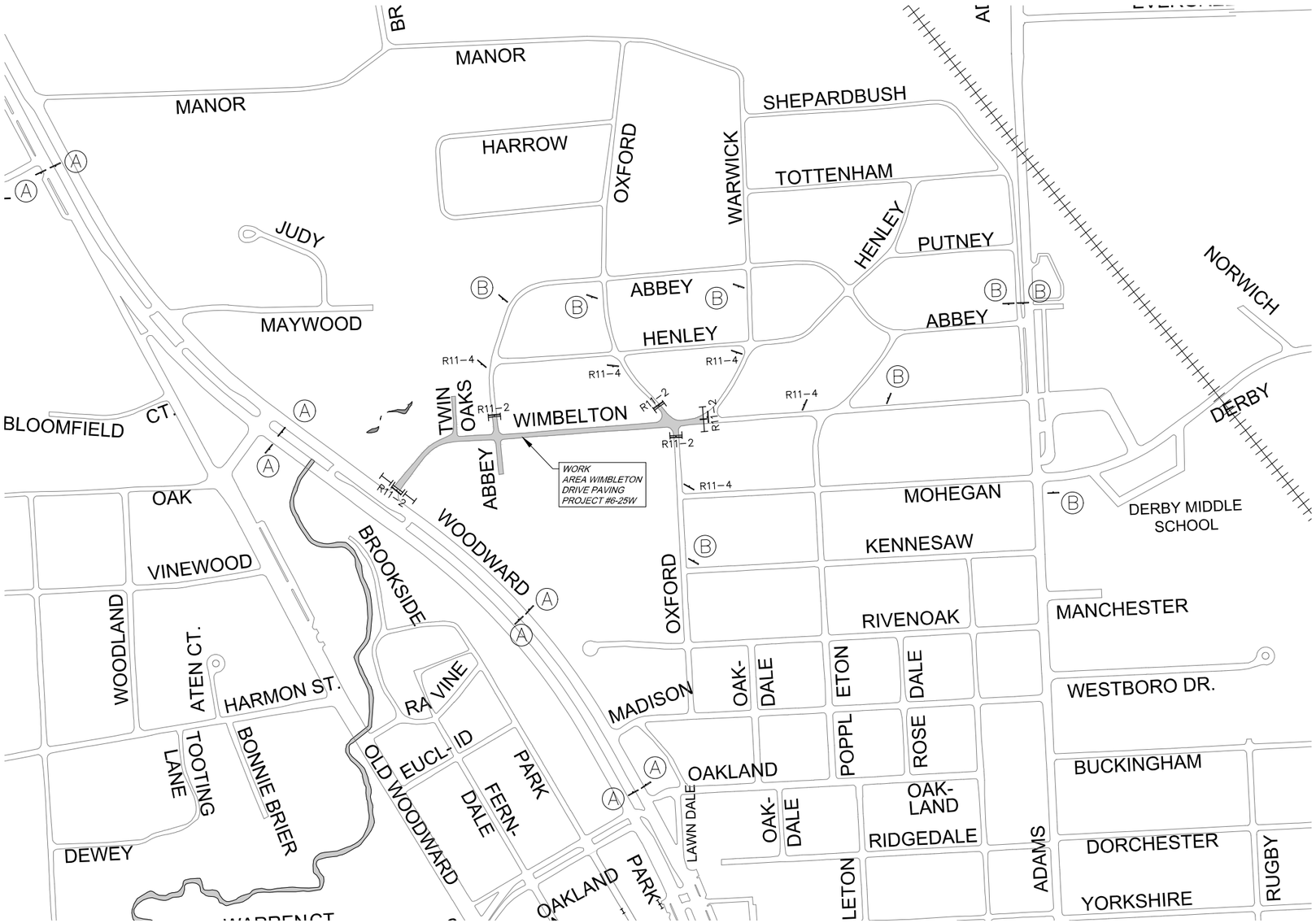
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WIMBLETON CLOSED
NO ACCESS FROM WOODWARD
SEEK ALTERNATE ROUTE

36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND

WIMBLETON CLOSED OXFORD TO
WOODWARD - SEEK ALTERNATE
ROUTE

36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND





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 TO WOODWARD - SEEK ALTERNATE ROUTE	36"x72"	8

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"	5

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.

ADVANCED WARNING SIGNAGE PLAN: WIMBLETON DRIVE PAVING PROJECT

8B

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Contract #6-25(W)

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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 & Detour Plan

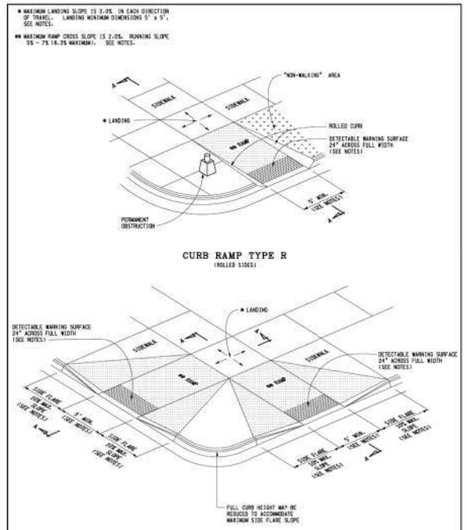
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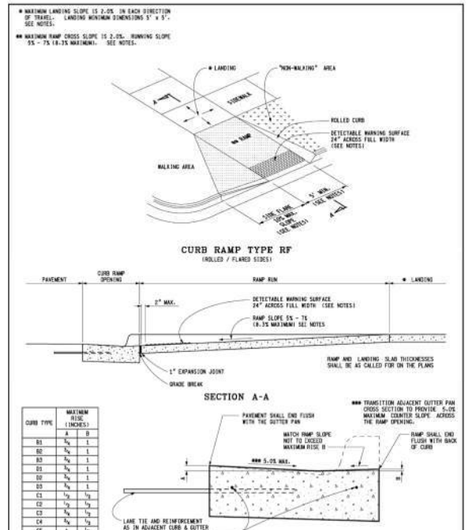
DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2025
SCALE: N.T.S.

NFE JOB NO. O310
SHEET NO. C21

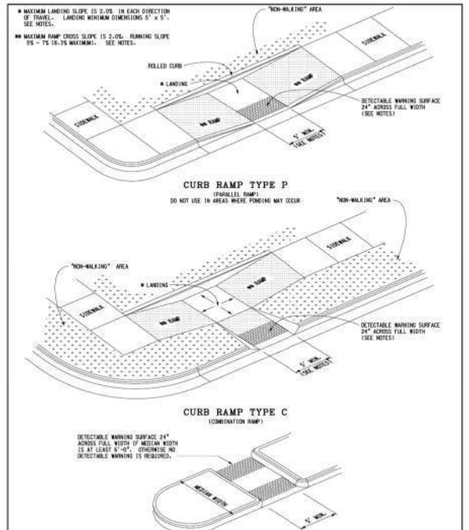
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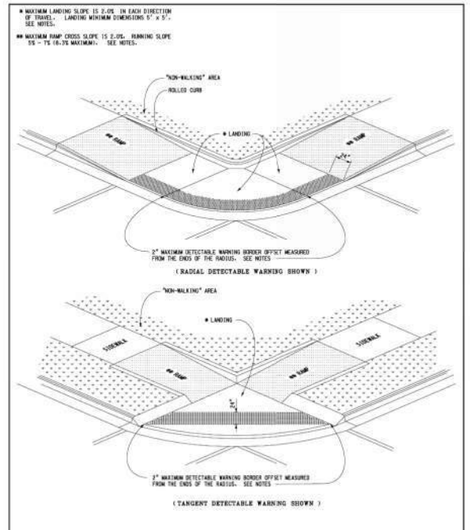


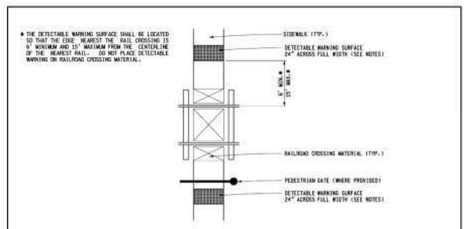


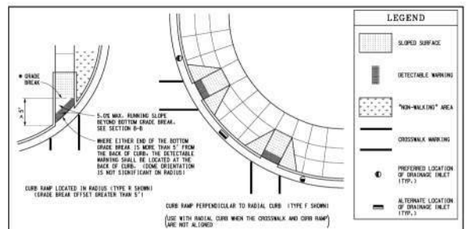
CURB TYPE	MAXIMUM RISE (INCHES) A	B
B1	3/4	1
B2	3/4	1
B3	3/4	1
D1	3/4	1
D2	3/4	1
D3	3/4	1
C1	1/2	1/2
C2	1/2	1/2
C3	3/4	1/2
C4	3/4	1/2
C5	1	1/2
C6	1	1/2
F1	1/2	1/2
F2	1/2	1/2
F3	3/4	1/2
F4	3/4	1/2
F5	1	1/2
F6	1	1/2

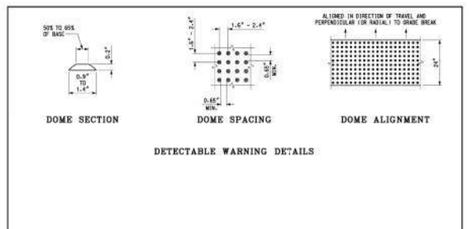
FOR CURB TYPES SEE STANDARD PLAN R-30-SERIES











NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

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.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, WHERE CONDITIONS PERMIT, IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE ON ONLY ONE DIRECTION. PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

WHEN 5' MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'.

CURB RAMPS WITH A RUNNING SLOPE ≤5% DO NOT REQUIRE A TOP LANDING. WHERE ANY CONTINUOUS SIDEWALK OR PEDESTRIAN CIRCULATION CROSSING THROUGH AN INTERSECTION, A CURB RAMP MUST INDEPENDENTLY ALIGN WITH ITS CROSSING AT NOT GREATER THAN 2% PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

DETECTABLE WARNING SURFACE COVERAGE IS 24" 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" MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

FOR NEW ROADWAY CONSTRUCTION, THE RAMP CROSS SLOPE MAY NOT EXCEED 2.0%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSITIONED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.3% IS RELATIVE TO A FLAT (0%) REFERENCE. HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMPS TO EXCEED 15 FEET IN LENGTH NOT INCLUDING LANDINGS OR TRANSITIONS.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMPS. THE LOCATION OF THE RAMP SHALL TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN ½". ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO STOP TRAFFIC SHORT OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE ROADSIDE CURB LINE, SHALL BE PROVIDED WHERE AN UNOBSTRUCTED CIRCULATION PATH LATERALLY CROSSES THE CURB RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, UNPAVED SURFACE, OR PERMANENT FIXED OBJECTS, WHERE THEY ARE NOT REQUIRED, FLARES SHALL ONLY BE CONSIDERED IN ORDER TO AVOID SHARP CURB RETURNS AT RAMP OPENINGS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS EAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR WEAVING.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022 T.R.N.A. APPROVAL	1-4-2020 PLAN DATE	R-28-J	SHEET 7 OF 7

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LAND PLANNERS

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Notes and Details

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SCALE: N.T.S.

NFE JOB NO. O310
SHEET NO. C22

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GENERAL NOTES

1. BRICK PAVERS SHALL BE REMOVED BY MEANS WHICH CAUSE NO DAMAGE TO THE BRICKS. BRICKS SHALL BE DELIVERED TO CITY OF BIRMINGHAM DEPARTMENT OF SERVICES AS DIRECTED BY THE ENGINEER.
2. ALL PAVEMENT TO BE REMOVED SHALL BE SAWCUT FULL DEPTH.
3. ANY GRAVEL REPLACEMENT NECESSARY FOR REGRADING DRIVEWAYS SHALL BE CONSIDERED INCLUDED IN THE COST OF CONCRETE DRIVE APPROACH.
4. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE.
5. ALL DRIVEWAYS (BEHIND THE SIDEWALK) SHALL BE REPAIRED WITH A CROSS SECTION WHICH MATCHES THE EXISTING IN THICKNESS, OR A MINIMUM 4.0" BITUMINOUS MIXTURE No. 13A. IF THE EXISTING DRIVEWAY IS GREATER THAN 4.0" IN DEPTH, THE THICKNESS OF THE BITUMINOUS MIXTURE No. 13A SHALL BE ADJUSTED TO MAKE UP THE DIFFERENCE.
6. UNLESS OTHERWISE SHOWN, PROPOSED GRADES IN PROFILE ARE TOP OF CURB GRADES.
7. ROCKS, OR OTHER MISC. DEBRIS WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, UNLESS DIRECTED OTHERWISE FROM THE CITY.
8. THE PAY ITEM "ADJUST STRUCTURE COVER" APPLIES ONLY TO PRE-EXISTING STRUCTURES TO BE ADJUSTED TO PROPOSED GRADES AS PART OF CONSTRUCTION.
9. IF THE CONTRACTOR HAS MULTIPLE CREWS WORKING THAT REQUIRES MULTIPLE CITY INSPECTORS ON A GIVEN WORK DAY, THE PAY ITEM "INSPECTOR CREW DAYS" SHALL BE MULTIPLIED BY THE CORRESPONDING NUMBER OF INSPECTORS REQUIRED DURING SAID WORK DAY.

PAVING NOTES

1. PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

   CONCRETE ROAD: BASE COURSE – 21AA CRUSHED LIMESTONE AGGREGATE (8" THICK)
   MIX – PORTLAND CEMENT TYPE IA (AIR-ENTRAINED), TO COMPLY WITH MDOT 350CHP REQUIREMENTS.

   CONCRETE FLATWORK: 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 1.5 TO 3 INCHES. COMPLY WITH MDOT 3500 REQUIREMENTS.

   ALL CONCRETE PAVEMENT AND FLATWORK MIXES USED ON THIS PROJECT SHALL COMPLY WITH A MINIMUM GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS) SUBSTITUTION OF TWENTY-FIVE (25) PERCENT SUBJECT TO SEASONAL LIMITATIONS PER THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION.

   ASPHALT: BASE COURSE – 21AA CRUSHED LIMESTONE AGGREGATE (8" THICK)

   SURFACE COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE 220 POUNDS PER SQUARE YARD)

   LEVELING COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 4EML (MAX. APPLICATION RATE 330 POUNDS PER SQUARE YARD)

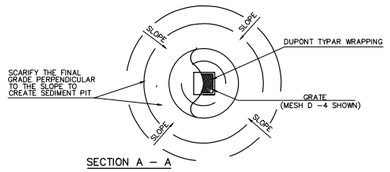
   REPAIR AREAS –
   BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD
2. PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
3. ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
4. ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.
5. 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, 2003 EDITION.
6. ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.
7. ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.
8. 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.
9. 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.
10. 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).
11. EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.
12. 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.
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.
15. R.A.P. NOT ALLOWED IN SURFACE / TOP COURSE OF ASPHALT.

WATER MAIN NOTES

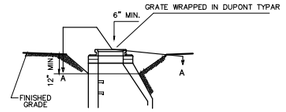
1. ALL WATER MAINS 4" AND LARGER SHALL BE DUCTILE IRON PIPE THICKNESS CLASS 52, WITH PUSH ON TYPE JOINTS PER CITY REQUIREMENTS.
2. NEW WATER MAINS SHALL BE INSTALLED WITH A MINIMUM 5.5 FEET OF COVER. EXCEPTIONS WILL BE ALLOWED WHEN NECESSARY TO CONNECT TO EXISTING MAIN OR WHEN AUTHORIZED BY THE ENGINEER.
3. KNOWN WATER SERVICES BASED ON FIELD INFORMATION OR CITY RECORDS ARE SHOWN ON THE PLANS AS FOLLOWS: "C" = COPPER, "L" = LEAD AND "W.S." = WATER SERVICE TYPE UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL EXISTING SERVICES TO THE NEW MAIN AFTER IT HAS BEEN APPROVED FOR USE.
4. COAT ALL BOLTS ON MECHANICAL FITTINGS WITH TAR.
5. HYDRANT CONNECTION TO CONSIST OF 6" DUCTILE IRON PIPE, 6" GATE VALVE AND BOX, AND HYDRANT. HYDRANT SHALL BE EJIW MODEL 5BR WITH 6" MECHANICAL JOINT INLET, TWO PUMPER INLETS, ALL OPENING LEFT, 5'-6" TRENCH, PLUGGED DRAIN AND BLOCK BOLTS.
6. INSTALL GATE VALVE AS CLOSE TO HYDRANT AS PRACTICABLE.
7. GATE VALVES 4" AND LARGER MAY BE MUELLER BRAND SPECIFIED, OR APPROVED EQUIVALENT. ALL MATERIALS RELATIVE TO WATER SERVICE CONNECTIONS SHALL BE MUELLER BRAND.
8. IN ABANDONING MAINS, THE FOLLOWING SHALL BE DONE: PLUG ALL OPEN PIPE ENDS WITH MASONRY, DISCONNECT MAINS WHICH ARE TO BE ABANDONED FROM FITTINGS AT LIVE MAINS AND PLUG AND BLOCK THOSE FITTINGS. FILL MAIN TO BE ABANDONED WITH GROUT OR HYDRAULIC CEMENT.
9. WORK INDICATED BY (A) SHALL BE PERFORMED AFTER THE NEW MAINS ARE PLACED IN SERVICE.
10. THE LOCATIONS AND TYPES OF SERVICE LEADS IS BASED ON THE BEST AVAILABLE INFORMATION. THE EXACT LOCATION OF SERVICE LEADS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
11. WHERE APPLICABLE, THE APPROPRIATE SECTIONS OF EXISTING WATERMAIN SHALL BE SHUTDOWN AND DEPRESSURIZED PRIOR TO A) CUTTING AND REMOVING, B) CUTTING AND INSTALLING PROPOSED TEE CONNECTIONS, C) PERFORMING ANY AND ALL OTHER WORK AROUND/ADJACENT TO HYDRANTS AND ALL OTHER CONNECTIONS, WHILE MEETING AND/OR EXCEEDING APPLICABLE INDUSTRY SAFETY PRECAUTIONS AND MIOSHA STANDARDS.

STORM SEWER NOTES (where applicable)

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY. THE MUNICIPALITY STANDARD NOTES, DETAILS AND SPECIFICATIONS SHALL BE INCORPORATED AS PART OF THESE PLANS.
2. ALL STORM SEWER TRENCHES UNDER OR WITHIN THREE (3) FEET OF EXISTING OR PROPOSED PAVEMENT SHALL BE BACK FILLED WITH MDOT CLASS II MATERIAL (SAND) AND BE MACHINE COMPACTED TO A MINIMUM OF % OF THE MATERIAL'S MAXIMUM DENSITY. PAVEMENT SHALL INCLUDE PARKING LOTS, DRIVE APPROACHES, 9S CURB & GUTTER AND ADJACENT WALKS.
3. ALL STORM SEWER PIPE SHALL BE INSTALLED ON CLASS "B" BEDDING OR BETTER UNLESS OTHERWISE INCLUDED ON THE PLANS.
4. STORM SEWER SHALL BE OF THE TYPE, SIZE & CLASS DESIGNATION INDICATED ON THE PLANS AND LIKEWISE BE INSTALLED AT THE PROPOSED LINE & GRADE INDICATED.
5. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM SPECIFICATION C-76 CL IV.
6. ALL MAN HOLE, CATCH BASIN, INLET, REAR YARD DRAINAGE STRUCTURES AND COVERS SHALL BE AS INDICATED ON THE PLANS AND CONSTRUCTED IN ACCORDANCE WITH MUNICIPALITY STANDARDS.
7. INSTALL TRAPS ON THE FIRST CATCH BASIN (TYPICALLY A 4' DIAMETER STRUCTURE WITH 2' SUMP) THAT IS UPSTREAM OF ITS CONNECTION TO A MAINLINE STORM OR SEWER MANHOLE, TO CAPTURE FLOATABLES AND TO MINIMIZE ESCAPE OF ODOR.
8. THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
9. EXACT GRADES AND INVERTS OF PROPOSED STORM SEWER ARE TO BE CHECKED WITH THE FIELD ENGINEER PRIOR AND DURING INSTALLATION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY PLAN INCONSISTENCY AND/OR UTILITY CONFLICTS.
10. ALL STORM SEWER PIPE JOINTS SHALL BE "PREMIUM JOINT" MODIFIED GROOVED TONGUE (M.G.T.) WITH SYNTHETIC RUBBER GASKETS CONFORMING TO ASTM SPECIFICATION C-443 & C-361, UNLESS OTHERWISE INDICATED ON THE PLANS.
11. FACILITY MANUFACTURED PRECAST TEE SECTIONS SHALL BE FOR ROOF DRAINS AND/OR SUMP PUMP LEADS AND LATERALS WHERE INDICATED ON THE PLANS. BLIND TOP CONNECTIONS INTO STORM SEWER WILL NOT BE PERMITTED BY BREAKING PIPE WALL.
12. THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL SITE INSPECTIONS.

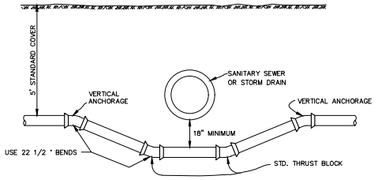


SECTION A – A



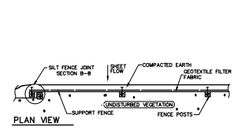
LOW POINT INLET FILTER & SEDIMENT PIT DETAIL

N.T.S.



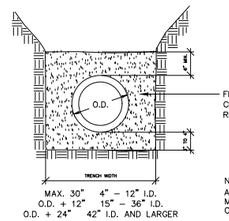
STANDARD SEWER OR STORM CROSSING

N.T.S.



SILT FENCE DETAIL

N.T.S.

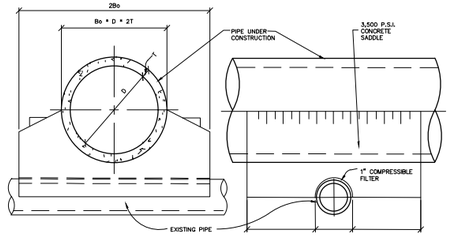


MAX. 30" 4" – 12" I.D.
O.D. + 12" 15" – 36" I.D.
O.D. + 24" 42" I.D. AND LARGER

NOTE:
APPROVAL MAY BE GIVEN TO ALTERNATE MATERIALS AND METHODS TO ACHIEVE CLASS B BEDDING.

STANDARD PIPE BEDDING

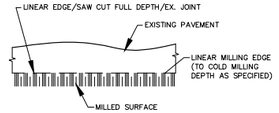
N.T.S.



CONCRETE SADDLE REQUIRED WHEN DISTANCE BETWEEN PIPES IS LESS THAN 18 INCHES. COMPRESSIBLE FILTER SHALL BE NEOPRENE CONFORMING TO ASTM D1056, CLASS SBO-11 & C509

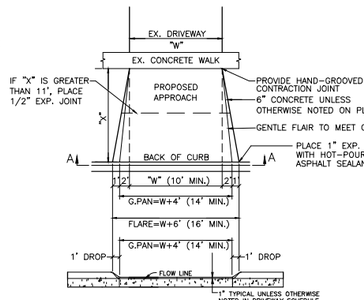
CONCRETE SADDLE OVER EXISTING UTILITIES

N.T.S.



LINEAR MILLING/SAWCUT EDGE DETAIL

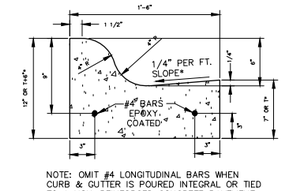
PLAN VIEW N.T.S.



SECTION A–A

CONCRETE DRIVE APPROACH – DETAIL 'L'

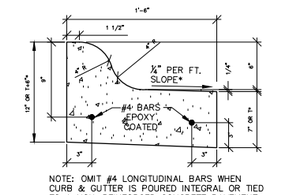
N.T.S.



NOTE: OMIT #4 LONGITUDINAL BARS WHEN CURB & GUTTER IS POURED INTEGRAL OR TIED TO A NON-REINFORCED CONCRETE PAVEMENT.

BIRMINGHAM 6" ROLL CURB CONCRETE CURB & STANDARD GUTTER DETAIL

N.T.S.

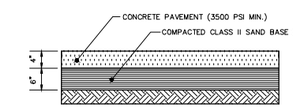


NOTE: OMIT #4 LONGITUDINAL BARS WHEN CURB & GUTTER IS POURED INTEGRAL OR TIED TO A NON-REINFORCED CONCRETE PAVEMENT.

BIRMINGHAM 6" ROLL CURB CONCRETE CURB & REVERSE GUTTER DETAIL

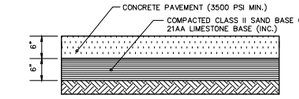
N.T.S.

*NOTE: "T" IS EQUAL TO THE THICKNESS & SLOPE IS EQUAL TO THE CROSS-SLOPE OF THE CONCRETE PAVEMENT WHEN CURB & GUTTER IS POURED INTEGRAL TO THE PAVEMENT.



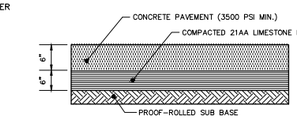
4" CONCRETE SIDEWALK SECTION

STANDARD SIDEWALK REPLACEMENTS/INSTALLATIONS N.T.S.



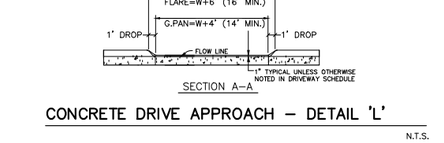
6" CONCRETE SIDEWALK SECTION

TO MATCH SPECIFIED PAVEMENT THICKNESS THROUGH DRIVE APPROACH N.T.S.



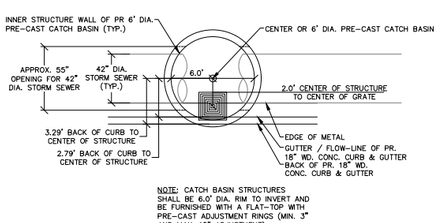
TYPICAL CONCRETE SECTION FOR RESIDENTIAL APPROACH

N.T.S.



THICKENED CONCRETE SIDEWALK (PLAIN)

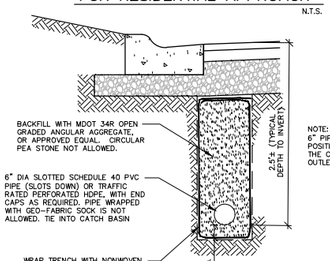
N.T.S.



NOTE: CATCH BASIN STRUCTURES SHALL BE 6.0' DIA. RIM TO INVERT AND BE FURNISHED WITH A FLAT-TOP WITH PRE-CAST ADJUSTMENT RINGS (MIN. 3" AND MAX. 18" ADJUSTMENT).

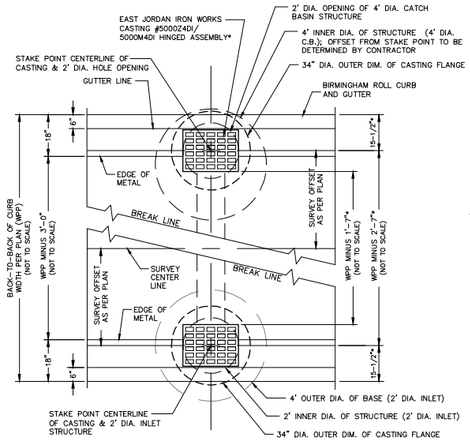
BIRMINGHAM – 6' DIA. CATCH BASIN W/ 2' SUMP & OFFSET GRATE

N.T.S.



6" PERFORATED PIPE UNDERDRAIN DETAIL

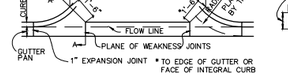
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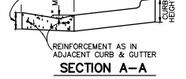


*CONTRACTOR RESPONSIBLE FOR CORRECT ALIGNMENT OF STRUCTURE, CASTING AND CURB AS SPECIFIED, UNLESS OTHERWISE DIRECTED BY CITY.

CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

SCALE: 1" = 2'

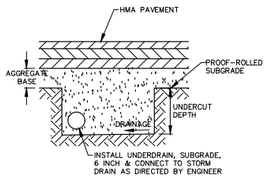




SECTION A–A

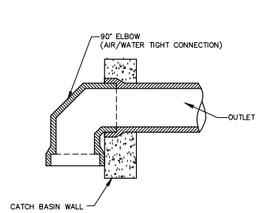
MDOT DRIVEWAY OPENING DETAIL 'M'

N.T.S.



UNDERCUT DETAIL

N.T.S.



WATER MAIN TEE FITTING SIZE DESIGNATION SCHEMATIC

N.T.S.

SEWER TRAP

N.T.S.

8B

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
Paving Project
Contract #6-25(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
Notes and Details

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: N.T.S.

NFE JOB NO. O310
SHEET NO. C23

\2000-2000 Files\2000-FILES\2310\Office\Construction Documents\2310_NOTES.dwg 3/4/2025 5:20 PM

BIRMINGHAM CONTRACT #6-25(W) - WIMBLETON DRIVE PAVING 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 C06 Utility Plan	SHEET C10 Utility Service Plan	SHEET C11 Utility Service Plan	SHEET C12 Utility Service Plan	SHEET C13 P&G Plan	SHEET C14 P&G Plan	SHEET C15 P&G Plan	SHEET C16 P&G Plan	SHEET C17 P&G Plan	SHEET C18 P&G Plan	TOTAL QUANTITY
	SEWER PAY ITEMS																	
1	18" Combined Sewer, PVC SDR 26, Trench A	LF		317	400	190												907
2	12" Combined Sewer, PVC SDR 26, Trench A	LF				21												21
3	10" Combined Sewer, PVC SDR 26, Trench A	LF				89	181	122										392
4	42" Storm Sewer, CI5, CL-IV, Trench A	LF	451	450	400													1,304
5	36" Storm Sewer, CI5, CL-IV, Trench A	LF	15			153												168
6	24" Storm Sewer, CI5, CL-IV, Trench A	LF	91					166										257
7	18" Storm Sewer, CI5, CL-IV, Trench A	LF	24			110		99										233
8	12" Storm Sewer, CI5, CL-IV, Trench A	LF				22	47											69
9	10" Storm Sewer, PVC, SDR 26, Trench A	LF					138											138
10	Sewer Service, 6" PVC SDR 23.5	LF							460	342	106							928
11	6" Perforated Pipe Underdrain (No sock)	LF	375	440	420	345	310	150										2,040
12	New 6'-0" Diameter Combined Manhole w/ Two Int. Drop Connections	EA				1												1
13	New 5'-0" Diameter Combined Manhole w/ Int. Drop Connection	EA			1													1
14	New 4'-0" Diameter Combined Manhole, Construct Online	EA				2	1											3
15	New 4'-0" Diameter Combined Manhole	EA		1	1	1		2										5
16	Contech SCV-10 Water Quality Structure	EA	1															1
17	New 6'-0" Diameter Storm Manhole w/ 2' Sump & Elevated 36" Dia. Overflow	EA	1															1
18	New 6'-0" Diameter Storm Manhole	EA	2	1														3
19	New 6'-0" Diameter Storm Catch Basin w/ 2' Sump & Offset Grate (Per Detail)	EA	5	3	1	2												11
20	New 5'-0" Diameter Storm Manhole w/ 2' Sump	EA						1										1
21	New 4'-0" Diameter Storm Manhole, Construct Online	EA						1										1
22	New 4'-0" Diameter Storm Manhole	EA						1										1
23	New 4'-0" Diameter Storm Catch Basin w/ 2' Sump	EA				3	2											5
24	New 2'-0" Diameter Storm Inlet	EA				1	1	1										3
25	Sewer Investigation, Laterals	EA							17	16	3							36
26	Sewer Service Tap, 6"	EA							16	27	5							48
27	Sewer Service Connection, 6"	EA							6		1							7
28	Sewer Tap, Combined, OCWRC, 18"	EA		1														1
29	Sewer Tap, Combined, OCWRC, 10"	EA					1	1										2
30	Sewer Tap, Storm, 42"	EA	1															1
31	Sewer Stub w/ Capped End, Storm, 36"	EA				1												1
32	Sewer Stub w/ Capped End, Storm, 24"	EA	1					1										2
33	Sewer Stub w/ Capped End, Storm, 18"	EA				1		1										2
34	Install Concrete Saddle at Utility Crossing	EA	1			2												3
35	Reconstruct Manhole (if and where needed)	VF																25
36	Remove & Replace Structure Cover (as directed by City)	LS																1,650
37	Remove Ex. Sewer Manhole	EA	1	6	2	3	4											16
38	Remove Ex. Drainage Structure	EA	1	4	2	1	2											10
39	Abandon Ex. 12" Combined Sewer	LF			236	181	52											471
40	Abandon Ex. 8" Combined Sewer	LF					123	274										397
41	Remove Ex. 24" Combined Sewer	LF				18												18
42	Remove Ex. 12" Combined Sewer	LF		304	162													466
43	Remove Ex. 10" Combined Sewer	LF		70														70
44	Remove Ex. 18" Storm Sewer	LF						66										66
45	Remove Ex. 10" Storm Sewer	LF				8												8
46	Bulkhead Structure, 24"	EA		1														1
47	Bulkhead Structure, 12" or Less	EA																2
48	Bulkhead Pipe, Larger than 8"	EA																10
49	Clean and Televise Ex. Storm Outfall	LS																1
50	CCTV Sewer Acceptance Inspection	LS																1
	SUBTOTAL SEWER PAY ITEMS																	
	WATER MAIN PAY ITEMS																	
51	Remove Hydrant	EA	1	1														2
52	Remove Gate Valve Well	EA		3														3
53	12" Gate Valve & Well	EA	1	2		2	1	2										8
54	Fire Hydrant Assembly, Complete	EA	2	1	1		1	1										6
55	16" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	10															10
56	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	267	451	400	169												1,307
57	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF				79	173	226										478
58	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	22	7	7	29	4	16										85
59	4" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF						22										22
60	16" Water Main Connection to Ex. 16" Water Main	EA	1															1
61	8" Water Main Connection to Ex. 8" Water Main	EA				1												1
62	6" Water Main Connection to Ex. 6" Water Main	EA				2												2
63	4" Water Main Connection to Ex. 4" Water Main	EA						1										1
64	New Water Service, 1.5", Trench A, Copper	LF							47	28								75
65	New Water Service, 1", Trench A, Copper	LF							367	355	29							741
66	New Water Service, 1", Trench A, PEX	LF									11							11
67	New Water Service", 1", Private Property (Bored), PEX	LF							30		105							135
68	Water Service Connection, 1.5"	EA							2	1								3
69	Water Service Connection, 1"	EA							12	15	6							33
70	Water Service Connection, 1", Connection at Meter, 155 Wimbleton	EA							1									1
71	Water Service Connection, 1", Connection at Meter, 951 Twin Oaks	EA									1							1
72	Water Service Connection, 1", Connection at Meter, 999 Twin Oaks	EA									1							1
73	Install Curb Stop & Box, 1"	EA							7	9	3							19
74	Hydra-Stop, Insta-Valve 250, 16"	EA																1
75	Hydra-Stop, Insta-Valve 250, 6"	EA																1
76	Hydra-Stop, Line-Stop, 16"	EA																1
77	Hydra-Stop, Line-Stop, 6"	EA																1
78	Hydra-Stop, Line-Stop, 4"	EA																1
79	Abandon Existing Water Mains, Entire Project	LS																1
	SUBTOTAL WATER MAIN PAY ITEMS																	
	PAVING PAY ITEMS																	
80	Earth Excavation	CY										790	820	460	410	170	200	2,850
81	Subgrade Undercutting, 21AA Limestone	CY										120	125	70	65	30	35	445
82	Subgrade Undercutting, 1"x3" Limestone	CY										25	25	15	15	10	10	100
83	Subgrade Geogrid Fabric, Tensar Triax TX 1309	SY																1,250
84	Remove and Salvage Brick Pavers	SF										525				175		700
85	Removing Concrete Drive Approach	SY										85	166	132	31		21	435
86	Removing Asphalt Drive Approach	SY										100	14	113			22	249
87	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY										52	140	74	99	48	10	414
88	Removing Pavement Full Depth (Curb & Gutter included)	SY										1340	1280	1018	990	305	435	5,368
89	Aggregate Base, MDOT 21AA Limestone, 8"	SY										1510	1635	1295	960	370	540	6,310
90	Capeseal Surface	SY										1260	1360	1070	860	290	460	5,300
91	Bituminous Mixture No. 4EML (Handpatching for Driveways)	TON										10		1		9	1	21
92	Concrete Curb & Gutter (18" Wide, "Birmingham Roll")	LF										885	960	690	345	278	302	3,570
93	Concrete Drive Approach, 6" Thick on 6" 21AA Limestone	SY										150	155	220	51	13	25	614
94	Concrete Drive Approach, 7" Thick on 9" 21AA Limestone	SY										50						50
95	Concrete Sidewalk, 6" (Includes Ramps)	SF										240	350	90	385	210	40	1,325
96	Concrete Sidewalk, 4"	SF										985	890	660	430	265	50	3,180
97	Reinstall Salvaged Brick Pavers	SF										150				125		275
98	Handicap Ramp Truncated Domes	SF										20	80		85			185
99	Adjust Structure Cover	EA										2	1		1	1		5
100	Maintenance Aggregate for Entire Project	LS																1
	SUBTOTAL PAVING PAY ITEMS																	
	GENERAL PAY ITEMS																	
101	Mobilization (Max. 5% of Bid)	LS																1
102	Traffic Maintenance & Control	LS																1
103	Inspector Crew Days	DAYS																90
104	Water and Sewer Allowance	LS																1
105	Audio-Video Route Survey	LS																1
106	Salvage Existing Signs	LS																1
107	New Signs	SF																60
108	Sign Post, U-Channel	LF																240
109	Tree Protection, 3" Dia. Or Greater	EA																66
110	Silt Fencing, 18" Height	LF							260							50		310
111	Mulch, 3"	SY										25	5	45	55	15	10	155
112	Topsoil, 3"	SY										1250	960	690	400	100	500	3,900
113	Sod, Class A	SY										1250	960	690	400	100	500	3,900
114	Inlet Filter	EA										5	3	1	6	3	1	19
115	Inlet Sediment Pit	EA										5	3	1	6	3	1	19
	SUBTOTAL GENERAL PAY ITEMS																	
	ALTERNATE #1 - "ROUGE RIVER STORM OUTFALL IMPROVEMENTS"																	
	ALTERNATE #1 PAY ITEMS																	
116	42" Storm Sewer, CI5, CL-IV, Trench A	LF																10
117	New 6'-0" Diameter Storm Manhole, Construct Online	EA																1
118	New 42" Dia. End Section w/ Bar Screen	EA																1
119	Pre-Lining Preparation, Cleaning & Video Inspection, 48-inch Sewer	LF																244
120	Sewer Lining, Pre-Liner, 48" RIPI-CIPP	LF																244
121	Sewer Lining, 48" RIPI-CIPP	LF																244
122	Cut/Grind Protruding Sewer Leads, Any Material	EA																2
123	Cut/Grind Root Intrusion	EA																5
124	Cut/Grind Mineral Deposit	EA																5
125	Remove Ex. 42" Storm Headwall	EA																1
126	Remove Ex. 42" Storm Sewer	LF																39
127	Earth Excavation, Alternate #1	CY																325
128	Remove & Replace Woodward Ave. Sidewalk	SF																300
129	Remove & Replace Woodward Ave. Guardrail	LF																60
130	Mobilization (Max. 5% of Bid Alternate #1 Total)	LS																1
131	Traffic Maintenance & Control, Alternate #1	LS																1
132	Inspector Crew Days, Alternate#1	DAYS																20
133	Silt Fencing, 30" Height	LF																260
134	Lawn Restoration Along Bank at Storm Outlet	LS																1
135	Gravity Retaining Wall, Boulder	FSF																365
136	Natural Stone Rip-Rap & 1x3 Energy Dissipating Pool (per detail)	SY																130
	SUBTOTAL ALTERNATE #1 PAY ITEMS																	

V:\2025-2500 Files\12000-FILES\12070\Office\Construction Documents\12070_SHEETS.dwg, 3/4/2025 5:19 PM

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
Paving Project
Contract #6-25(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

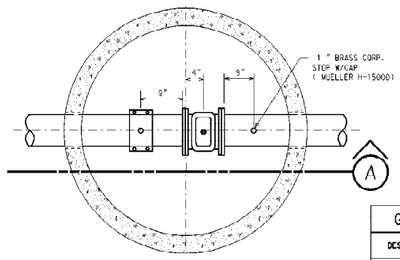
SHEET
Quantities

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
10-25-24	ISSUED SURVEY
02-12-25	CITY REVIEW
02-20-25	BIDS
03-04-25	ADDENDUM 2

DRAWN BY: L. Gross
DESIGNED BY: P. Tulikangas
APPROVED BY: P. Tulikangas
DATE: February 20, 2024
SCALE: N.T.S.

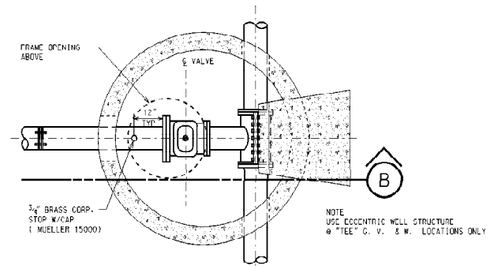
NFE JOB NO. O310
SHEET NO. Q1



GATE WELL PLAN

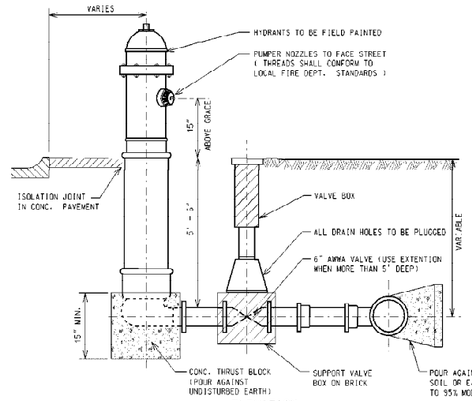
NO SCALE

GATE WELL SCHEDULE				
DESCRIPTION	DIM.	PIPE DIA. INCHES		
		6" & 8"	12"	16"
INSIDE DIA.	A	60"	72"	72"
WALL THICK.	B	5"	7"	7"
VALVE BLOCK THICK.	C	4"	4"	4"

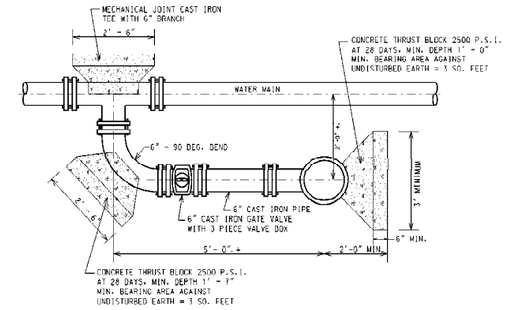


TAPPING SLEEVE, VALVE & WELL PLAN

NO SCALE



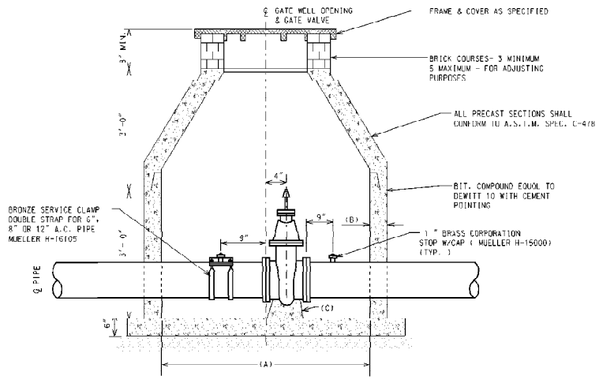
ELEVATION



"L" HYDRANT CONNECTION

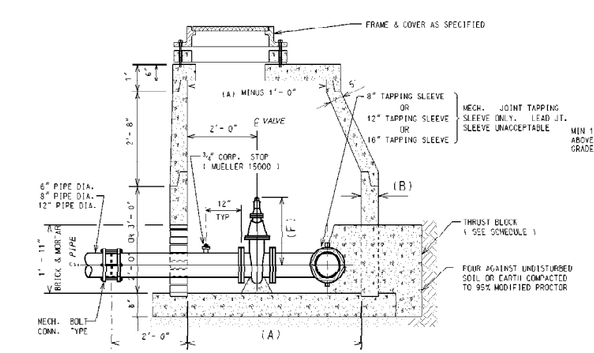
NO SCALE
W-9

NOTE: FOR CONSTRUCTION OF NEW FIRE HYDRANT TO EXISTING CIVIL INFORMATION USE 6" TAPPING SLEEVE VALVE & BOX TO MAKE CONNECTION, AND DELETE "6" CAST IRON GATE VALVE WITH 3 PIECE VALVE " AS SHOWN ON DETAIL .



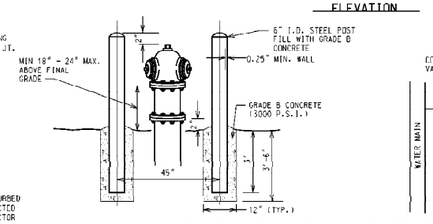
SECTION "A" GATE WELL

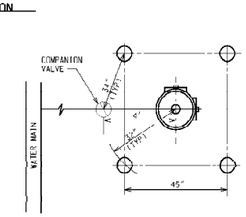
NO SCALE
W-1 & W-3



SECTION "B" TAPPING SLEEVE, VALVE & WELL

NO SCALE
W-4



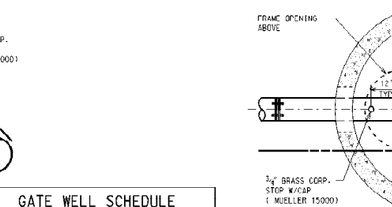


FIRE HYDRANT GUARD POSTS DETAIL

VERTICAL BEND THRUST BLOCKS FOR 8"-12" MAINS

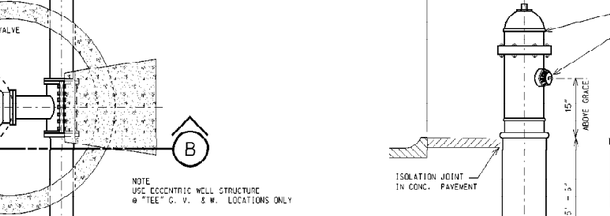
DITCH AND STREAM CROSSING

NO SCALE



SEWER OR CULVERT CROSSING

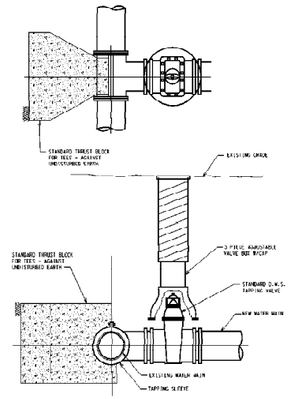
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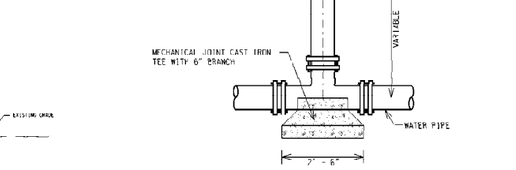
PROP. WATER MAINS NOT UNDER PAVED SURFACE

PROP. WATER MAINS UNDER PAVED SURFACE OR WITHIN INFLUENCE OF PAVED SURFACE

BEDDING DETAILS

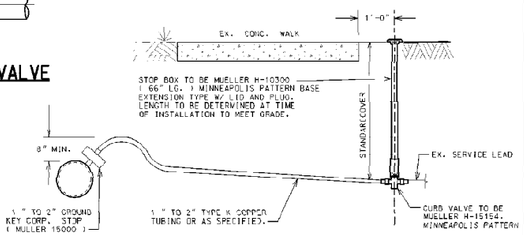


TAPPING SLEEVE & VALVE W/VALVE BOX



STRAIGHT HYDRANT CONNECTION

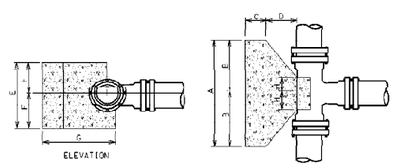
NO SCALE
W-10



WATER SERVICE CONNECTION (TYP)

NO SCALE

SCHEDULE OF THRUST BLOCK DIMENSIONS				
CODE		TEE SIZE		
		8"x8" 12"x8" 16"x8" 24"x8"	12"x12" 16"x12" 24"x12"	16"x16" 24"x16"
A		3'-0"	4'-0"	5'-0"
B		1'-6"	2'-0"	2'-6"
C		0'-9"	0'-9"	1'-0"
D		2'-0"	3'-0"	4'-0"
E		1'-0"	1'-6"	2'-0"
F		1'-0"	1'-0"	2'-0"
G	8"	2'-2"		
	12"	2'-6"	2'-10"	
	16"	2'-10"	3'-1"	3'-8"
	24"	3'-5"	3'-7"	4'-2"
H	8"	0'-6"		
	12"	0'-6"	0'-10"	
	16"	0'-6"	0'-10"	1'-0"
	24"	0'-6"	0'-10"	1'-0"

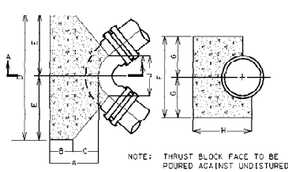


THRUST BLOCK FACE SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

CONCRETE THRUST BLDCK FOR TEES

N.T.S.

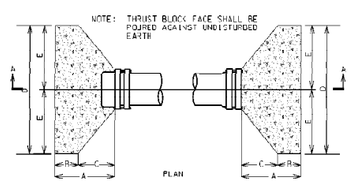


CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SIZE	ANGLE	A MIN.	B MIN.	C	D	E	F	G	H MIN.	J
6"	90°	1'-6"	0'-9"	0'-9"	2'-0"	1'-0"	2'-0"	1'-0"	1'-8"	0'-10"
8"	45°	1'-6"	0'-9"	1'-0"	2'-4"	1'-0"	2'-8"	1'-3"	1'-11"	1'-4"
8"	90°	1'-9"	0'-9"	1'-0"	3'-6"	1'-8"	2'-8"	1'-3"	1'-11"	1'-2"
12"	22-1/2°	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	2'-0"	1'-3"	2'-0"	1'-4"
12"	45°	2'-1"	0'-9"	1'-4"	3'-6"	1'-9"	2'-6"	1'-3"	2'-4"	1'-4"
12"	90°	2'-1"	0'-9"	1'-4"	5'-6"	2'-3"	3'-0"	1'-6"	2'-4"	1'-8"
16"	22-1/2°	2'-3"	1'-0"	1'-8"	3'-4"	1'-8"	2'-0"	1'-3"	2'-8"	1'-2"
16"	45°	2'-8"	1'-0"	1'-8"	5'-4"	2'-8"	3'-0"	1'-3"	3'-0"	1'-6"
16"	90°	2'-8"	1'-0"	1'-8"	8'-0"	3'-0"	5'-0"	2'-3"	3'-0"	1'-8"
24"	90°	4'-7"	1'-0"	3'-7"	10'-0"	5'-0"	7'-0"	2'-3"	5'-4"	2'-4"

CONCRETE THRUST BLOCK FOR BENDS

N.T.S.



SIZE	A MIN.	B MIN.	C	D	E	F	G
8"	1'-11"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"
12"	2'-1"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"
16"	2'-8"	1'-0"	1'-8"	5'-0"	2'-6"	3'-0"	1'-6"

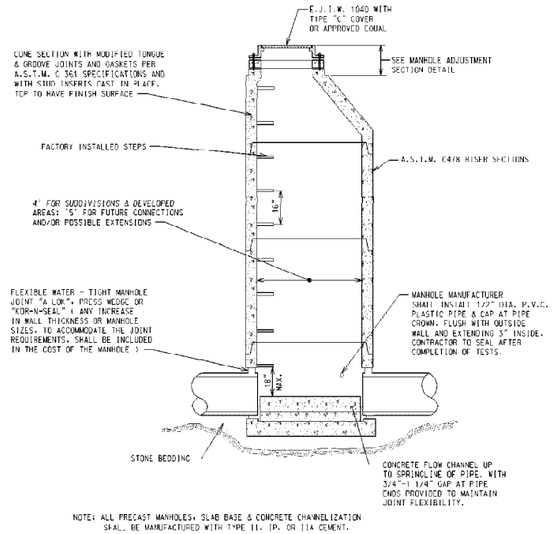
CONC. THRUST BLOCKS FOR PLUGS & CAPS

City of Birmingham

151 MARTIN STREET BIRMINGHAM, MICHIGAN 48012

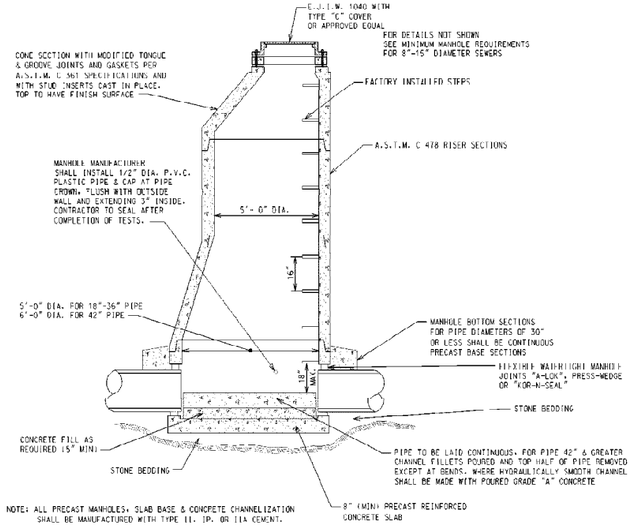
WATER MAIN STANDARD DETAILS

DATE	REVISION AND/OR REVISION	DRAWN	PROJECT NO.	SHEET NO.
		DESIGNED	DATE APRIL 2005	WM-1
		APPROVED	SCALE	



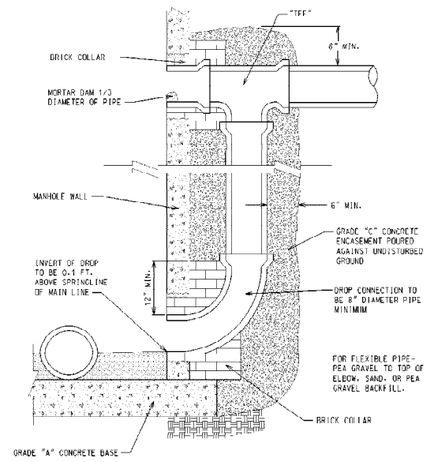
SEWER MANHOLE

(8" THRU 15" DIA. SEWERS)

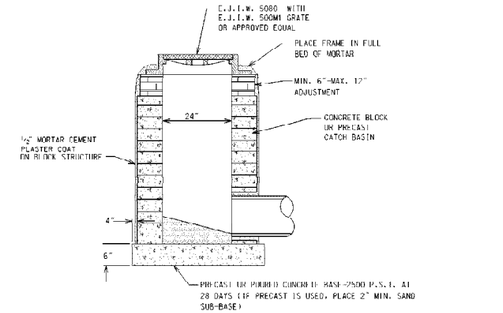


SEWER MANHOLE

(18" THRU 42" DIA. SEWERS)

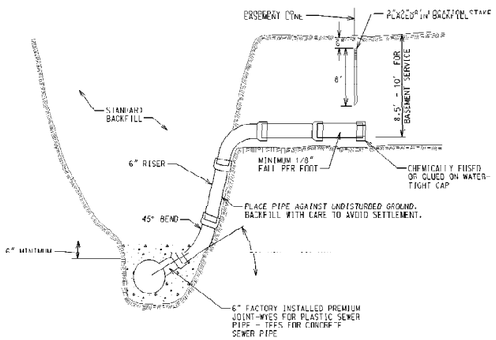


EXTERNAL DROP CONNECTION



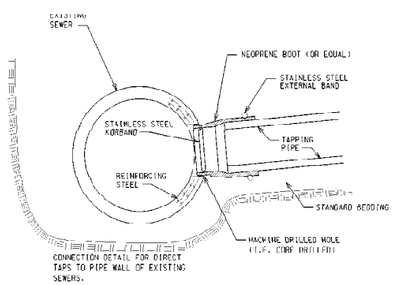
2 FT. DIAMETER INLET

NOTE:
FOR CATCH BASINS OR INLETS WITHIN YARD AREAS USE E.J.I.W. 1040 WITH TYPE "M" COVER OR APPROVED EQUAL



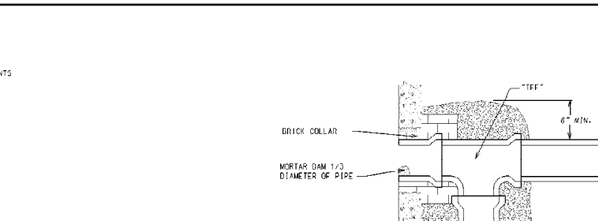
BUILDING LEAD DETAIL

0' - 15' COVER

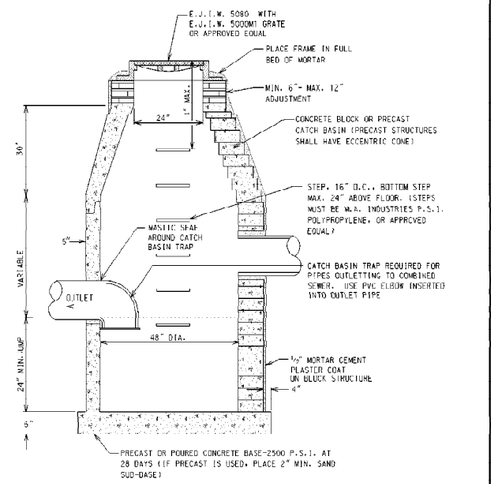


KOR-N-TEE TAP FOR CONCRETE

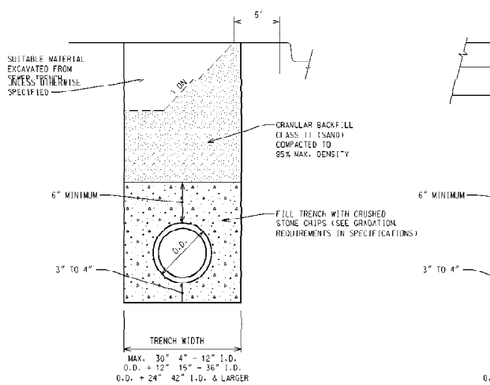
NO SCALE



SANITARY MANHOLE ADJUSTMENT SECTION DETAIL



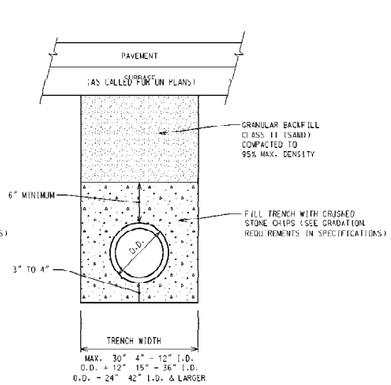
4 FT. DIAMETER CATCH BASIN

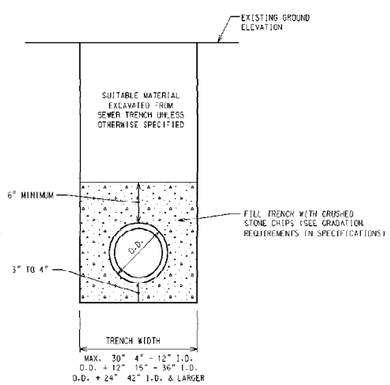


TRENCH DETAIL "A"

SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED

NOT TO SCALE

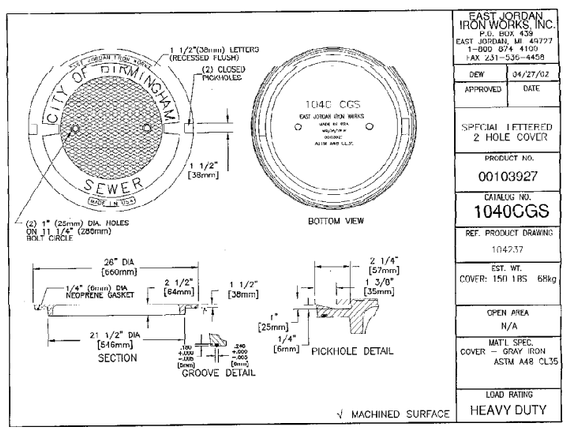




TRENCH DETAIL "B"

SEWER NOT UNDER ROAD BED

NOT TO SCALE



EAST JORDAN IRON WORKS, INC.
P.O. BOX 439
EAST JORDAN, MI 49727
1-800 874 4100
FAX 231-536-4458

DRW	04/27/02
APPROVED	DATE
SPECIAL LETTERED 2 HOLE COVER	
PRODUCT NO.	00103927
CATALOG NO.	1040CGS
REF. PRODUCT DRAWING	104737
EST. WT.	COVER: 150 LBS 68kg
OPEN AREA	N/A
MATL SPEC.	COVER - GRAY IRON ASTM A48 CL35
LOAD RATING	HEAVY DUTY

City of Birmingham

151 MARTIN STREET BIRMINGHAM, MICHIGAN 48102

SEWER STANDARD DETAILS

DATE	REVISION AND/OR REVISION	DRAWN	PROJECT NO.	SHEET NO.
		DESIGNED	DATE JANUARY 2007	
		APPROVED	SCALE	

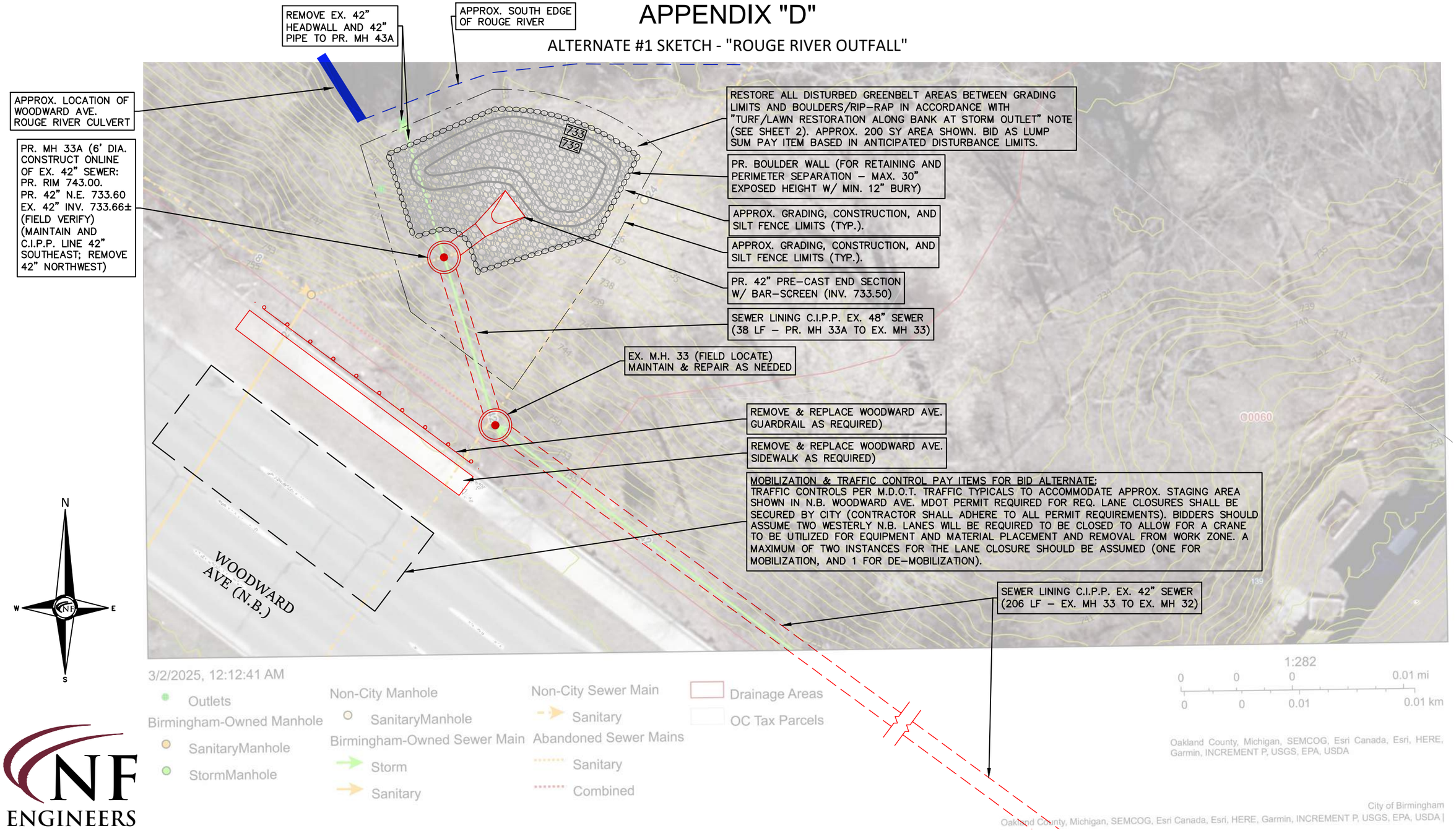
APPENDIX – D

Sketch for:

“Alternate #1 – Rouge River Storm Outfall Improvements”

APPENDIX "D"

ALTERNATE #1 SKETCH - "ROUGE RIVER OUTFALL"



1" = 20'

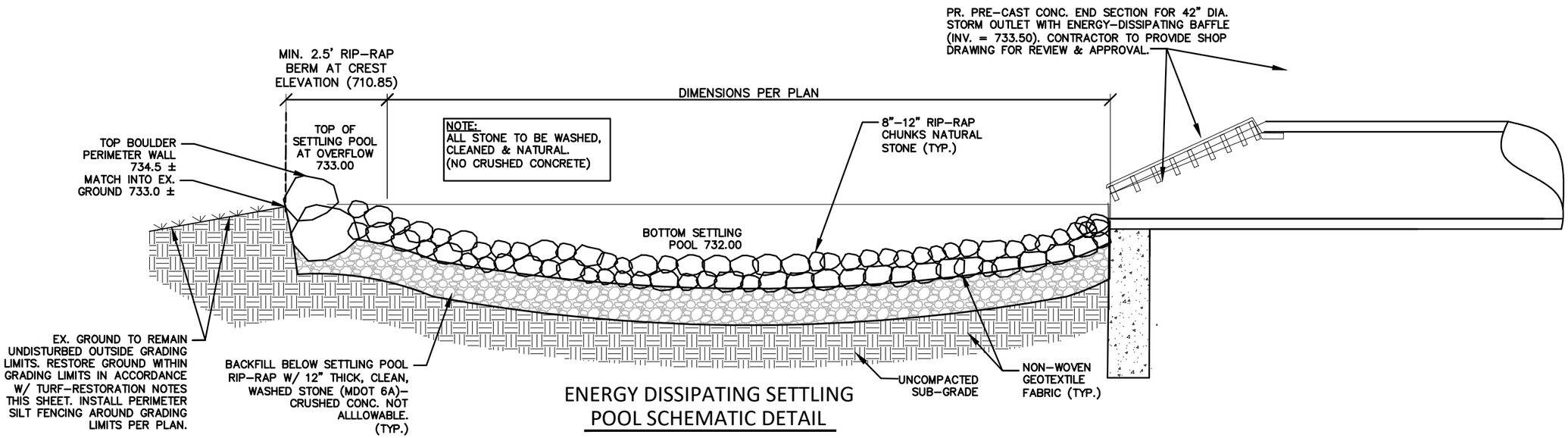
20 10 0 10 20 30

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

SCALE	DATE	DRAWN	JOB NO.	SHEET
1 = 20'	03/04/25	PT	O310	1 OF 2

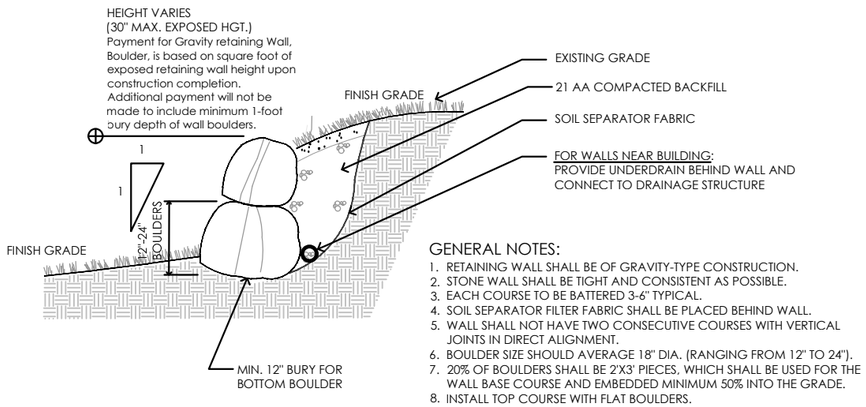
APPENDIX "D"

ALTERNATE #1 SKETCH - "ROUGE RIVER OUTFALL"



ENERGY DISSIPATING SETTLING POOL SCHEMATIC 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 3-6" 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'X3' 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

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.

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

SCALE	DATE	DRAWN	JOB NO.	SHEET
N.T.S.	03/04/25	PT	O310	2 OF 2

Wimbleton Phase 1 Project
Paving Special Assement District

Sidwell Number	Street Address	Total Assessable Length (LFT)	Road SAD Costs	Approach SAD Costs	Total Paving SAD Costs
1925177022	999 TWIN OAKS LN	21.32	$3,649.59	$2,349.90	$5,999.49
1925177023	951 TWIN OAKS LN	74.80	$12,805.57	$207.90	$13,013.47
1925177024	187 WIMBLETON DR	91.01	$15,580.60	$3,187.50	$18,768.10
1925177025	175 WIMBLETON DR	64.18	$10,988.06	$1,215.00	$12,203.06
1925177026	165 WIMBLETON DR	51.26	$8,774.73	$1,927.50	$10,702.23
1925177027	155 WIMBLETON DR	55.25	$9,458.66	$2,275.20	$11,733.86
1925177028	139 WIMBLETON DR	90.10	$15,424.90	$3,097.50	$18,522.40
1925180003	176 WIMBLETON DR	53.13	$9,096.32	$1,215.00	$10,311.32
1925180004	144 WIMBLETON DR	170.04	$29,110.85	$1,741.50	$30,852.35
1925251022	175 ABBEY RD	22.10	$3,783.47	$630.00	$4,413.47
1925251023	147 ABBEY RD	137.00	$23,454.06	$2,775.40	$26,229.46
1925254008	205 WIMBLETON DR	61.50	$10,528.65	$-	$10,528.65
1925254011	287 WIMBLETON DR	55.25	$9,458.66	$2,220.00	$11,678.66
1925254012	323 WIMBLETON DR	55.25	$9,458.66	$1,260.00	$10,718.66
1925254013	341 WIMBLETON DR	55.25	$9,458.66	$1,222.50	$10,681.16
1925254014	355 WIMBLETON DR	55.25	$9,458.66	$1,815.00	$11,273.66
1925254015	379 WIMBLETON DR	51.00	$8,731.07	$1,222.50	$9,953.57
1925254016	421 WIMBLETON DR	51.00	$8,731.07	$1,222.50	$9,953.57
1925254017	463 WIMBLETON DR	99.79	$17,084.49	$-	$17,084.49
1925254019	245 WIMBLETON DR	55.25	$9,458.66	$2,175.00	$11,633.66
1925254020	269 WIMBLETON DR	55.25	$9,458.66	$1,215.00	$10,673.66
1925255006	519 WIMBLETON DR	80.48	$13,777.63	$1,387.50	$15,165.13
1925256001	129 ABBEY RD	92.38	$15,814.37	$2,235.00	$18,049.37
1925256002	111 ABBEY RD	56.95	$9,749.70	$690.00	$10,439.70

Wimbleton Phase 1 Project
Paving Special Assement District

1925257001	202 WIMBLETON DR	82.56	$14,133.98	$1,185.00	$15,318.98
1925257002	244 WIMBLETON DR	63.75	$10,913.84	$1,237.50	$12,151.34
1925257003	266 WIMBLETON DR	53.55	$9,167.63	$1,260.00	$10,427.63
1925257004	282 WIMBLETON DR	51.00	$8,731.07	$1,260.00	$9,991.07
1925257005	322 WIMBLETON DR	51.00	$8,731.07	$1,237.50	$9,968.57
1925257008	380 WIMBLETON DR	51.00	$8,731.07	$1,260.00	$9,991.07
1925257012	498 WIMBLETON DR	38.91	$6,660.87	$-	$6,660.87
1925257018	460 WIMBLETON DR	51.00	$8,731.07	$1,395.00	$10,126.07
1925257019	420 WIMBLETON DR	51.00	$8,731.07	$1,312.50	$10,043.57
1925257020	444 WIMBLETON DR	51.00	$8,731.07	$3,000.00	$11,731.07
1925257023	340 WIMBLETON DR	102.00	$17,462.15	$1,522.50	$18,984.65
1925258001	520 WIMBLETON DR	38.91	$6,660.87	$-	$6,660.87
1925401001	N/A POPPLETON PARK	111.35	$22,426.88	$-	$22,426.88

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Clerk's Office

DATE: March 19, 2025

TO: Jana L. Ecker, City Manager

FROM: Alexandria Bingham, City Clerk

SUBJECT: Clerk's Confirmation of Public Hearing Notice: Wimbleton Paving Project, Contract #6-25(W) - Paving Special Assessment District (SAD)

INTRODUCTION:
The public hearing notice process has been completed for Wimbleton Paving Project, Contract #6-25(W) - Paving Special Assessment District (SAD). Please see attachments for further confirmation.

PUBLIC COMMUNICATIONS:
Mailing Date: 3/19/2025
Test Mail Return Date:
Publishing Dates in the Oakland Press: 3/23/2025 & 4/6/2025
Posted in www.bhamgov/publicnotices

ATTACHMENTS:
1. Public Hearing Notice
2. Addresses
3. Mailing Letter
4. Mail Machine Counter Repot
5. 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, April 7, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, April 21, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton:

1925256002	111 ABBEY RD	1925257005	322 WIMBLETON DR
1925256001	129 ABBEY RD	1925254012	323 WIMBLETON DR
1925177028	139 WIMBLETON DR	1925257023	340 WIMBLETON DR
1925180004	144 WIMBLETON DR	1925254013	341 WIMBLETON DR
1925251023	147 ABBEY RD	1925254014	355 WIMBLETON DR
1925177027	155 WIMBLETON DR	1925254015	379 WIMBLETON DR
1925177026	165 WIMBLETON DR	1925257008	380 WIMBLETON DR
1925251022	175 ABBEY RD	1925257019	420 WIMBLETON DR
1925177025	175 WIMBLETON DR	1925254016	421 WIMBLETON DR
1925180003	176 WIMBLETON DR	1925257020	444 WIMBLETON DR
1925177024	187 WIMBLETON DR	1925257018	460 WIMBLETON DR
1925257001	202 WIMBLETON DR	1925254017	463 WIMBLETON DR
1925254008	205 WIMBLETON DR	1925257012	498 WIMBLETON DR
1925257002	244 WIMBLETON DR	1925255006	519 WIMBLETON DR
1925254019	245 WIMBLETON DR	1925258001	520 WIMBLETON DR
1925257003	266 WIMBLETON DR	1925177023	951 TWIN OAKS LN
1925254020	269 WIMBLETON DR	1925177022	999 TWIN OAKS LN
1925257004	282 WIMBLETON DR	1925401001	POPPLETON PARK
1925254011	287 WIMBLETON DR		

Nature of Improvement:	The City of Birmingham Wimbleton Project will start in the Spring of 2025. The project includes the replacement of the water main, sewer, and the streets will receive concrete curb and gutter with cape seal treatments. As part of the project, the City will disturb the unimproved streets and will construct concrete curb, gutter, and cape seal treatment. A Paving Special Assessment District (SAD) is created for the work being done. Enclosed is a map of properties included in the Paving SAD.
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 3/23/2025 & 4/6/2025
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	First Owner Name	POSTALCITY	POSTALSTAT	POSTALZIP5	PNUM	Postal City Postal State Postal Zip 5
1925254013	1109 EARL BLVD	MICHAEL DAVID MISCHLE	FERNDALE	MI	48220	08-19-25-254-013	FERNDALE, MI 48220
1925256002	111 ABBEY RD	FREDERICK J PHILLIPS	BIRMINGHAM	MI	48009	08-19-25-256-002	BIRMINGHAM, MI 48009
1925256001	129 ABBEY RD	JOHN J MCINERNEY JR	BIRMINGHAM	MI	48009	08-19-25-256-001	BIRMINGHAM, MI 48009
1925177028	139 WIMBLETON DR	CHRISTOPHER BIDLAKE	BIRMINGHAM	MI	48009	08-19-25-177-028	BIRMINGHAM, MI 48009
1925180004	144 WIMBLETON DR	SUSAN ANN HORNUNG	BIRMINGHAM	MI	48009	08-19-25-180-004	BIRMINGHAM, MI 48009
1925251023	147 ABBEY RD	CHARLES G MILLER III LVNG TRUST	BIRMINGHAM	MI	48009	08-19-25-251-023	BIRMINGHAM, MI 48009
1925177027	155 WIMBLETON DR	JACQUELINE L SPICER	BIRMINGHAM	MI	48009	08-19-25-177-027	BIRMINGHAM, MI 48009
1925177026	165 WIMBLETON DR	STEVEN L WICHLACZ	BIRMINGHAM	MI	48009	08-19-25-177-026	BIRMINGHAM, MI 48009
1925251022	175 ABBEY RD	JEFFREY W WILSON	BIRMINGHAM	MI	48009	08-19-25-251-022	BIRMINGHAM, MI 48009
1925177025	175 WIMBLETON DR	GEOFFREY D KAHN	BIRMINGHAM	MI	48009	08-19-25-177-025	BIRMINGHAM, MI 48009
1925180003	176 WIMBLETON DR	ANTHONY R ANSARA	BIRMINGHAM	MI	48009	08-19-25-180-003	BIRMINGHAM, MI 48009
1925177024	187 WIMBLETON DR	RYAN MCGUIRE	BIRMINGHAM	MI	48009	08-19-25-177-024	BIRMINGHAM, MI 48009
1925257001	202 WIMBLETON DR	JOHN FALLUCCA	BIRMINGHAM	MI	48009	08-19-25-257-001	BIRMINGHAM, MI 48009
1925254008	205 WIMBLETON DR	ELISA H ROOVERS	BIRMINGHAM	MI	48009	08-19-25-254-008	BIRMINGHAM, MI 48009
1925257002	244 WIMBLETON DR	TIMOTHY J DOYLE	BIRMINGHAM	MI	48009	08-19-25-257-002	BIRMINGHAM, MI 48009
1925254019	245 WIMBLETON DR	JARROD K ANTHONY	BIRMINGHAM	MI	48009	08-19-25-254-019	BIRMINGHAM, MI 48009
1925257003	266 WIMBLETON DR	DANIEL C KOWAL	BIRMINGHAM	MI	48009	08-19-25-257-003	BIRMINGHAM, MI 48009
1925254020	269 WIMBLETON DR	JORDAN INGRAM	BIRMINGHAM	MI	48009	08-19-25-254-020	BIRMINGHAM, MI 48009
1925257004	282 WIMBLETON DR	DANIEL J HILL	BIRMINGHAM	MI	48009	08-19-25-257-004	BIRMINGHAM, MI 48009
1925254011	287 WIMBLETON DR	VOSS REVOCABLE TRUST	BIRMINGHAM	MI	48009	08-19-25-254-011	BIRMINGHAM, MI 48009
1925257005	322 WIMBLETON DR	JULIANA MAMOU	BIRMINGHAM	MI	48009	08-19-25-257-005	BIRMINGHAM, MI 48009
1925254012	323 WIMBLETON DR	KENT L FAIRLESS	BIRMINGHAM	MI	48009	08-19-25-254-012	BIRMINGHAM, MI 48009
1925257023	340 WIMBLETON DR	PIETER E KRIEL	BIRMINGHAM	MI	48009	08-19-25-257-023	BIRMINGHAM, MI 48009
1925254014	355 WIMBLETON DR	ANNETTA P SARGENT LIVING TRUST	BIRMINGHAM	MI	48009	08-19-25-254-014	BIRMINGHAM, MI 48009
1925254015	379 WIMBLETON DR	DAVID E BREAUGH JR	BIRMINGHAM	MI	48009	08-19-25-254-015	BIRMINGHAM, MI 48009
1925257008	380 WIMBLETON DR	MARGARET A DESMOND	BIRMINGHAM	MI	48009	08-19-25-257-008	BIRMINGHAM, MI 48009
1925258001	401 S OLD WOODWARD AVE STE 470	BINGHAM WIMBLETON LLC	BIRMINGHAM	MI	48009	08-19-25-258-001	BIRMINGHAM, MI 48009
1925257019	420 WIMBLETON DR	PIERRE LOUIS GIRON REVOC LVG TRST	BIRMINGHAM	MI	48009	08-19-25-257-019	BIRMINGHAM, MI 48009
1925254016	421 WIMBLETON DR	SEAN CHRISTOPHER VAUGHAN	BIRMINGHAM	MI	48009	08-19-25-254-016	BIRMINGHAM, MI 48009
1925257020	444 WIMBLETON DR	DONAL S O'LEARY	BIRMINGHAM	MI	48009	08-19-25-257-020	BIRMINGHAM, MI 48009
1925257018	460 WIMBLETON DR	KEVIN PATRICK CLEARY	BIRMINGHAM	MI	48009	08-19-25-257-018	BIRMINGHAM, MI 48009
1925254017	463 WIMBLETON DR	BRYAN J UHL TRUST	BIRMINGHAM	MI	48009	08-19-25-254-017	BIRMINGHAM, MI 48009
1925257012	498 WIMBLETON DR	BRADFORD L COULTER	BIRMINGHAM	MI	48009	08-19-25-257-012	BIRMINGHAM, MI 48009
1925255006	519 WIMBLETON DR	TIMOTHY C BRADLEY TRUST	BIRMINGHAM	MI	48009	08-19-25-255-006	BIRMINGHAM, MI 48009
1925177023	951 TWIN OAKS LN	PERISH A LAVOISNE	BIRMINGHAM	MI	48009	08-19-25-177-023	BIRMINGHAM, MI 48009
1925177022	999 TWIN OAKS LN	JEFFREY SLATKIN	BIRMINGHAM	MI	48009	08-19-25-177-022	BIRMINGHAM, MI 48009
	151 MARTIN STREET	CITY OF BIRMINGHAM					BIRMINGHAM, MI 48009

BIRMINGHAM
A WALKABLE CITY

March 18, 2025

TO: parcel #
NAME
ADDRESS
CITY/STATE/ZIP

Re: Wimbleton Paving Project, Contract #6-25(W)
Paving Special Assessment District (SAD)

To whom it may concern,

The City of Birmingham Wimbleton Project will start in the Spring of 2025. The project includes the replacement of the water main, sewer, and the streets will receive concrete curb and gutter with cape seal treatments.

As part of the project, the City will disturb the unimproved streets and will construct concrete curb, gutter, and cape seal treatment. A Paving Special Assessment District (SAD) is created for the work being done. Enclosed is a map of properties included in the Paving SAD.

With this letter, you are receiving notifications for two public hearings for the Paving Special Assessment District (SAD):

- 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 1 Project is **Monday, April 7, 2025**, at the regularly scheduled City Commission meeting at 7:30 p.m. in City Hall at 151 Martin St.

- If necessity is determined at the April 7 hearing, a Public Hearing of Confirmation to confirm the Special Assessment District will follow on **Monday, April 21, 2025**, at the regularly scheduled City Commission meeting at 7:30 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 pays for the balance of the costs, 15% and 75% of short footage and long footage respectively.

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.

After the work is completed, an invoice will be generated and sent to the property owner of record for the public improvements. Payment in full will be expected within 30 days of receipt. If you are not in a position to pay off the charge in one payment, it can be broken into as many as 10 annual payments. An annual interest charge on the remaining balance, currently about 8.50 percent, will apply. Official estimates of road installation will be provided at the Hearing of Necessity.

The Engineering Department will have a resident meeting on **Wednesday April 2, 2025, 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 or concerns, please contact the Engineering Office at (248) 530-1850. You will 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

151 Martin Street • P.O. Box 3001 • Birmingham, MI 48012-3001
(248) 530-1800 • Fax (248) 530-1080 • www.bhamgov.org

Funds Report	Available:	$7,522.61	PBP Account Number:	35884980
	Used:	$82,263.39	Indicia Number:	0008029208
	Total Pieces:	110175	Meter Number:	8029208
	Control Sum:	$89,786.00	Meter Name:	
	Resettable Piece Count:	37	Printed:	MAR 19 2025 3:15 PM
	Piece Count Value:	$25.53		

Faith calendar

The following is a list of in-person and online worship services and events happening at churches and synagogues in the Oakland County area. Visit websites or call for service times and events.

▪ Abiding Presence Lutheran Church, 1550 Walton Blvd., Rochester Hills, 248-651-6550, abidingpresence.org. Sunday worship services are at 9:30 a.m., virtual services are available on the website.

▪ Adat Shalom Synagogue, 29901 Middlebelt Road, Farmington Hills, in-person and online services via Zoom. To view daily Minyan video conferences; email Executive Director Michael Wolf at mwolf@adatshalom.org or visit adatshalom.org, 248-851-5100.

▪ All Saints' Episcopal, 171 W. Pike St., Pontiac, allsaintspontiac.org, 248-334-4571, rector@allsaintspontiac.org.

▪ The Apostolic Church of Christ, 3655 N. Squirrel Road, Auburn Hills, theapostolicchurch.com, 248-373-4500, Sunday worship services at 11 a.m.

▪ Archdiocese of Detroit, livestream Mass times, aod.org/livemasses.

Online: Complete list available at THEOAKLANDPRESS.COM.

▪ Auburn Hills Christian Center, 2592 Walton Blvd., Auburn Hills, Sunday worship services at 10:30 a.m., Servicio Evangelistico services (in Spanish) at 2-4 p.m. Sundays, 248-373-7139, www.myahcc.org.

▪ Beacon Unitarian Universalist Congregation, Troy, in-person and online services at 10:30 a.m. Sundays, beaconcongregation.org, admin@beaconcongregation.org.

▪ Beautiful Savior Lutheran Church, 5631 N. Adams Road, Bloomfield Hills, livestream services at 9 a.m. Sundays, and in person at 9 a.m. and 11:15 a.m. at bslcmi.org, facebook/bslcmi, 248-646-5041.

▪ Berea Family Tabernacle of Faith, Pontiac, Sunday worship services are at 11 a.m., experienceberea.org, 248-338-4748.

▪ Berkley First United Methodist Church, 2820 12 Mile Road, Berkley, worship services are 10 a.m. Sundays in person and online at www.berkleyfirst.org.

▪ Bharatiya Temple, 6850 N Adams Road, Troy, www.bharatiya-temple.org, 248-879-2552.

▪ Big Beaver United Methodist Church, 3753 John R Road, Troy, worship services at 10 a.m. Sundays, http://bbumchurch.org.

▪ Birmingham First United Methodist Church, 1589 W Maple Road, Birmingham, www.fumcbirmingham.org. Sunday worship services in person and online are at 9:30 a.m., and in-person only services at 11 a.m.

▪ Birmingham Unitarian Church, 38651 Woodward Ave., Bloomfield Hills, in-person and online worship services, 10:30 a.m. Sundays, bucmi.org, 248-647-2380.

▪ Bridge Community Church, 5700 Rochester Road, Troy, in-person and online worship services, 10 a.m. Sundays, bridgecommunitychurch.com/live, 248-879-9500.

▪ Bridgewood Church, 6765 Rattalee Lake Road, Clarkston, 248-625-1344, www.

FAITH » PAGE 5

GARDENING

Consider planting an extra row for the hungry in your garden this spring

By Jessica Damiano
The Associated Press

If you're gearing up to plant fruits, vegetables or herbs this spring, why not grow some extra to donate to your local soup kitchen or pantry?

The national Plant a Row for the Hungry campaign, launched in 1995, has been encouraging home and community gardeners to do just that every year to help feed neighbors in need of fresh food.

The program was spearheaded in 1995 by Anchorage Daily News garden columnist Jeff Lowenfels, who wrote a column encouraging his readers to plant extra crops and donate their harvests.

After seeing the impact that his column had on local food donations, Lowenfels partnered with GardenComm International, then known as Garden Writers of America, to enlist garden columnists all over the country to promote the cause in their own communities. Since then, more than 20 million pounds of produce, providing more than 80 million meals, have been donated through the campaign by home gardeners.

"All of this has been achieved without government subsidy or bureaucratic red tape — just people helping people," according to organizers on the campaign's website. And there's no big advertising campaign, either — just garden columnists and their readers spreading the word.

If everyone reading this column planted one extra row and donated its harvest, together we could have an impact on hunger.

So what do you say?

To participate, plant an extra row or container (or, if you're short on space or resources, even just one additional plant) and donate its harvest to your local food pantry, soup kitchen, house of worship or informally to a neighbor who could use it.

If you'd like to help even more, consider starting your own Plant a Row campaign with friends, neighbors or co-workers and plant individually or at the office, in a community garden, school garden, prison garden — whatever garden you have at your disposal.

If you need help getting started, GardenComm.org has posted steps for running your own campaign and a listing of existing campaigns to join in your state and town.

But it's not necessary to join a group. To find food drop-off sites near you, visit AmpleHarvest.org and plug in your zip code.

Before dropping off food, call the organization to confirm they accept perishables (soup kitchens are generally more likely to have the refrigeration necessary for storage than pantries or food banks, but there may be exceptions).

Neck

FROM PAGE 1

you not to bend your neck.

To alleviate pain, he recommends these actions:

▪ Take a break from using the device and try to straighten your neck, gently moving it from side to side to loosen the muscle

▪ Work with a physical therapist on postural awareness and a customized ergonomic set up of your work station and tech use.

▪ Do regular neck stretches

▪ Do postural and neck strengthening exercises

▪ Work with a physical therapist who may do manual therapy including soft tissue massage

▪ If neck pain is severe or persists, seek out a medical professional.

Eating

FROM PAGE 1

ratio of protein is easier to digest, said Krista Austin, a physiologist in Colorado Springs, Colo.

Austin said if it will be an hour or longer before you can have a full meal, it's better to have a high-protein snack in the meantime to help curb your appetite. The reason has little to do with muscle recovery or nutrient absorption: Rather, people who are too hungry make poor dietary choices.

"A lot of people get very hungry about an hour after exercise, and you don't want to do that," said Austin, author of "Performance Nutrition: Applying the Science of Nutrient Timing." "You want to catch it early, or you go and overeat."

But it's another myth that you need to grab a protein shake within minutes of finishing to build the biggest muscles, Langer said.

Many exercise enthusiasts point to what's known as an anabolic window of about an hour within exercising that the body is primed to repair muscle. For the average person, you have a much longer window, and nutrient timing is less important than making sure you consume some protein at every meal, Langer said. The body needs a continuous supply of amino acids like protein for muscle repair and maintenance, she said, which means about 25 to 30 grams at every meal, depending on various factors.

"Prioritizing that will help with goals, either muscle building, satiety, weight loss, all of that," Langer said.

How about eating during exercise?

Most people who are eating enough throughout the day don't need anything during a workout. Langer and Austin said the threshold is about an hour of intense exercise. Longer than that — say you're training for a marathon — and you can benefit from a carb-rich snack in the middle.

Instead of focusing on when to eat, Austin said to focus on what and how much. She cautioned against overcomplicating the topic and recommended following the USDA's My Plate recommendations for a balanced diet.

"The biggest thing we need to teach people is that nutrition is simple," she said. "Maybe you need to stop focusing on the concept of nutrient timing and just make sure that you're consistently eating throughout the day and focus on health."wellness, food and travel.

Find his work at https://www.albertstumm.com



ASSOCIATED PRESS FILE PHOTO

A jogger is silhouetted while running on a jetty at sunrise over the Atlantic Ocean in Bal Harbour, Fla., on Sept. 19, 2020.



THE CANADIAN PRESS VIA AP, FILE

A man jogs through a park in Montreal on Jan. 8, 2025.

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, April 7, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Meeting Date, Time, Location:	HEARING FOR CONFIRMATION OF THE ROLL Monday, April 21, 2025, 7:30 PM Municipal Building, 151 Martin, Birmingham, MI 48009
Project Location:	Wimbleton: 1925256002 111 ABBEY RD; 1925256001 129 ABBEY RD; 1925177028 139 WIMBLETON DR; 1925180004 144 WIMBLETON DR; 1925251023 147 ABBEY RD; 1925177027 155 WIMBLETON DR; 1925177026 165 WIMBLETON DR; 1925251022 175 ABBEY RD; 1925177025 175 WIMBLETON DR; 1925180003 176 WIMBLETON DR; 1925177024 187 WIMBLETON DR; 1925257001 202 WIMBLETON DR; 1925254008 205 WIMBLETON DR; 1925257002 244 WIMBLETON DR; 1925254019 245 WIMBLETON DR; 1925257003 266 WIMBLETON DR; 1925254020 269 WIMBLETON DR; 1925257004 282 WIMBLETON DR; 1925254011 287 WIMBLETON DR; 1925257005 322 WIMBLETON DR; 1925254012 323 WIMBLETON DR; 1925257023 340 WIMBLETON DR; 1925254013 341 WIMBLETON DR; 1925254014 355 WIMBLETON DR; 1925254015 379 WIMBLETON DR; 1925257008 380 WIMBLETON DR; 1925257019 420 WIMBLETON DR; 1925254016 421 WIMBLETON DR; 1925257020 444 WIMBLETON DR; 1925257018 460 WIMBLETON DR; 1925254017 463 WIMBLETON DR; 1925257012 498 WIMBLETON DR; 1925255006 519 WIMBLETON DR; 1925258001 520 WIMBLETON DR; 1925177023 951 TWIN OAKS LN; 1925177022 999 TWIN OAKS LN; 1925401001 POPPLETON PARK
Nature of Improvement:	The City of Birmingham Wimbleton Project will start in the Spring of 2025. The project includes the replacement of the water main, sewer, and the streets will receive concrete curb and gutter with cape seal treatments. As part of the project, the City will disturb the unimproved streets and will construct concrete curb, gutter, and cape seal treatment. A Paving Special Assessment District (SAD) is created for the work being done. Enclosed is a map of properties included in the Paving SAD.
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 3/23/2025 & 4/6/2025
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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Savings requires purchase and installation of select complete heating and cooling system. Removal and disposal by Company of existing heating and cooling system required. Valid at participating ARS® Network locations. Not valid for third party, new construction, or commercial customers, with any other offers, discounts, or on prior sales. Call service center for details. Coupon required at time of service. Void if copied or transferred and where prohibited. Any other use may constitute fraud. Cash value $.001. **Offer expires 3/31/2025.** License numbers available at americanresidential.com/licenses. License # 7113540.

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Wimbleton Phase 1 Project

Hearing of Necessity for Paving Special Assessment District (SAD)

Engineering Department

Date: April 7, 2025

Wimbleton Phase 1 Project
Paving Special Assessment District

➢Overview

- Limits of Wimbleton Phase 1 Project are Wimbleton Drive from Woodward Ave. to Oxford Road, Abbey Street from Wimbleton south to the dead end, and Twin Oaks from Wimbleton north to the dead end.
- Project includes:
  - New Water Main: Wimbleton Drive, Abbey Street, and Twin Oaks
  - Sewer Improvements: Wimbleton Drive, Abbey Street, and Twin Oaks
  - Installation of cape seal treatment and new concrete curb and gutter
- Special Assessment District (SAD) for Paving:
  - Roadway with cape seal treatment, new concrete curb and gutter, and driveway approaches

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Wimbleton Phase 1 Project
Paving Special Assessment District

- General Information: Road



$0.05 of $0.34 (14%) goes to Major AND Local Road funds

Major AND Local Road Funds covers the maintenance of the current roads by the Department of Public Services and/or contractors, and capital improvement projects

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In 2024, $6.5 million went to Major and Local Road funds, or $76,425 per City road mile

Wimbleton Phase 1 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 Phase 1 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 Phase 1 Project
Paving Special Assessment District

- General Information: Road



City of Birmingham's 2025 Unimproved Roads Map

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Wimbleton Phase 1 Project
Paving Special Assessment District

➢General Information: Road

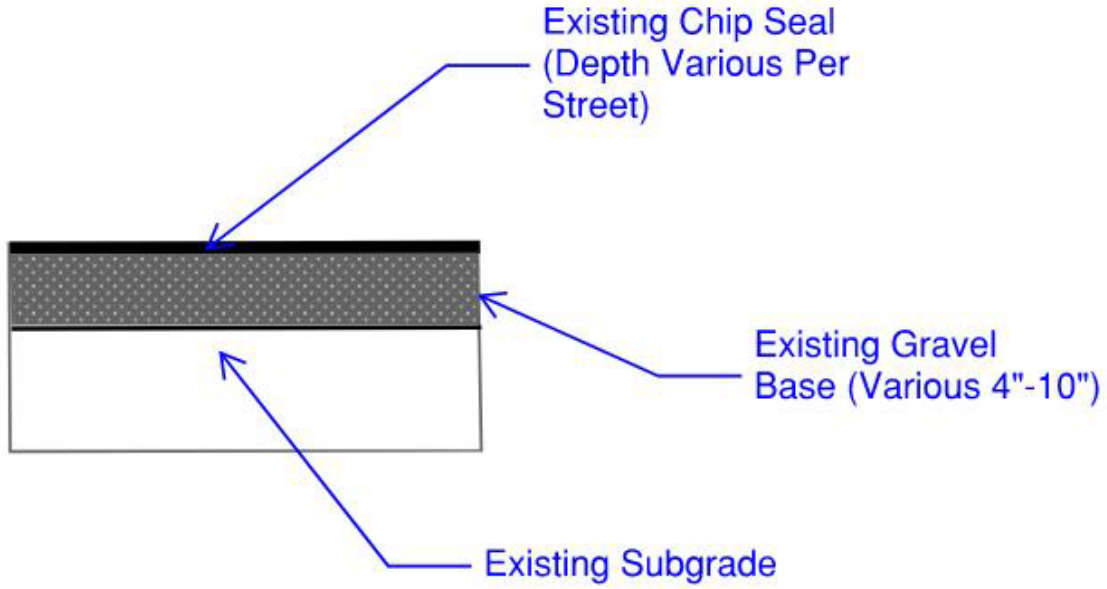
Unimproved Roads

- 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.

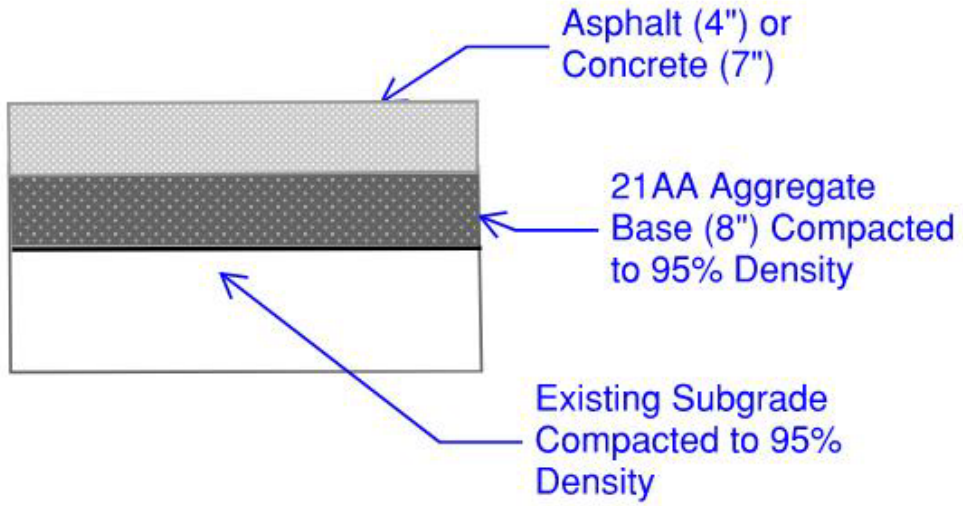
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Wimbleton Phase 1 Project
Paving Special Assessment District

- General Information: Road



Unimproved Road Cross Section



Improved Road Cross Section

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Wimbleton Phase 1 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 Phase 1 Project
Paving Special Assessment District

- General Construction Information: Road
  - Last Cape Seal Treatments:
    - Wimbleton Drive in 2019
    - Abbey Street in 2014
    - Twin Oak Lane in 2014
  - 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)
    - Abbey Street: 1991 (SAD 741 - Cape Seal), 1987 (SAD 723 - Cape Seal), 1975 (SAD 656 - Road Oil)
    - Twin Oaks Lane: 1984 (Cape Seal), 1975 (SAD 656 - Road Oil)

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Wimbleton Phase 1 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 Phase 1 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

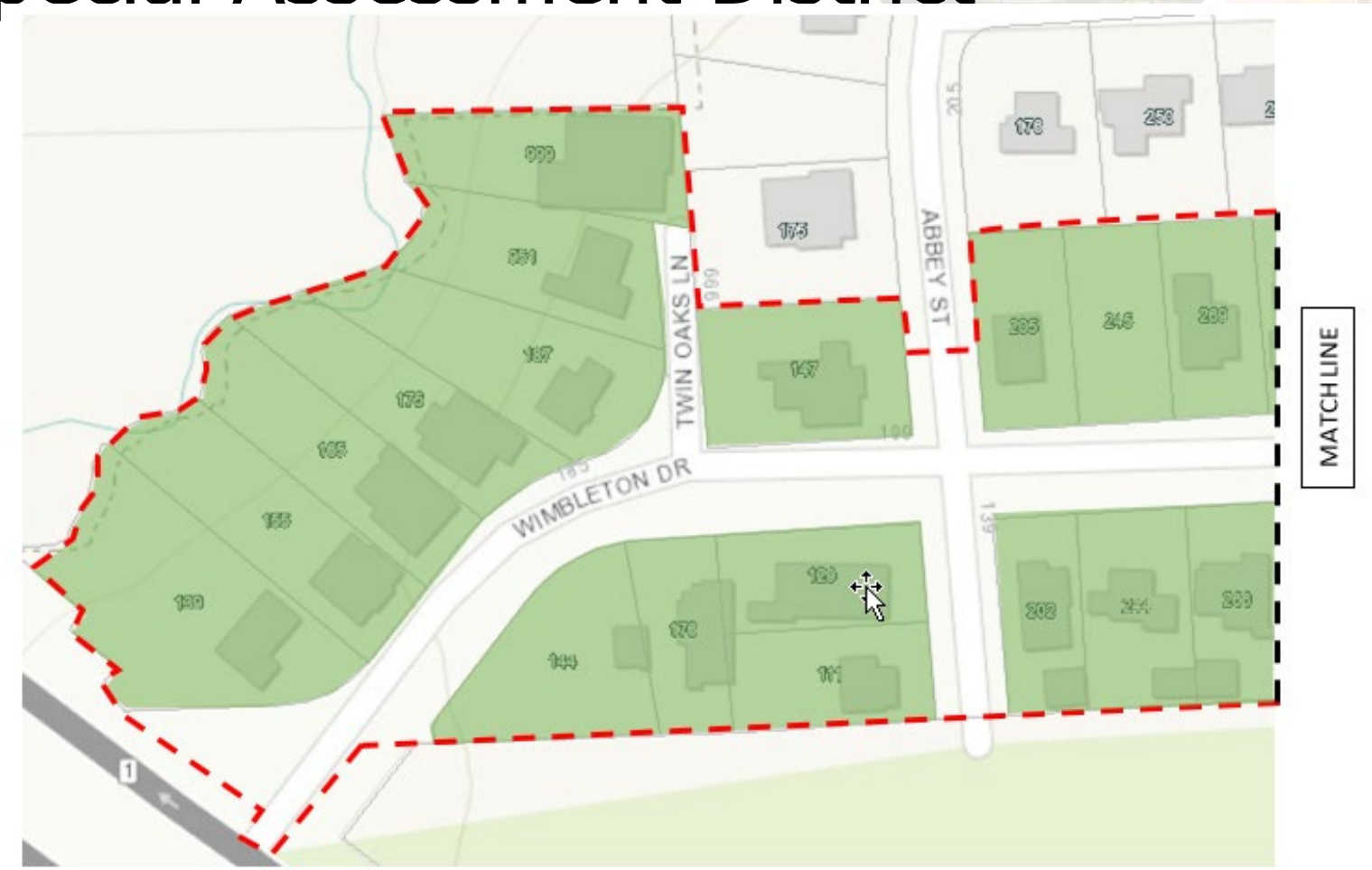
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Wimbleton Phase 1 Project
Paving Special Assessment District

- SAD:
  - Received bids for project on March 12, 2025
  - Paving costs: $171.20 per front footage
  - Approach costs:
    - Reinstall salvage brick pavers: $40.00 per square foot
    - Remove concrete approach and install concrete approach: $75.00 per square yard
    - Remove asphalt approach and install concrete approach: $75.00 per square yard

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Wimbleton Phase 1 Project
Paving Special Assessment District



Paving SAD Project Limits

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Wimbleton Phase 1 Project
Paving Special Assessment District



Paving SAD Project Limits

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Wimbleton Phase 1 Project
Paving Special Assessment District

➢PROPERTIES LOCATED IN PAVING SAD:

Sidwell Number	Street Address
1925177022	999 TWIN OAKS LN
1925177023	951 TWIN OAKS LN
1925177024	187 WIMBLETON DR
1925177025	175 WIMBLETON DR
1925177026	165 WIMBLETON DR
1925177027	155 WIMBLETON DR
1925177028	139 WIMBLETON DR
1925180003	176 WIMBLETON DR
1925180004	144 WIMBLETON DR
1925251022	175 ABBEY RD
1925251023	147 ABBEY RD
1925254008	205 WIMBLETON DR
1925254011	287 WIMBLETON DR

Sidwell Number	Street Address
1925254012	323 WIMBLETON DR
1925254013	341 WIMBLETON DR
1925254014	355 WIMBLETON DR
1925254015	379 WIMBLETON DR
1925254016	421 WIMBLETON DR
1925254017	463 WIMBLETON DR
1925254019	245 WIMBLETON DR
1925254020	269 WIMBLETON DR
1925255006	519 WIMBLETON DR
1925256001	129 ABBEY RD
1925256002	111 ABBEY RD
1925257001	202 WIMBLETON DR

Sidwell Number	Street Address
1925257002	244 WIMBLETON DR
1925257003	266 WIMBLETON DR
1925257004	282 WIMBLETON DR
1925257005	322 WIMBLETON DR
1925257008	380 WIMBLETON DR
1925257012	498 WIMBLETON DR
1925257018	460 WIMBLETON DR
1925257019	420 WIMBLETON DR
1925257020	444 WIMBLETON DR
1925257023	340 WIMBLETON DR
1925258001	520 WIMBLETON DR
1925401001	N/A POPPLETON PARK

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Wimbleton Phase 1 Project Paving Special Assessment District

- Summary
  - The Engineering Department recommends the City Commission declare a necessity and approve the SAD for Wimbleton Phase 1 Project for paving
  - Should the Commission approve the SAD, a public hearing for confirmation of the roll will be held on April 21, 2025

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MEMORANDUM

Engineering Department

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Melissa A. Coatta, City Engineer

SUBJECT: N Adams Road Resurfacing, Contract #12-24(P)
Contract Award

INTRODUCTION:
The City received and opened 4 bids for the N. Adams Resurfacing Project, Contract #12-24(P) on February 6, 2025. The Engineering Department recommends awarding this contract to DiPonio Contracting LLC.

BACKGROUND:
This project extends from the north City limits on Adams Road to Madison Street. The work consists of a road diet to reduce the number of lanes on this portion of Adams Road from 4 lanes to 3 lanes. The existing 1924 water main will be replaced, spot repairs will occur to the sewer, and a mill and overlay of this entire portion of Adams Road will be completed.

A sewer and water lateral special assessment district (SAD) along Adams Road was presented to the City Commission on July 8, 2024, with the confirmation of roll on July 22, 2024.

A part of the City Commission resolution on March 3, 2024 was to proceed with the final design for the project. The resolution also directed staff to investigate installing a sidewalk on the west side of Adams Road. This project was bid out with two alternatives. Alternative No. 1 was for the installation of sidewalk along the west side of Adams Road and across the Adams Road Bridge. Alternative No. 2 was to grade along the west side of Adams Road so that a sidewalk could be installed at a future date if desired.

The Engineering Department received 4 bids on February 6, 2025, as listed in the attached summary. The lowest bid for Alternative No. 1 (install sidewalk) was $2,445,366.10 from F.D.M. Contracting, Inc. The lowest bid for Alternative No. 2 (No sidewalk) was $2,289,787.75 from DiPonio Contracting LLC. The City has decided not to install the sidewalk as part of this project due to the amount that the bids are over budget and the additional design and cost of a separate project to install lighting on the west side of the bridge. The Michigan Department of Transportation (MDOT) has also not approved the sidewalk design to extend across the Adams Road Bridge. The grading of the west side of Adams Road will prepare the area for sidewalk in the future if the City Commission elects to install it as part of a future project and budget.

DiPonio Excavating LLC has previously worked for the City of Birmingham on the Arlington, Shirley, and Brandon project. The Engineering Department is confident that they are qualified to perform the work.

As required for all City construction projects, DiPonio Excavating LLC has submitted a 5% bid security with their bid which will be forfeited if they do not provide signed contracts, bonds, and insurance required by the contract.

LEGAL REVIEW:
The City's standard RFP and contract language was used for bidding this project which the City Attorney has reviewed and approved. The City Attorney has no objection to the suggested Commission action.

FISCAL IMPACT:
This project was budgeted for in the 2024/2025 fiscal year, and a budget amendment is required for the 2025/2026 fiscal year. The total construction cost for the project is estimated to be $2,518,766.53 which includes DiPonio Excavating LLC's bid amount of $2,289,787.75 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	$1,265,373.75	$126,537.38	$1,391,911.13
Sewer Fund	590.0-537.000-981.0100	$422,683.00	$42,268.30	$464,951.30
Water Fund	591.0-544.000-981.0100	$601,731.00	$60,173.10	$661,904.10

SUSTAINABILITY:
Sewer and water laterals will be replaced, where utility improvements are occurring. This will protect the new road from disturbance of either sewer or water lateral replacement in the future.

DESIGN CONSIDERATIONS:
At the March 3, 2024 City Commission meeting, a resolution was approved to direct the Engineering Department to proceed with the final design of the N. Adams Road Project from Madison Street to the north City limits reducing the existing 4 lanes to 3 lanes, and to investigate installing a sidewalk on the west side of Adams Road.

PUBLIC COMMUNICATIONS:
Property owners received notification during the sewer and water lateral and paving special assessment district process. A property owners meeting will be held prior to the start of construction, which is scheduled for June 2025. Communication for property owners in the project area will be provided before starting construction.

SUMMARY:
The Engineering Department recommends the N. Adams Resurfacing Project Contract #12-24(P) to be awarded to DiPonio Excavating LLC.

ATTACHMENTS:
- Project Area Map
- Bid Summary
- Nowak and Fraus Recommendation Letter

- Contract Book
- Plans

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to award the N Adams Road Resurfacing Project Contract #12-24(P) to DiPonio Contracting LLC in the amount of $2,289,787.75 plus a 10% construction contingency for a total of $2,518,766.53. 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 DiPonio Contracting LLC. Funding for this project has been budgeted in the following in the following years:

FY 2024/2025

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Major Street Fund	202.0-449.001-981.0100	$1,265,373.75	$126,537.38	$1,391,911.13
Sewer Fund	590.0-537.000-981.0100	$422,683.00	$42,268.30	$464,951.30
Water Fund	591.0-544.000-981.0100	$601,731.00	$60,173.10	$661,904.10

AND

Make a motion adopting a resolution to approve the appropriation and amendment to the fiscal year 2024/2025 budget as follows:

<u>Major Street Fund:</u>
Revenues:
Draw from Fund Balance 202.0-000.000-400.0000 $471,700

Expenditures:
Public Improvement 202.0-449.001-981.0100 $471,700

<u>Sewer Fund:</u>
Revenues:
Draw from Net Position 590.0-000.000-400.0000 $259,230

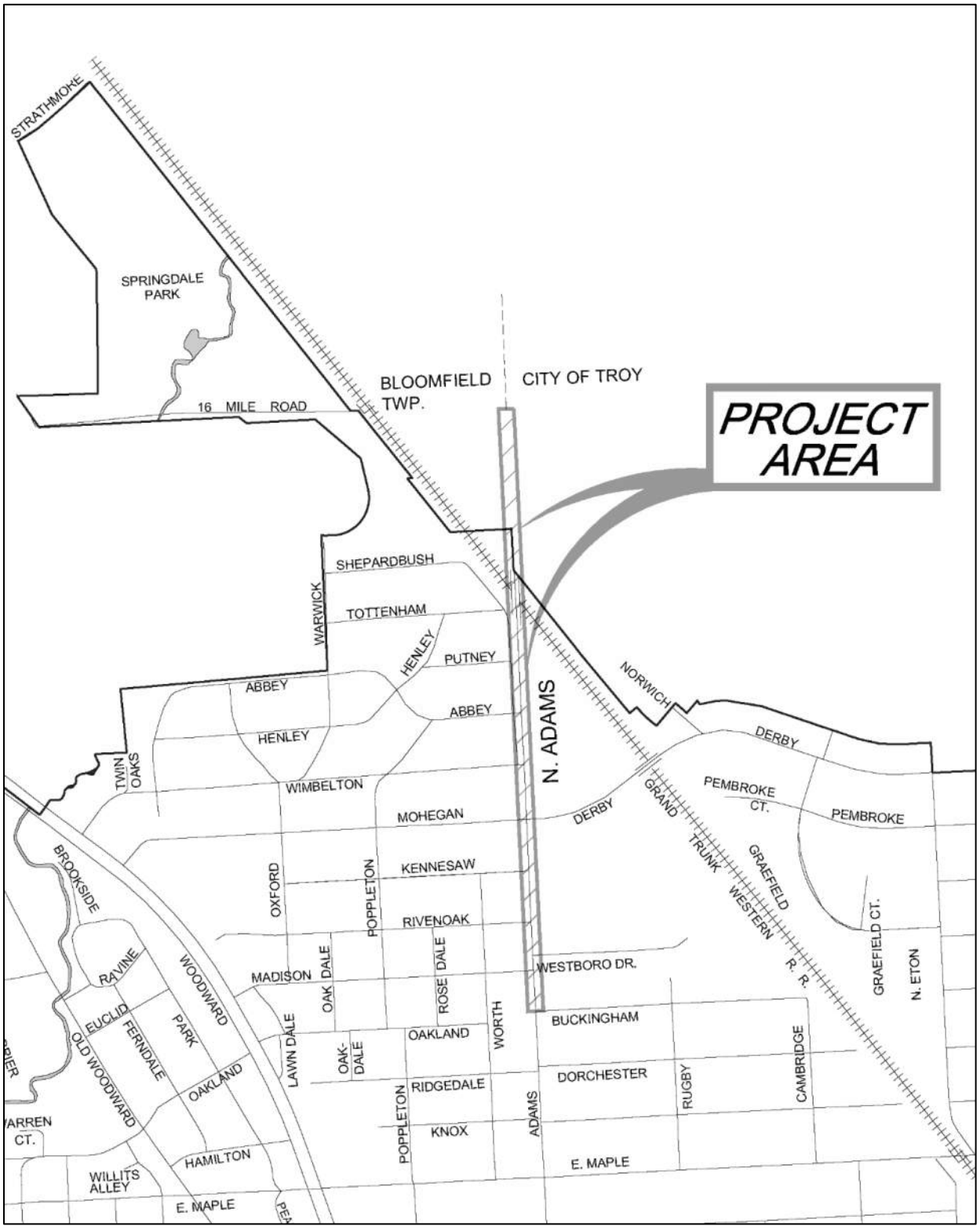
Expenditures:
Public Improvements 590.0-537.000-981.0100 $259,230

<u>Water Fund:</u>
Revenues:
Draw from Net Position 591.0-000.000-400.0000 $282,310

Expenditures:
Public Improvement 591.0-544.000-981.0100 $282,310

N ADAMS ROAD RESURFACING

CONTRACT #12-24(P)



BID TABULATION
CITY OF BIRMINGHAM
2024 ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Bids Due: February 6, 2025

Item	Quantity	Unit	F.D.M Contracting, Inc. 49156 Van Dyke Shelby Twp., Michigan 48317		DiPonio Contracting LLC 51251 Simone Industrial Drive Shelby Twp., MI 48316		Eminent Excavating LLC 514 S Fort St. Detroit, MI 48217	
			Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
SEWER PAY ITMES								
1. 10" Storm Sewer, PVC SDR 26, Trench A	269	LF	$ 130.00	$ 34,970.00	$ 150.00	$ 40,350.00	$ 190.00	$ 51,110.00
2. 12" Storm Sewer, C76, CL-IV, Trench A	101	LF	$ 150.00	$ 15,150.00	$ 150.00	$ 15,150.00	$ 225.00	$ 22,725.00
3. 15" Storm Sewer, C76, CL-IV, Trench A	368	LF	$ 160.00	$ 58,880.00	$ 130.00	$ 47,840.00	$ 250.00	$ 92,000.00
4. 18" Storm Sewer, C76, CL-IV, Trench A	350	LF	$ 180.00	$ 63,000.00	$ 155.00	$ 54,250.00	$ 275.00	$ 96,250.00
5. Sewer Point Repair, 12" Diameter, PVC SDR, Trench A	20	LF	$ 700.00	$ 14,000.00	$ 1,000.00	$ 20,000.00	$ 650.00	$ 13,000.00
6. Sewer Service, 8" PVC SDR 26	71	LF	$ 150.00	$ 10,650.00	$ 250.00	$ 17,750.00	$ 150.00	$ 10,650.00
7. Sewer Service, 6" PVC SDR 23.5	60	LF	$ 150.00	$ 9,000.00	$ 300.00	$ 18,000.00	$ 125.00	$ 7,500.00
8. New 2'-0" Diameter Inlet	4	EA	$ 3,000.00	$ 12,000.00	$ 3,200.00	$ 12,800.00	$ 4,500.00	$ 18,000.00
9. New 4'-0" Diameter Storm Catch Basin w/ 2' Sump	4	EA	$ 6,500.00	$ 26,000.00	$ 4,500.00	$ 18,000.00	$ 5,500.00	$ 22,000.00
10. New 4'-0" Diameter Storm Manhole	3	EA	$ 6,500.00	$ 19,500.00	$ 4,200.00	$ 12,600.00	$ 6,500.00	$ 19,500.00
11. New 4'-0" Diameter Storm Manhole, Construct Online	1	EA	$ 9,000.00	$ 9,000.00	$ 6,800.00	$ 6,800.00	$ 7,500.00	$ 7,500.00
12. New 4'-0" Diameter Storm Manhole w/2' Sump and Gas Trap	1	EA	$ 6,600.00	$ 6,600.00	$ 4,600.00	$ 4,600.00	$ 8,500.00	$ 8,500.00
13. New 5'-0" Diameter Storm Manhole, Construct Online	1	EA	$ 10,000.00	$ 10,000.00	$ 8,000.00	$ 8,000.00	$ 10,500.00	$ 10,500.00
14. 6" Perforated Pipe Underdrain (No Sock)	1,120	LF	$ 27.00	$ 30,240.00	$ 27.00	$ 30,240.00	$ 25.00	$ 28,000.00
15. Sewer Service Connection, 8"	1	EA	$ 1,500.00	$ 1,500.00	$ 800.00	$ 800.00	$ 3,000.00	$ 3,000.00
16. Sewer Service Connection, 6"	2	EA	$ 1,250.00	$ 2,500.00	$ 750.00	$ 1,500.00	$ 3,000.00	$ 6,000.00
17. Sewer Tap, 6", Underdrain	6	EA	$ 500.00	$ 3,000.00	$ 150.00	$ 900.00	$ 750.00	$ 4,500.00
18. Sewer Tap, 10"	4	EA	$ 1,000.00	$ 4,000.00	$ 900.00	$ 3,600.00	$ 1,800.00	$ 7,200.00
19. Sewer Tap, 12"	1	EA	$ 1,500.00	$ 1,500.00	$ 1,000.00	$ 1,000.00	$ 2,000.00	$ 2,000.00
20. Reconstruct Manhole (if and where needed)	25	VF	$ 100.00	$ 2,500.00	$ 500.00	$ 12,500.00	$ 450.00	$ 11,250.00
21. Remove Ex. Drainage Structure	7	EA	$ 800.00	$ 5,600.00	$ 1,000.00	$ 7,000.00	$ 1,000.00	$ 7,000.00
22. Remove Ex. 10" Storm Sewer	94	LF	$ 35.00	$ 3,290.00	$ 40.00	$ 3,760.00	$ 45.00	$ 4,230.00
23. Remove Ex. 12" Storm Sewer	103	LF	$ 35.00	$ 3,605.00	$ 50.00	$ 5,150.00	$ 45.00	$ 4,635.00
24. Remove & Replace Structure Cover (as directed by City)	2,000	LB	$ 3.00	$ 6,000.00	$ 3.00	$ 6,000.00	$ 10.00	$ 20,000.00
25. Abandon Ex. 10" Storm Sewer	40	LF	$ 15.00	$ 600.00	$ 15.00	$ 600.00	$ 30.00	$ 1,200.00
26. Abandon Ex. 12" Storm Sewer	63	LF	$ 18.00	$ 1,134.00	$ 16.00	$ 1,008.00	$ 30.00	$ 1,890.00
27. Abandon Ex. 12" Combined Sewer	40	LF	$ 20.00	$ 800.00	$ 17.00	$ 680.00	$ 30.00	$ 1,200.00
28. Abandon Ex. Sewer Manhole	1	EA	$ 750.00	$ 750.00	$ 500.00	$ 500.00	$ 1.00	$ 1.00
29. Bulkhead Pipe, 12" or Less	8	EA	$ 500.00	$ 4,000.00	$ 800.00	$ 6,400.00	$ 1,200.00	$ 9,600.00

BID TABULATION
CITY OF BIRMINGHAM
2024 ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Bids Due: February 6, 2025

Item	Quantity	Unit	**F.D.M Contracting, Inc.** 49156 Van Dyke Shelby Twp., Michigan 48317 Unit Price	Total Cost	**DiPonio Contracting LLC** 51251 Simone Industrial Drive Shelby Twp., MI 48316 Unit Price	Total Cost	**Eminent Excavating LLC** 514 S Fort St. Detroit, MI 48217 Unit Price	Total Cost
30. Bulkhead Pipe, Larger than 8"	4	EA	$ 400.00	$ 1,600.00	$ 800.00	$ 3,200.00	$ 1,000.00	$ 4,000.00
SUBTOTAL - SEWER PAY ITEMS				**$ 361,369.00**		**$ 360,978.00**		**$ 494,941.00**
WATER MAIN PAY ITEMS								
31. Remove Hydrant	2	EA	$ 1,000.00	$ 2,000.00	$ 900.00	$ 1,800.00	$ 1,500.00	$ 3,000.00
32. Abandon Gate Valve Well	9	EA	$ 750.00	$ 6,750.00	$ 800.00	$ 7,200.00	$ 1,500.00	$ 13,500.00
33. 12" Gate Vale Well	4	EA	$ 10,000.00	$ 40,000.00	$ 8,500.00	$ 34,000.00	$ 10,000.00	$ 40,000.00
34. 8" Gate Valve & Well	3	EA	$ 8,500.00	$ 25,500.00	$ 7,200.00	$ 21,600.00	$ 7,500.00	$ 22,500.00
35. Fire Hydrant Addembly, Complete	2	EA	$ 7,500.00	$ 15,000.00	$ 8,000.00	$ 16,000.00	$ 7,500.00	$ 15,000.00
36. 12" D.I. CL 52 Water Main w/ Polywrap, Trench A	1,158	LF	$ 240.00	$ 277,920.00	$ 187.00	$ 216,546.00	$ 325.00	$ 376,350.00
37. 8" D.I. CL 52 Water Main w/ Polywrap, Trench A	70	LF	$ 210.00	$ 14,700.00	$ 220.00	$ 15,400.00	$ 260.00	$ 18,200.00
38. 6" D.I. CL 52 Water Main w/ Polywrap, Trench A	175	LF	$ 200.00	$ 35,000.00	$ 185.00	$ 32,375.00	$ 250.00	$ 43,750.00
39. 4" D.I. CL 52 Water Main w/ Polywrap, Trench A	5	LF	$ 350.00	$ 1,750.00	$ 320.00	$ 1,600.00	$ 500.00	$ 2,500.00
40. 12" Water Main Connection to Ex. 12" Water Main	3	EA	$ 10,000.00	$ 30,000.00	$ 7,500.00	$ 22,500.00	$ 8,000.00	$ 24,000.00
41. 8" Water Main Connection to Ex. 8" Water Main	1	EA	$ 7,500.00	$ 7,500.00	$ 7,000.00	$ 7,000.00	$ 7,500.00	$ 7,500.00
42. 6" Water Main Connection to Ex. 6" Water Main	2	EA	$ 6,500.00	$ 13,000.00	$ 6,500.00	$ 13,000.00	$ 7,000.00	$ 14,000.00
43. 4" Water Main Connection to Ex. 4" Water Main	1	EA	$ 5,500.00	$ 5,500.00	$ 6,500.00	$ 6,500.00	$ 6,000.00	$ 6,000.00
44. New Water Service, 2", Trench A, Copper	246	LF	$ 75.00	$ 18,450.00	$ 80.00	$ 19,680.00	$ 100.00	$ 24,600.00
45. New Water Service, 1.5", Trench A, Copper	21	LF	$ 70.00	$ 1,470.00	$ 75.00	$ 1,575.00	$ 90.00	$ 1,890.00
46. New Water Service, 1", Trench A, Copper	111	LF	$ 60.00	$ 6,660.00	$ 70.00	$ 7,770.00	$ 80.00	$ 8,880.00
47. New Water Service, 1.5", Private Property (Bored), PEX	8	LF	$ 200.00	$ 1,600.00	$ 500.00	$ 4,000.00	$ 400.00	$ 3,200.00
48. Water Service Connection, 2"	4	EA	$ 1,500.00	$ 6,000.00	$ 1,500.00	$ 6,000.00	$ 3,000.00	$ 12,000.00
49. Water Service Connection, 1.5"	2	EA	$ 1,250.00	$ 2,500.00	$ 1,300.00	$ 2,600.00	$ 2,500.00	$ 5,000.00
50. Water Service Connection, 1"	1	EA	$ 1,000.00	$ 1,000.00	$ 1,200.00	$ 1,200.00	$ 2,000.00	$ 2,000.00
51. Water Service Connection, 1.5" Connection at Meter, 1078-1050 Wimbleton	1	EA	$ 2,000.00	$ 2,000.00	$ 5,000.00	$ 5,000.00	$ 6,000.00	$ 6,000.00
52. Install Curb Stop & Box	5	EA	$ 1,500.00	$ 7,500.00	$ 1,000.00	$ 5,000.00	$ 2,000.00	$ 10,000.00
53. Hydra-Stop, Insta-Valve 250, 12"	1	EA	$ 1,000.00	$ 1,000.00	$ 20,000.00	$ 20,000.00	$ 15,000.00	$ 15,000.00
54. Hydra-Stop, Line-Stop, 12"	2	EA	$ 1,000.00	$ 2,000.00 *	$ 9,000.00	$ 18,000.00	$ 5,700.00	$ 11,400.00
55. Hydra-Stop, Line-Stop, 8"	2	EA	$ 100.00	$ 200.00	$ 8,500.00	$ 17,000.00	$ 4,800.00	$ 9,600.00
56. Hydra-Stop, Line-Stop, 6"	2	EA	$ 100.00	$ 200.00	$ 8,000.00	$ 16,000.00	$ 4,500.00	$ 9,000.00
57. Abandon Existing Water Mains, Entire Project	1	LS	$ 7,500.00	$ 7,500.00	$ 10,000.00	$ 10,000.00	$ 17,500.00	$ 17,500.00
SUBTOTAL - WATER MAIN PAY ITEMS				**$ 532,700.00** *		**$ 529,346.00**		**$ 722,370.00**

BID TABULATION
CITY OF BIRMINGHAM
2024 ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Bids Due: February 6, 2025

				F.D.M Contracting, Inc. 49156 Van Dyke Shelby Twp., Michigan 48317		**DiPonio Contracting LLC** 51251 Simone Industrial Drive Shelby Twp., MI 48316		**Eminent Excavating LLC** 514 S Fort St. Detroit, MI 48217	
	Item	Quantity	Unit	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
	PAVING PAY ITEMS								
58.	Earth Excavation	670	CY	$ 35.00	$ 23,450.00	$ 70.00	$ 46,900.00	$ 25.00	$ 16,750.00
59.	Subgrade Undercutting, 21AA Limestone	250	CY	$ 10.00	$ 2,500.00	$ 80.00	$ 20,000.00	$ 55.00	$ 13,750.00
60.	Subgrade Undercutting, 1"x3" Limestone	250	CY	$ 10.00	$ 2,500.00	$ 80.00	$ 20,000.00	$ 55.00	$ 13,750.00
61.	Subgrade Geogrid Fabric, Tensar Triax TX130S	500	SY	$ 1.00	$ 500.00	$ 4.00	$ 2,000.00	$ 6.00	$ 3,000.00
62.	Removing Asphalt Drive Approach	207	SY	$ 10.00	$ 2,070.00	$ 28.00	$ 5,796.00	$ 7.00	$ 1,449.00
63.	Removing Concrete Drive Approach	42	SY	$ 10.00	$ 420.00	$ 30.00	$ 1,260.00	$ 14.00	$ 588.00
64.	Removing Concrete Sidewalk & Ramp (sawcutting included)	103	SY	$ 10.00	$ 1,030.00	$ 30.00	$ 3,090.00	$ 14.00	$ 1,442.00
65.	Removing Pavement Full Depth (Curb & Gutter included)	8,390	SY	$ 16.00	$ 134,240.00	$ 12.60	$ 105,714.00	$ 11.00	$ 92,290.00
66.	Cold Milling HMASurface, 3.0"	9,600	SY	$ 6.00	$ 57,600.00	$ 3.53	$ 33,888.00	$ 3.00	$ 28,800.00
67.	Aggregate Base, MDOT 21AA Limestone, 8"	5,888	SY	$ 20.00	$ 117,760.00	$ 24.00	$ 141,312.00	$ 12.50	$ 73,600.00
68.	Pavt Joint and Crack Repair, Detail 7	4,600	LF	$ 9.50	$ 43,700.00	$ 9.00	$ 41,400.00	$ 8.00	$ 36,800.00
69.	Pavt Joint and Crack Rapair, Detail 8	2,300	LF	$ 11.50	$ 26,450.00	$ 10.00	$ 23,000.00	$ 11.00	$ 25,300.00
70.	Bituminous Mixture No. 4EML (Handpatching)	240	TON	$ 363.00	$ 87,120.00	$ 95.00	$ 22,800.00	$ 325.00	$ 78,000.00
71.	Bituminous Mixture No. 5EML (1.5" Leveling Course)	1,120	TON	$ 142.00	$ 159,040.00	$ 138.00	$ 154,560.00	$ 136.00	$ 152,320.00
72.	Bituminous Mixture No. 4EML (1.5" Leveling Course)	1,120	TON	$ 124.00	$ 138,880.00	$ 126.00	$ 141,120.00	$ 118.50	$ 132,720.00
73.	Bitominous Mixture No. 2EML (4.0" Base Course)	873	TON	$ 163.00	$ 142,299.00	$ 145.00	$ 126,585.00	$ 156.00	$ 136,188.00
74.	Concrete Curb & Gutter (18" Wide, "MDOT F2 Modified, Type 1")	2,137	LF	$ 29.00	$ 61,973.00	$ 29.00	$ 61,973.00	$ 28.50	$ 60,904.50
75.	Concrete Curb & Gutter (18" Wide, "MDOT F2 Modified, Type 2")	92	LF	$ 29.00	$ 2,668.00	$ 29.00	$ 2,668.00	$ 28.50	$ 2,622.00
76.	Concrete Curb & Gutter (18" Wide, Detail "M" Approach Opening)	117	LF	$ 29.00	$ 3,393.00	$ 29.00	$ 3,393.00	$ 28.50	$ 3,334.50
77.	Lane Tie, Epoxy Anchored	200	EA	$ 12.00	$ 2,400.00	$ 12.00	$ 2,400.00	$ 8.00	$ 1,600.00
78.	Concrete Pavement, Non-reinforced, 8" incl.	40	SY	$ 85.00	$ 3,400.00	$ 85.00	$ 3,400.00	$ 69.00	$ 2,760.00
79.	Concrete Drive Approach, 6"	175	SY	$ 63.00	$ 11,025.00	$ 100.00	$ 17,500.00	$ 63.00	$ 11,025.00
80.	SEE ALTERNATES BELOW FOR: Concrete Sidewalk 6"								
81.	SEE ALTERNATES BELOW FOR: Concrete Sidewalk 4"								

BID TABULATION
CITY OF BIRMINGHAM
2024 ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Bids Due: February 6, 2025

	Item	Quantity	Unit	F.D.M Contracting, Inc. 49156 Van Dyke Shelby Twp., Michigan 48317 Unit Price	F.D.M Contracting, Inc. Total Cost	DiPonio Contracting LLC 51251 Simone Industrial Drive Shelby Twp., MI 48316 Unit Price	DiPonio Contracting LLC Total Cost	Eminent Excavating LLC 514 S Fort St. Detroit, MI 48217 Unit Price	Eminent Excavating LLC Total Cost
82.	Remove and Replace Guardrail	20	LF	$ 115.00	$ 2,300.00	$ 75.00	$ 1,500.00	$ 100.00	$ 2,000.00
83.	SEE ALTERNATES BELOW FOR: Handicap Ramp Truncated Domes								
84.	Adjust Structure Cover (Cored)	15	EA	$ 2,000.00	$ 30,000.00	$ 1,500.00	$ 22,500.00	$ 2,000.00	$ 30,000.00
85.	Adjust Structure Cover	12	EA	$ 900.00	$ 10,800.00	$ 1,200.00	$ 14,400.00	$ 1,000.00	$ 12,000.00
86.	Adjust Structure Cover & Install New EJIW 5100-M# (Restricted Cover)	1	EA	$ 1,500.00	$ 1,500.00	$ 2,000.00	$ 2,000.00	$ 1,500.00	$ 1,500.00
87.	Maintenance Aggregate for Entire Project	1	LS	$ 33,000.00	$ 33,000.00	$ 25,000.00	$ 25,000.00	$ 10,000.00	$ 10,000.00
88.	SEE ALTERNATES BELOW FOR: Bridge Barrier Railing, Type 6, Replasement, Modified								
	SUBTOTAL - PAVING PAY ITEMS				**$ 1,102,018.00**		**$ 1,046,159.00**		**$ 944,493.00**
	GENERAL PAY ITEMS								
89.	Mobilization (Max 5% of Bid)	1	LS	$ 80,000.00	$ 80,000.00	$ 110,000.00	$ 110,000.00	$ 100,000.00	$ 100,000.00
90.	Traffic Maintenance & Control	1	LS	$ 25,000.00	$ 25,000.00	$ 20,000.00	$ 20,000.00	$ 75,000.00	$ 75,000.00
91.	Inspector Crew Days	$650.00	DAYS	60	$ 39,000.00	60	$ 39,000.00	$ 60.00	$ 39,000.00
92.	Water and Sewer Allowance	1	LS	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00
93.	Pavement Marking, Polyurea, 24 inch Stop Bar, White	125	LF	$ 16.50	$ 2,062.50	$ 15.00	$ 1,875.00	$ 16.00	$ 2,000.00
94.	Pavement Marking, Polyurea, 24 inch Crosshatching, White	420	LF	$ 16.50	$ 6,930.00	$ 15.00	$ 6,300.00	$ 16.00	$ 6,720.00
95.	Pavement Marking, Polyurea, 6" inch, 2' Skip Lane Marking, White	36	LF	$ 11.00	$ 396.00	$ 10.00	$ 360.00	$ 11.00	$ 396.00
96.	Pavement Marking, Polyurea, 4" inch Skip Lane Marking, White	125	LF	$ 1.25	$ 156.25	$ 1.15	$ 143.75	$ 1.50	$ 187.50
97.	Pavement Marking, Polyurea, 4" inch Skip Lane Marking, Yellow	1,700	LF	$ 1.25	$ 2,125.00	$ 1.15	$ 1,955.00	$ 1.50	$ 2,550.00
98.	Pavement Marking, Polyurea, 4" inch Solid Lane Marking, Yellow	6,837	LF	$ 1.25	$ 8,546.25	$ 1.15	$ 7,862.55	$ 1.50	$ 10,255.50
99.	Pavement Marking, Polyurea, 6" inch, Solid Lane Marking, White	4,622	LF	$ 1.50	$ 6,933.00	$ 1.35	$ 6,239.70	$ 1.75	$ 8,088.50
100.	Pavement Marking, Polyurea, Lt Turn Arrow, White	9	EA	$ 275.00	$ 2,475.00	$ 250.00	$ 2,250.00	$ 300.00	$ 2,700.00
101.	Pavement Marking, Polyurea, Right & Straight	1	EA	$ 275.00	$ 275.00	$ 250.00	$ 250.00	$ 300.00	$ 300.00

BID TABULATION
CITY OF BIRMINGHAM
2024 ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Bids Due: February 6, 2025

	Item	Quantity	Unit	**F.D.M Contracting, Inc.** 49156 Van Dyke Shelby Twp., Michigan 48317 Unit Price	Total Cost	**DiPonio Contracting LLC** 51251 Simone Industrial Drive Shelby Twp., MI 48316 Unit Price	Total Cost	**Eminent Excavating LLC** 514 S Fort St. Detroit, MI 48217 Unit Price	Total Cost
102.	Pavement Marking, Polyurea, Right & Straight Arrow, White	2	EA	$ 330.00	$ 660.00	$ 300.00	$ 600.00	$ 350.00	$ 700.00
103.	Pavement Marking, Polyurea, Only, White	3	EA	$ 275.00	$ 825.00	$ 250.00	$ 750.00	$ 300.00	$ 900.00
104.	Pavement Marking, Polyurea, School, White	2	EA	$ 330.00	$ 660.00	$ 300.00	$ 600.00	$ 350.00	$ 700.00
105.	Recessing Pavt Mkrg, Longit	13,320	LF	$ 1.00	$ 13,320.00	$ 0.85	$ 11,322.00	$ 1.00	$ 13,320.00
106.	Recessing Pavt Mkrg, Transv	1,762	LF	$ 4.00	$ 7,048.00	$ 3.50	$ 6,167.00	$ 3.75	$ 6,607.50
107.	Remove Ex. Pavt. Markings, up to 6 inch wide	1,860	LF	$ 1.00	$ 1,860.00	$ 0.95	$ 1,767.00	$ 1.25	$ 2,325.00
108.	Remove Ex. Pavt. Markings, 6 inch to 12 inch wide	25	LF	$ 1.50	$ 37.50	$ 1.15	$ 28.75	$ 50.00	$ 1,250.00
109.	Salvage Existing Signs	1	LS	$ 2,000.00	$ 2,000.00	$ 1,500.00	$ 1,500.00	$ 500.00	$ 500.00
110.	New Signs	158	SF	$ 22.00	$ 3,476.00	$ 20.00	$ 3,160.00	$ 25.00	$ 3,950.00
111.	Sign Post, U-Channel	168	LF	$ 13.00	$ 2,184.00	$ 12.00	$ 2,016.00	$ 35.00	$ 5,880.00
112.	Tree Protection, 3" Dia. Or Greater	65	EA	$ 125.00	$ 8,125.00	$ 100.00	$ 6,500.00	$ 150.00	$ 9,750.00
113.	Mulch, 3"	200	SY	$ 20.00	$ 4,000.00	$ 20.00	$ 4,000.00	$ 10.00	$ 2,000.00
114.	SEE ALTERNATES BELOW FOR: Topsoil, 3"								
115.	SEE ALTERNATES BELOW FOR: Sod, Class A								
116.	Inlet Filter	28	EA	$ 100.00	$ 2,800.00	$ 120.00	$ 3,360.00	$ 200.00	$ 5,600.00
	SUBTOTAL - GENERAL PAY ITEMS				**$ 270,894.50**		**$ 288,006.75**		**$ 350,680.00**
	ALTERNATE #1 -Includes Pedestrian Barrier and Associated Sidewalks								
80.	Concrete Sidewalk, 6"	270	SF	$ 11.00	$ 2,970.00	$ 17.00	$ 4,590.00	$ 7.00	$ 1,890.00
81.	Concrete Sidewalk, 4"	5,351	SF	$ 4.60	$ 24,614.60	$ 9.00	$ 48,159.00	$ 6.00	$ 32,106.00
83.	Handicap Ramp Truncated Dames	80	SF	$ 75.00	$ 6,000.00	$ 75.00	$ 6,000.00	$ 30.00	$ 2,400.00
88.	Bridge Barrier Railing, Type 6, Replacement, Modified	450	LF	$ 144.00	$ 64,800.00	$ 310.00	$ 139,500.00	$ 450.00	$ 202,500.00
114.	Topsoil, 3"	4,000	SY	$ 10.00	$ 40,000.00	$ 4.00	$ 16,000.00	$ 7.50	$ 30,000.00
115.	Sod, Class A	4,000	SY	$ 10.00	$ 40,000.00	$ 7.50	$ 30,000.00	$ 8.50	$ 34,000.00
	SUBTOTAL - ALTERNATE #1 PAY ITEMS				**$ 178,384.60**		**$ 244,249.00**		**$ 302,896.00**
	ALTERNATE #2 - No Predestrian Barrier or Associated Sidewalkds								
80.	Concrete Sidewalk, 6"	207	SF	$ 11.00	$ 2,277.00	$ 18.00	$ 3,726.00	$ 7.00	$ 1,449.00
81.	Concrete Sidewalk, 4"	386	SF	$ 4.60	$ 1,775.60	$ 12.00	$ 4,632.00	$ 6.00	$ 2,316.00
83.	Handicap Ramp Truncated Domes	60	SF	$ 75.00	$ 4,500.00	$ 75.00	$ 4,500.00	$ 30.00	$ 1,800.00

BID TABULATION
CITY OF BIRMINGHAM
2024 ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Bids Due: February 6, 2025

Item	Quantity	Unit	**F.D.M Contracting, Inc.** 49156 Van Dyke Shelby Twp., Michigan 48317 Unit Price	Total Cost	**DiPonio Contracting LLC** 51251 Simone Industrial Drive Shelby Twp., MI 48316 Unit Price	Total Cost	**Eminent Excavating LLC** 514 S Fort St. Detroit, MI 48217 Unit Price	Total Cost
88. Bridge Barrier Railing, Type 6, Replacement, Modified	0	LF	$ -	$ -	$ 310.00	$ -	$ -	$ -
114. Topsoil, 3"	4,560	SY	$ 10.00	$ 45,600.00	$ 4.00	$ 18,240.00	$ 7.50	$ 34,200.00
115. Sod, Class A	4,560	SY	$ 10.00	$ 45,600.00	$ 7.50	$ 34,200.00	$ 8.50	$ 38,760.00
SUBTOTAL - ALTERNATE #2 PAY ITEMS				**$ 99,752.60**		**$ 65,298.00**		**$ 78,525.00**
TOTAL BID W/ ALTERNATE #1 PAY ITEMS				**$ 2,445,366.10** *		**$ 2,468,738.75**		**$ 2,815,380.00**
TOTAL BID W/ ALTERNATE #2 PAY ITEMS				**$ 2,366,734.10** *		**$ 2,289,787.75**		**$ 2,591,009.00**

Corrected by Engineering *

NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

February 28, 2025

City of Birmingham
151 Martin Street
Birmingham, MI 48012

Attn: Ms. Melissa A. Coatta, P.E.
City Engineer

Re: Recommendation for Bid Award
Adams Road Paving Project - Contract #12-24P
NFE Job #N788

Dear Ms. Coatta,

Bids for the subject project were received, opened, and read on Thursday, February 6th, 2025 at 2:00 p.m. at City Hall. A total of three (3) bids were received and read. The bids have been tabulated, checked, and are in order. The project was bid with two separate alternates to provide the City with an option to complete a sidewalk and pedestrian crossing over the west side of the Adams Road Bridge crossing with the GTW Railroad. Bid Alternate #1 includes pay items and quantities to complete the crossing, while Bid Alternate #2 forgoes these items but still accommodates road design considerations so that the crossing can be constructed in the future at the City of Birmingham's discretion.

The low bidder for the project for Bid Alternate #1 was FDM Contracting, Inc. and the low bidder for Bid Alternate #2 was DiPonio Contracting LLC.

We understand that the City is planning to select the Bid Alternate #2 scope of work for this contract, and as such, DiPonio Contracting, LLC is the low bidder for the chosen scope of work, with a total bid of $2,289,787.75 for Alternate #2 (FDM Contracting was second lowest with a total bid of $2,366,734.10 for Alternate #2). We also note that DiPonio's low bid for Alternate #2 was approximately 7% higher that the engineer's estimate for the same scope of work.

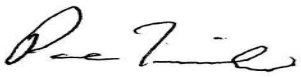
NFE has experience working with DiPonio on numerous previous infrastructure projects, both in Birmingham and other surrounding communities. Based on this previous experience, along with review of their submitted reference projects, we do not have any concerns about DiPonio's capability to perform the work.

We therefore recommend that Contract #12-24P for the Adams Road Paving Project be awarded to DiPonio Contracting, LLC in the amount of **$2,289,787.75.**

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MI 48342-5032
WWW.NOWAKFRAUS.COM
VOICE: 248.332.7931
FAX: 248.332.8257

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

ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)



CITY OF BIRMINGHAM

ENGINEERING DEPARTMENT

Contractor's Name: DiPonio Contracting LLC **Copy #** 1

ADAMS ROAD PAVING PROJECT
CONTRACT # 12-24(P)
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BID BOND

SiriusPoint America Insurance Company
1 World Trade Ctr, 285 Fulton St, 47th Fl, Ste 47J, New York, NY 10007

KNOW ALL MEN BY THESE PRESENTS: That we **DiPonio Contracting, LLC**, called the Principal, and SiriusPoint America Insurance Company, a New York corporation, called the Surety, are held and firmly bound unto **City of Birmingham, 151 Martin Street, Birmingham, MI 48009**, called the Obligee, in the sum of **Five-Percent of Greatest Amount Bid** U.S. Dollars (**$5% GAB**), for the payment of which we bind ourselves, and our successors and assigns, jointly and severally, as provided herein.

WHEREAS, Principal has submitted or is about to submit a bid to the Obligee on a contract for **Adams Road Paving Project Contract #12-24(P)** ("Project").

NOW, THEREFORE, the condition of this bond is that if Obligee accepts Principal's bid, and Principal enters into a contract with Obligee in conformance with the terms of the bid and provides such bond or bonds as may be specified in the bidding or contract documents, then this obligation shall be void; otherwise Principal and Surety will pay to Obligee the difference between the amount of Principal's bid and the amount for which Obligee shall in good faith contract with another person or entity to perform the work covered by Principal's bid, but in no event shall Surety's and Principal's liability exceed the penal sum of this bond.

Signed this **30th** day of **January, 2025**.

PRINCIPAL

DiPonio Contracting, LLC

, Title JOHN C. NALTESE, PRESIDENT

SIRIUSPOINT AMERICA INSURANCE COMPANY

Gary Nitsche , Attorney-in-Fact

POWER OF ATTORNEY
SIRIUSPOINT AMERICA INSURANCE COMPANY
NEW YORK

NITGID01_0623

KNOW ALL MEN BY THESE PRESENTS: That SiriusPoint America Insurance Company (the "Company"), a New York corporation, having its principal office in the City of New York, pursuant to the following Resolution, which was adopted on August 27,2024 by Unanimous Written Consent of the Board of the Directors of the Company, to wit:

RESOLVED, that the President, Senior Vice President, Chief Financial Officer, Secretary or the Assistant Secretary is hereby authorized to execute Powers of Attorney appointing as attorneys-in-fact selected employees of certain surety companies who shall have the power for and on behalf of the Company to execute and affix the seal of the Company to surety contracts as co-surety.

Does hereby nominate, constitute and appoint:

Kenneth Nitsche, Robert James Nitsche, Robert K. Nitsche, Craig Parker, Gary Nitsche, Jennifer J. Biehle

Its true and lawful agent and attorney-in-fact, to make, execute, seal and deliver for and on its behalf, and its act and deed any and all bonds, contracts, agreements of indemnity and other undertakings in suretyship (NOT INCLUDING bonds without a fixed penalty or financial guarantee) and to bind the Company thereby as fully and to the same extent as of same were signed by the duly authorized officers of the Company, provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed the sum of:

$62,687,000 single bond limit

All acts of said attorneys-in-fact pursuant to the authorities herein given are hereby ratified and confirmed. The President, Senior Vice President, Chief Financial Officer, Secretary or Assistant Secretary may from time to time and at any time remove such appointee and remove the power given to him or her.

The execution of such bonds or undertakings in pursuance of these presents, within one year of the date of these present, shall be binding under said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its office in New York, New York, in their own proper persons.

IN WITNESS WHEREOF, SiriusPoint America Insurance Company has caused its corporate seal to be hereunto affixed and these presents to be signed by its President this tenth day of October, 2024.

SiriusPoint America Insurance Company

SIRIUSPOINT AMERICA INSURANCE COMPANY CORPORATE SEAL 1979 NEW YORK

Paul Mihulka
President

State of New York
County of New York

On this tenth day of October 2024, before me a Notary Public of the State of New York, in and for the County of New York, duly commissioned and qualified, came Paul Mihulka, President, of SiriusPoint America Insurance Company, to me personally known to be the individual and officer described in, and who executed the preceding instrument, and acknowledged the execution of the same, and being by me duly sworn, deposed and said that he is the officer of the said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Company, referred to in the preceding instrument is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal.

SUSAN HISCOCK
Notary Public - State of New York
NO. 01HI6444797
Qualified in Richmond County
My Commission Expires Dec 5, 2026

Susan Hiscock
Notary Public
My Commission expires Dec. 5, 2026

STATE OF New York
COUNTY OF New York

I, Paul Mihulka, President of SiriusPoint America Insurance Company, a New York corporation, do hereby certify that the above and foregoing is a full, true and correct copy of Power of Attorney, is still in full force and effect and has not been revoked.

IN WITNESS WHEREOF, I have hereunto set my hand, and affixed the Seal of said Company, on the 30th day of January , 20 25

SIRIUSPOINT AMERICA INSURANCE COMPANY CORPORATE SEAL 1979 NEW YORK

Paul Mihulka
President

ADAMS ROAD PAVING PROJECT #12-24(P)

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, prior to the bid opening by close of business, **5:00 p.m., Thursday January 23rd, 2025**. 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: DiPonio Contracting, LLC

Address: 51251 Simone Industrial Drive, Shelby Township, MI 48316

Telephone: 586-997-4150 Fax: 586-997-4192 Email: bspada@diponiocontracting.com Website: http://www.diponiocontracting.com

Number of Years Operating Under Your Present Name: 29

General Nature of Work Performed: water main, storm sewer, sanitary sewer road building, heavy civil, aggregate base, box culverts

Number of construction crews **employed by your company** relating to the type of work under this contract: 5

Number of construction personnel that constitutes a crew (foreman, pipe layers, excavator, and loader operators, etc.): 8

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: up to 2

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: Fenton Elmwood Subdivision Reconstruction
Owner: City of Fenton
Contact Person: Tim Juidici - OHM Telephone No.: 248-751-3104
Contract Amount: $ 5,237,376
Final Contract Price: $ 6,016,766
Date Completed: Spring 2024
Description of Work Performed:
Water main, sanitary sewer, full road reconstruction in the Elmwood Subdivision in the City of Fenton

REFERENCE PROJECT#2:

Project Name: Water Main Replacement and Asphalt Resurface 2023 Phase 3
Owner: City of Dearborn
Contact Person: Soud El-Jamaly, PE Telephone No.: 313-801-8578
Contract Amount: $ 4,108,903
Final Contract Price: $ 3,997,463
Date Completed: June 2024
Description of Work Performed:
Watermain replacement and pavement rehabilitation in the City of Dearborn

REFERENCE PROJECT #3:

Project Name: Crescents Water Main and Road Improvements
Owner: City of Ann Arbor
Contact Person: Nicholas Bayley, PE Telephone No.: 734-794-6410 x 43685
Contract Amount: $ 7,691,341
Final Contract Price: $ 6,828,951
Date Completed: November 2024
Description of Work Performed:
Replace water main, storm sewer, and neighborhood roads in the Crescents Subdivision in the City of Ann Arbor

List major work presently under contract:

Name of Project	Percent Complete	Owner	Engineer	Contract Amount
Arlington + Shirley	95 %	City of Birmingham	Nowak + Fraus Birmingham	$5,596,815
2024 Dwrf WM	10 %	City of Eastpointe	AEW	$15,511,021
2025 Water Main	0 %	City of Ferndale	Giffels Webster	$2,194,742
M-24 at Brocker	0 %	M.D.O.T.	MDOT	$898,267
	%			$

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
GM & Sons, Inc. 46900 West Rd, Novi, MI 248-956-7939	Concrete	10 %
Doan Concrete 3670 Carpenter Rd, Ypsilanti, MI 734-971-4678	Concrete	10 %
Nagle Paving 39525 W 13 mile Rd Ste 300 Novi, MI 248-553-0669	Asphalt	12 %
Pro-Line Asphalt 11797 29 Mile Rd, Washington, MI 586-752-7730	Asphalt	12 %
Eastlund Concrete 3929 Holt Rd, Holt, MI 517-694-0204	Concrete	10 %
Dan K's Landscape 28520 Barbara Ln, Grosse Ile, MI 734-671-5691	Landscaping	5 %
Tranquility Springs LLC 6024 Hunters Ridge, Washington, MI 586-677-2890	Landscaping	5 %
Cadillac Asphalt 2575 S Haggerty Ste 100, Canton, MI 734-397-8480	Asphalt	12 %
Site Solutions, Inc. 4337 E. Grand River, Ste 234 Howell, MI 810-923-0555	Landscaping	5 %
PK Contracting 1965 Barrett, Troy, MI 48084 248-362-2130	Pavement Markings	3 %

CONTRACTOR QUESTIONAIRE:

Have you, at any time, failed to complete a contract?

___ Yes ✓ No

Are there any judgements, claims or suits pending by or outstanding against you?

___ Yes ✓ No

If the answer to either question is Yes, submit details on separate sheet.

List all judgments against your firm due to construction contracts in the last three (3) years. Include separate pages if necessary.

CERTIFICATION

I hereby certify that the above information is true and correct this 21st day of January, 2024~~4~~5.

By: DiPonlo Contracting LLC

Signature and Title:

Written Name: John C. Maltese, President

Address: 51251 Simone Industrial Dr, Shelby Twp. MI 48316

STATE OF MICHIGAN)
) SS
County of Macomb)

Subscribed and Sworn to before me, a Notary Public, in and for Macomb County, Michigan, on this 21st day of January, 2024~~4~~5.

Notary Public

In and for the County of Macomb, MI.

My commission Expires: 7/6/2025

Deanna Schrader
Notary Public of Michigan
Macomb County
Expires 07/06/2025
Acting in the County of Macomb

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 **5:00 p.m., Thursday January 23rd, 2025.**

Attention: Mr. Cory Borton, Assistant Director of Engineering
Email: cborton@bhamgov.org

Receipt of the form may be confirmed by calling (248) 530-1850.

Copies of this Sworn Statement form will be sent by email to prospective bidders upon request.

PROPOSAL

ADAMS ROAD PAVING PROJECT

CONTRACT #12-24(P)

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, 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 **Adams Road Paving Project, Contract #12-24(P),** 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 prices as here stated and further defined in the specifications.

Bidder has examined copies of all Contract Documents and of following addenda:

Date		Addendum Number
01/28/25		1

Bidder must write out in words the unit price of each item on the line provided under each pay item.

SEWER PAY ITEMS					
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
1.	10" Storm Sewer, PVC SDR 26, Trench A @ One hundred fifty dollars and 00/100	269	LF	$150.00	$40,350.00
2.	12" Storm Sewer, C76, CL-IV, Trench A @ One hundred fifty dollars and 00/100	101	LF	$150.00	$15,150.00
3.	15" Storm Sewer, C76, CL-IV, Trench A @ One hundred thirty dollars and 00/100	368	LF	$130.00	$47,840.00
4.	18" Storm Sewer, C76, CL-IV, Trench A @ One hundred fifty five dollars and 00/100	350	LF	$155.00	$54,250.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
5.	Sewer Point Repair, 12" Diameter, PVC SDR, Trench A @ One thousand dollars and 00/100	20	LF	$1,000.00	$20,000.00
6.	Sewer Service, 8" PVC SDR 26 @ Two hundred fifty dollars and 00/100	71	LF	$250.00	$17,750.00
7.	Sewer Service, 6" PVC SDR 23.5 @ Three hundred dollars and 00/100	60	LF	$300.00	$18,000.00
8.	New 2'-0" Diameter Storm Inlet @ Three thousand two hundred dollars and 00/100	4	EA	$3,200.00	$12,800.00
9.	New 4'-0" Diameter Storm Catch Basin w/ 2' Sump @ Four thousand five hundred dollars and 00/100	4	EA	$4,500.00	$18,000.00
10.	New 4'-0" Diameter Storm Manhole @ Four thousand two hundred dollars and 00/100	3	EA	$4,200.00	$12,600.00
11.	New 4'-0" Diameter Storm Manhole, Construct Online @ Six thousand eight hundred dollars and 00/100	1	EA	$6,800.00	$6,800.00
12.	New 4'-0" Diameter Storm Manhole w/ 2' Sump and Gas Trap @ Four thousand six hundred dollars and 00/100	1	EA	$4,600.00	$4600.00
13.	New 5'-0" Diameter Storm Manhole, Construct Online @ Eight thousand dollars and 00/100	1	EA	$8,000.00	$8,000.00
14.	6" Perforated Pipe Underdrain (No sock) @ Twenty seven dollars and 00/100	1,120	LF	$27.00	$30,240.00
15.	Sewer Service Connection, 8" @ Eight hundred dollars and 00/100	1	EA	$800.00	$800.00
16.	Sewer Service Connection, 6" @ Seven hundred fifty dollars and 00/100	2	EA	$750.00	$1,500.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
17.	Sewer Tap, 6", Underdrain @ One hundred fifty dollars and 00/100	6	EA	$150.00	$900.00
18.	Sewer Tap, 10" @ Nine hundred dollars and 00/100	4	EA	$900.00	$3,600.00
19.	Sewer Tap, 12" @ One thousand dollars and 00/100	1	EA	$1,000.00	$1,000.00
20.	Reconstruct Manhole (if and where needed) @ Five hundred dollars and 00/100	25	VF	$500.00	$12,500.00
21.	Remove Ex. Drainage Structure @ One thousand dollars and 00/100	7	EA	$1,000.00	$7,000.00
22.	Remove Ex. 10" Storm Sewer @ Forty dollars and 00/100	94	LF	$40.00	$3,760.00
23.	Remove Ex. 12" Storm Sewer @ Fifty dollars and 00/100	103	LF	$50.00	$5,150.00
24.	Remove & Replace Structure Cover (as directed by City) @ Three dollars and 00/100	2000	LB	$3.00	$6,000.00
25.	Abandon Ex. 10" Storm Sewer @ Fifteen dollars and 00/100	40	LF	$15.00	$600.00
26.	Abandon Ex. 12" Storm Sewer @ Sixteen dollars and 00/100	63	LF	$16.00	$1,008.00
27.	Abandon Ex. 12" Combined Sewer @ Seventeen dollars and 00/100	40	LF	$17.00	$680.00
28.	Abandon Ex. Sewer Manhole @ Five hundred dollars and 00/100	1	EA	$500.00	$500.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
29.	Bulkhead Structure, 12" or Less @ Eight hundred dollars and 00/100	8	EA	$800.00	$6,400.00
30.	Bulkhead Pipe, Larger than 8" @ Eight hundred dollars and 00/100	4	EA	$800.00	$3,200.00
	SUBTOTAL – SEWER PAY ITEMS				$ 360,978.00

	WATER MAIN PAY ITEMS				
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
31.	Remove Hydrant @ Nine hundred dollars and 00/100	2	EA	$900.00	$1,800.00
32.	Abandon Gate Valve Well @ Eight hundred dollars and 00/100	9	EA	$800.00	$7,200.00
33.	12" Gate Valve Well @ Eight thousand five hundred dollars and 00/100	4	EA	$8,500.00	$34,000.00
34.	8" Gate Valve & Well @ Seven thousand two hundred dollars and 00/100	3	EA	$7,200.00	$21,600.00
35.	Fire Hydrant Assembly, Complete @ Eight thousand dollars and 00/100	2	EA	$8,000.00	$16,000.00
36.	12" D.I. CL 52 Water Main w/ Polywrap, Trench A @ One hundred eighty seven dollars and 00/100	1,158	LF	$187.00	$216,546.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
37.	8" D.I. CL 52 Water Main w/ Polywrap, Trench A @ Two hundred twenty dollars and 00/100	70	LF	$220.00	$15,400.00
38.	6" D.I. CL 52 Water Main w/ Polywrap, Trench A @ One hundred eighty five dollars and 00/100	175	LF	$185.00	$32,375.00
39.	4" D.I. CL 52 Water Main w/ Polywrap, Trench A @ Three hundred twenty dollars and 00/100	5	LF	$320.00	$1,600.00
40.	12" Water Main Connection to Ex. 12" Water Main @ Seven thousand five hundred dollars and 00/100	3	EA	$7,500.00	$22,500.00
41.	8" Water Main Connection to Ex. 8" Water Main @ Seven thousand dollars and 00/100	1	EA	$7,000.00	$7,000.00
42.	6" Water Main Connection to Ex. 6" Water Main @ Six thousand five hundred dollars and 00/100	2	EA	$6,500.00	$13,000.00
43.	4" Water Main Connection to Ex. 4" Water Main @ Six thousand five hundred dollars and 00/100	1	EA	$6,500.00	$6,500.00
44.	New Water Service, 2", Trench A, Copper @ Eighty dollars and 00/100	246	LF	$80.00	$19,680.00
45.	New Water Service, 1.5", Trench A, Copper @ Seventy five dollars and 00/100	21	LF	$75.00	$1,575.00
46.	New Water Service, 1", Trench A, Copper @ Seventy dollars and 00/100	111	LF	$70.00	$7,770.00
47.	New Water Service, 1.5", Private Property (Bored), PEX @ Five hundred dollars and 00/100	8	LF	$500.00	$4,000.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
48.	Water Service Connection, 2" @ One thousand five hundred dollars and 00/100	4	EA	$1,500.00	$6,000.00
49.	Water Service Connection, 1.5" @ One thousand three hundred dollars and 00/100	2	EA	$1,300.00	$2,600.00
50.	Water Service Connection, 1" @ One thousand two hundred dollars and 00/100	1	EA	$1,200.00	$1,200.00
51.	Water Service Connection, 1.5" Connection at Meter, 1078-1050 Wimbleton @ Five thousand dollars and 00/100	1	EA	$5,000.00	$5,000.00
52.	Install Curb Stop & Box @ One thousand dollars and 00/100	5	EA	$1,000.00	$5,000.00
53.	Hydra-Stop, Insta-Valve 250, 12" @ Twenty thousand dollars and 00/100	1	EA	$20,000.00	$20,000.00
54.	Hydra-Stop, Line-Stop, 12" @ Nine thousand dollars and 00/100	2	EA	$9,000.00	$18,000.00
55.	Hydra-Stop, Line-Stop, 8" @ Eight thousand five hundred dollars and 00/100	2	EA	$8,500.00	$17,000.00
56.	Hydra-Stop, Line-Stop, 6" @ Eight thousand dollars and 00/100	2	EA	$8,000.00	$16,000.00
57.	Abandon Existing Water Mains, Entire Project @ Ten thousand dollars and 00/100	1	LS	$10,000.00	$10,000.00
	SUBTOTAL - WATER MAIN PAY ITEMS				$529,346.00

PAVING PAY ITEMS					
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
58.	Earth Excavation @ Seventy dollars and 00/100	670	CY	$70.00	$46,900.00
59.	Subgrade Undercutting, 21AA Limestone @ Eighty dollars and 00/100	250	CY	$80.00	$20,000.00
60.	Subgrade Undercutting, 1"x3" Limestone @ Eighty dollars and 00/100	250	CY	$80.00	$20,000.00
61.	Subgrade Geogrid Fabric, Tensar Triax TX130S @ Four dollars and 00/100	500	SY	$4.00	$2,000.00
62.	Removing Asphalt Drive Approach @ Twenty eight dollars and 00/100	207	SY	$28.00	$5,796.00
63.	Removing Concrete Drive Approach @ Thirty dollars and 00/100	42	SY	$30.00	$1,260.00
64.	Removing Concrete Sidewalk & Ramp (sawcutting included) @ Thirty dollars and 00/100	103	SY	$30.00	$3,090.00
65.	Removing Pavement Full Depth (Curb & Gutter included) @ Twelve dollars and 60/100	8,390	SY	$12.60	$105,714.00
66.	Cold Milling HMA Surface, 3.0" @ Three dollars and 53/100	9,600	SY	$3.53	$33,888.00
67.	Aggregate Base, MDOT 21AA Limestone, 8" @ Twenty four dollars and 00/100	5,888	SY	$24.00	$141,312.00
68.	Pavt Joint and Crack Repr, Detail 7 @ Nine dollars and 00/100	4,600	LF	$9.00	$41,400.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
69.	Pavt Joint and Crack Repr, Detail 8 @ Ten dollars and 00/100	2,300	LF	$10.00	$23,000.00
70.	Bituminous Mixture No. 4EML (Handpatching) @ Ninety five dollars and 00/100	240	TON	$95.00	$22,800.00
71.	Bituminous Mixture No. 5EML (1.5" Wearing Course Course) @ One hundred thirty eight dollars and 00/100	1,120	TON	$138.00	$154,560.00
72.	Bituminous Mixture No. 4EML (1.5" Leveling Course) @ One hundred twenty six dollars and 00/100	1,120	TON	$126.00	$141,120.00
73.	Bituminous Mixture No. 2EML (4.0" Base Course) @ One hundred forty five dollars and 00/100	873	TON	$145.00	$126,585.00
74.	Concrete Curb & Gutter (18" Wide, "MDOT F2 Modified, Type 1") @ Twenty nine dollars and 00/100	2,137	LF	$29.00	$61,973.00
75.	Concrete Curb & Gutter (18" Wide, "MDOT F2 Modified, Type 2") @ Twenty nine dollars and 00/100	92	LF	$29.00	$2,668.00
76.	Concrete Curb & Gutter (18" Wide, "Detail "M" Approach Opening) @ Twenty nine dollars and 00/100	117	LF	$29.00	$3,393.00
77.	Lane Tie, Epoxy Anchored @ Twelve dollars and 60/100	200	EA	$12.00	$2400.00
78.	Concrete Pavement, Non-reinforced, 8" incl. integral Detail F2 Curb & Gutter @ Eighty five dollars and 00/100	40	SY	$85.00	$3,400.00
79.	Concrete Drive Approach, 6" @ One hundred dollars and 00/100	175	SY	$100.00	$17,500.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
80.	**SEE ALTERNATES BELOW FOR: Concrete Sidewalk 6"**				
81.	**SEE ALTERNATES BELOW FOR: Concrete Sidewalk 4"**				
82.	Remove and Replace Guardrail @ Seventy five dollars and 00/100	20	LF	$75.00	$1,500.00
83.	**SEE ALTERNATES BELOW FOR: Handicap Ramp Truncated Domes**				
84.	Adjust Structure Cover (Cored) @ One thousand five hundred dollars and 00/100	15	EA	$1,500.00	$22,500.00
85.	Adjust Structure Cover @ One thousand two hundred dollars and 00/100	12	EA	$1,200.00	$14,400.00
86.	Adjust Structure Cover & Install New EJIW 5100-M3 (Restricted Cover) @ Two thousand dollars and 00/100	1	EA	$2,000.00	$2,000.00
87.	Maintenance Aggregate for Entire Project @ Twenty five thousand dollars and 00/100	1	LS	$25,000.00	$25,000.00
88.	**SEE ALTERNATES BELOW FOR: Bridge Barrier Railing, Type 6, Replacement, Modified**				
	SUBTOTAL - PAVING PAY ITEMS				$1,046,159.00

here

GENERAL PAY ITEMS					
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
89.	Mobilization (Max. 5% of Bid) @ One hundred ten thousand dollars and 00/100	1	LS	$110,000.00	$110,000.00
90.	Traffic Maintenance & Control @ Twenty thousand dollars and 00/100	1	LS	$20,000.00	$20,000.00
91.	Inspector Crew Days @ Six hundred fifty dollars and 00/100	60	DAYS	$650.00	$39,000.00
92.	Water and Sewer Allowance @ Fifty thousand dollars and 00/100	1	LS	$50,000.00	$50,000.00
93.	Pavement Marking, Polyurea, 24 inch Stop Bar, White @ Fifteen dollars and 00/100	125	LF	$15.00	$1,875.00
94.	Pavement Marking, Polyurea, 24 inch Crosshatching, White @ Fifteen dollars and 00/100	420	LF	$15.00	$6,300.00
95.	Pavement Marking, Polyurea, 6" inch, 2' Skip Lane Marking, White @ Ten dollars and 00/100	36	LF	$10.00	$360.00
96.	Pavement Marking, Polyurea, 4" inch Skip Lane Marking, White @ One dollar and 15/100	125	LF	$1.15	$143.75
97.	Pavement Marking, Polyurea, 4" inch, Skip Lane Marking, Yellow @ One dollar and 15/100	1,700	LF	$1.15	$1,955.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
98.	Pavement Marking, Polyurea, 4" inch, Solid Lane Marking, Yellow @ One dollar and 15/100	6,837	LF	$1.15	$7,862.55
99.	Pavement Marking, Polyurea, 6" inch, Solid Lane Marking, White @ One dollar and 35/100	4,622	LF	$1.35	$6,239.70
100.	Pavement Marking, Polyurea, Lt Turn Arrow, White @ Two hundred fifty dollars and 00/100	9	EA	$250.00	$2,250.00
101.	Pavement Marking, Polyurea, Rt Turn Arrow, White @ Two hundred fifty dollars and 00/100	1	EA	$250.00	$250.00
102.	Pavement Marking, Polyurea, Right & Straight Arrow, White @ Three hundred dollars and 00/100	2	EA	$300.00	$600.00
103.	Pavement Marking, Polyurea, Only, White @ Two hundred fifty dollars and 00/100	3	EA	$250.00	$750.00
104.	Pavement Marking, Polyurea, School, White @ Three hundred dollars and 00/100	2	EA	$300.00	$600.00
105.	Recessing Pavt Mkrg, Longit @ Zero dollars and 85/100	13,320	LF	0.85	$11,322.00
106.	Recessing Pavt Mkrg, Transv @ Three dollars and 50/100	1,762	LF	$3.50	$6167.00
107.	Remove Ex. Pavt. Markings, up to 6 inch wide @ Zero dollars and 95/100	1,860	LF	$0.95	$1,767.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
108.	Remove Ex. Pavt. Markings, 6 inch to 12 inch wide @ One dollar and 15/100	25	LF	$1.15	$28.75
109.	Salvage Existing Signs @ One thousand five hundred dollars and 00/100	1	LS	$1,500.00	$1,500.00
110.	New Signs @ Twenty dollars and 00/100	158	SF	$20.00	$3,160.00
111.	Sign Post, U-Channel @ Twelve dollars and 00/100	168	LF	$12.00	$2,016.00
112.	Tree Protection, 3" Dia. Or Greater @ One hundred dollars and 00/100	65	EA	$100.00	$6,500.00
113.	Mulch, 3" @ Twenty dollars and 00/100	200	SY	$20.00	$4,000.00
114.	**SEE ALTERNATES BELOW FOR: Topsoil, 3"**				
115.	**SEE ALTERNATES BELOW FOR: Sod, Class A**				
116.	Inlet Filter @ One hundred twenty dollars and 00/100	28	EA	$120.00	$3,360.00
	SUBTOTAL - GENERAL PAY ITEMS				$ 288,006.75

Alternate #1 – Includes Pedestrian Barrier and Associated Sidewalks					
No.	**ITEMS FOR B**	**QTY**	**U**	**NIT RICE**	**AMOUNT**
80.	Concrete Sidewalk, 6 @ Seventeen dollars a	270		$17.00	$4,590.00
81.	Concrete Sidewalk, 4" @ Nine dollars and 00/10		SF	$9.00	$48,159.00
83.	Handicap Ramp Truncated Dome @ Seventy five dollars and 00/		SF	$75.00	$6,000.00
88.	Bridge Barrier Railing, Type 6, Repl Modified @ Three hundred ten dollars an		LF	$310.00	$139,500.00
114.	Topsoil, 3" @ Four dollars and 00		SY	$4.00	$16,000.00
115.	Sod, Class A @ Seven dollars 00	4,000		$7.50	$30,000.00
	SUBTOT ERANTE #1 PAY ITEMS				244,249.00

Alternate #2 – No Pedestrian Barrier or Associated Sidewalks					
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
80.	Concrete Sidewalk, 6" @ Eighteen dollars and 00/100	207	SF	$18.00	$3,726.00
81.	Concrete Sidewalk, 4" @ Twelve dollars and 00/100	386	SF	$12.00	$4,632.00
83.	Handicap Ramp Truncated Domes @ Seventy five dollars and 00/100	60	SF	$75.00	$4,500.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
88.	Bridge Barrier Railing, Type 6, Replacement, Modified @ Three hundred ten dollars and 00/100	0	LF	$310.00	$0.00
114.	Topsoil, 3" @ Four dollars and 00/100	4,560	SY	$4.00	$18,240.00
115.	Sod, Class A @ Seven dollars and 50/100	4,560	SY	$7.50	$34,200.00
SUBTOTAL – ALTERANTE #2 PAY ITEMS					$ 65,298.00

TOTAL BID W/ ALTERNATE #1 PAY ITEMS	$2,468,238.75
TOTAL BID W/ ALTERNATE #2 PAY ITEMS	$2,289,787.75

TOTAL BID AMOUNT W/ ALTERNATE #1 (WRITE OUT IN WORDS):

Two million four hundred sixy eight thousand seven hundred thirty eight dollars and 75/100

TOTAL BID AMOUNT W/ ALTERNATE #2 (WRITE OUT IN WORDS):

Two million two hundred eighty nine thousand seven hundred eighty seven dollars and 75/100

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 DiPonio Contracting, LLC

Street Address 51251 Simone Industrial Drive

City Shelby Township County Macomb

State/Zip Code Michigan 48316

Telephone 586-997-4150 Fax 586-997-4192

Date February 6, 2025

Signed by

Print Name: John C. Maltese

Title: President

If a corporation, give state in which incorporated: Michigan

Witnessed:

Print Name: Ben Spada, Estimator

Name of Superintendent Michael Knapp
Supervision & time sequence according to the General Requirements

Give below at least three (3) references as to ability to do work proposed.

Name Brad Brickel Address 46777 Woodward Ave, Pontiac, MI

Firm Nowak & Fraus Telephone 248-332-7931

Name Soud El-Jamaly, PE Address 16901 Michigan Ave, Dearborn, MI

Firm City of Dearborn Telephone 313-943-2145

Name Mason Ali Address 31001 Lahser Rd, Beverly Hills, MI

Firm RCOC Telephone 248-294-9723

Give below the last five (5) projeets worked on, ineluding those currently in progress, in chronologieal order. The names need not all be different from those listed above:

Project #1: Name of Project: 2024 DWRF Water Main Replacement Project

Date Started October 2024 Finished In progress

Name Ryan Kern, PE Address 23200 Gratiot Ave, Eastpointe, MI

Firm AEW Telephone 586-854-5044

Project #2: Name of Project: Arlington and Shirley Watermain Project

Date Started September 2024 Finished In progress, Spring 2025

Name Melissa Coatta, PE Address 151 Martin St, Birmingham, MI

Firm City of Birmingham Telephone 248-530-1839

Project #3. Name of Project: Harris Road Watermain - State Road to M-25

Date Started August 2024 Finished November 2024

Name Philip Porte, P.E. Address 4000 Burtch Road, Burtchville Twp, MI

Firm BMJ Engineers Telephone 810-984-5596

Project #4: Name of Project: North Fenton Estates Subdivision Reconstruction

Date Started April 2024 Finished November 2024

Name Tim Juidici Address 301 South Leroy St, Fenton, MI

Firm OHM Advisors Telephone 248-751-3104

Project #5: Name of Project: Eastways and Long Lake Culvert Replacements

Date Started July 2024 Finished September 2024

Name Patrick Guttierrez Address 31001 Lahser Rd, Beverly Hills, MI

Firm RCOC Telephone 248-858-4861

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 Mike Verklan Address 2575 S. Haggerty Rd, Ste 100, Canton, MI

Firm Cadillac Asphalt LLC Telephone 734-397-2050

Type of Work to be Performed: Milling and Asphalt Paving

Name Kyle Goretski Address 4850 S. Hill Rd, Milford, MI

Firm Goretski's Construction Company Telephone 248-685-1404

Type of Work to be Performed: Concrete curb and flatwork

Name Greg Moody Address 1965 Barrett Dr, Troy, MI

Firm P.K. Contracting, LLC Telephone 248-362-2130

Type of Work to be Performed: Pavement markings

Name Tony Maggiano Address 24806 Industrial Hwy, Warren, MI

Firm State Barricades, Inc Telephone 586-756-8282

Type of Work to be Performed: Temporary traffic devices and permanent signs

Name Lisa Apone Address 6024 Hunters Ridge Dr, Washington, MI

Firm Tranquility Springs LLC Telephone 586-677-2890

Type of Work to be Performed:

Name Address

Firm Telephone

Type of Work to be Performed:

END OF SECTION

ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

CONTRACT

THIS AGREEMENT made the _____ day of_____, 2025, by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and DiPonio Contracting, LLC of the City of Shelby Township, County of Macomb, State of Michigan, hereinafter called the "Contractor", relative to Contract No. 12-24(P), otherwise known as: ADAMS ROAD PAVING PROJECT in the amount of $2,289,787.75 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 _____ By: _____
City Clerk Mayor

Witnessed _____

By: _____
John C. Maltese, President
DiPonio Contracting, LLC
Contractor

APPROVAL (1.135 City Code)

_____
City Manager as to Substance

_____
City Attorney as to Form

_____
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.

PREPARED BY
(Print Name)

DATE

TITLE

DATE

AUTHORIZED SIGNATURE

E-MAIL ADDRESS

COMPANY

ADDRESS

PHONE

NAME OF PARENT COMPANY

ADDRESS

PHONE

TAXPAYER I.D.#

ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned DiPonio Contracting, LLC, City of Shelby Township, County of Macomb, as Principal, and SiriusPoint America Insurance Company as Sureties, are hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of Two Million Two Hundred Eighty Nine Thousand Seven Hundred Eighty Seven Dollars and Seventy Five-cents Dollars ($ 2,289,787.75), 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 4th day of March, 2025.

WHEREAS, the above bounded Principal has entered a certain written contract with the above-named City of Birmingham, Michigan dated _____ day of _____, 2025 for the construction of Adams Road Paving Project,

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:

DiPonio Contracting, LLC

51251 Simone Industrial Drive, Shelby Township, MI. 48316

Principal

John C. Maltese, President

SiriusPoint America Insurance Company

1 World Trade Center 285 Fulton Street 47th Floor, Suite 47J, New York, NY 10007

Surety (Gary Nitsche, Attorney-In-Fact

ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

PAYMENT BOND

KNOW ALL PEOPLE BY THESE PRESENTS, that we DiPonio Contracting, LLC of the City of Shelby Township, County of Macomb, State of Michigan hereinafter called the "Principal" and SiriusPoint America Insurance Company 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 Two Hundred Eighty Nine Thousand Seven Hundred Eighty Seven Dollars and Seventy Five-cents Dollars ($ 2,289,787.75), 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 4th day of March, 2025.

WHEREAS the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, 2025, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials Adams Road Paving Project

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:

DiPonio Contracting, LLC

51251 Simone Industrial Drive, Shelby Township, MI. 48316

Principal
John C. Maltese, President

SiriusPoint America Insurance Company

1 World Trade Center 285 Fulton Street
47th Floor, Suite 47J, New York, NY 10007

Surety (Gary Nitsche, Attorney-In-Fact)

POWER OF ATTORNEY
SIRIUSPOINT AMERICA INSURANCE COMPANY
NEW YORK

NITGID01_0623

KNOW ALL MEN BY THESE PRESENTS: That SiriusPoint America Insurance Company (the "Company"), a New York corporation, having its principal office in the City of New York, pursuant to the following Resolution, which was adopted on August 27,2024 by Unanimous Written Consent of the Board of the Directors of the Company, to wit:

RESOLVED, that the President, Senior Vice President, Chief Financial Officer, Secretary or the Assistant Secretary is hereby authorized to execute Powers of Attorney appointing as attorneys-in-fact selected employees of certain surety companies who shall have the power for and on behalf of the Company to execute and affix the seal of the Company to surety contracts as co-surety.

Does hereby nominate, constitute and appoint:

Kenneth Nitsche, Robert James Nitsche, Robert K. Nitsche, Craig Parker, Gary Nitsche, Jennifer J. Biehle

Its true and lawful agent and attorney-in-fact, to make, execute, seal and deliver for and on its behalf, and its act and deed any and all bonds, contracts, agreements of indemnity and other undertakings in suretyship (NOT INCLUDING bonds without a fixed penalty or financial guarantee) and to bind the Company thereby as fully and to the same extent as of same were signed by the duly authorized officers of the Company, provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed the sum of:

$62,687,000 single bond limit

All acts of said attorneys-in-fact pursuant to the authorities herein given are hereby ratified and confirmed. The President, Senior Vice President, Chief Financial Officer, Secretary or Assistant Secretary may from time to time and at any time remove such appointee and remove the power given to him or her.

The execution of such bonds or undertakings in pursuance of these presents, within one year of the date of these present, shall be binding under said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its office in New York, New York, in their own proper persons.

IN WITNESS WHEREOF, SiriusPoint America Insurance Company has caused its corporate seal to be hereunto affixed and these presents to be signed by its President this tenth day of October, 2024.

SiriusPoint America Insurance Company

SIRIUSPOINT AMERICA INSURANCE COMPANY CORPORATE SEAL 1979 NEW YORK

Paul Mihulka
President

State of New York
County of New York

On this tenth day of October 2024, before me a Notary Public of the State of New York, in and for the County of New York, duly commissioned and qualified, came Paul Mihulka, President, of SiriusPoint America Insurance Company, to me personally known to be the individual and officer described in, and who executed the preceding instrument, and acknowledged the execution of the same, and being by me duly sworn, deposed and said that he is the officer of the said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Company, referred to in the preceding instrument is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal.

SUSAN HISCOCK
Notary Public - State of New York
NO. 01HI6444797
Qualified in Richmond County
My Commission Expires Dec 5, 2026

Susan Hiscock
Notary Public
My Commission expires Dec. 5, 2026

STATE OF New York
COUNTY OF New York

I, Paul Mihulka, President of SiriusPoint America Insurance Company, a New York corporation, do hereby certify that the above and foregoing is a full, true and correct copy of Power of Attorney, is still in full force and effect and has not been revoked.

IN WITNESS WHEREOF, I have hereunto set my hand, and affixed the Seal of said Company, on the 4th day of March , 20 25

SIRIUSPOINT AMERICA INSURANCE COMPANY CORPORATE SEAL 1979 NEW YORK

Paul Mihulka
President

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 ADAMS ROAD PAVING PROJECT #12-24(P) 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. 12-24(P), Contract Name ADAMS ROAD PAVING 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 _____, 2025.

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 _____, 2025.

_____, 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 _____, 2025

_____

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: Adams Road Paving Project, Contract #12-24(P)

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

ADVERTISEMENT

CITY OF BIRMINGHAM, MICHIGAN
ADAMS ROAD PAVING PROJECT
CONTRACT #12-24(P)

Sealed proposals endorsed "ADAMS ROAD PAVING PROJECT #12-24(P)" 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, February 6th, 2025**. 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.

The project will include resurfacing of Adams Road between Buckingham Avenue and the northerly city limits (just south of Evergreen Drive in the City of Troy). The project will also include new portions of water main and storm sewer, utility service connections, as well as abandonment/removal of existing utilities. Partial and full-depth pavement repairs are included for Adams Road and adjacent side streets, as well as new sidewalks and sidewalk ramps, curb and gutter replacements and new curb & gutter installations, installtion of a new jersey wall pedestrian barrier on the west side of the Adams Road GTW Railroad Bridge, and new pavement markings throughout the project. **Approximate quantities are as follows: 1,403 linear feet of new water mains, 1,108 linear feet of new sewers, 9,600 square yards of partial-depth milling, 3,300 tons on new HMA pavment, 2,300 linear feet of curb and gutter, 5,400 square feet of new sidewalks, plus other work to make a complete project.**

In order to coordinate the work with several nearby K-12 school facilities, the project schedule will be specific and expedited, with the final contract award to stipulate that the majority of the work is completed between mid-June through August of 2025. Bidders are encouraged to review specific scheduling information included in the "Supplemental Instructions to Bidders" document (Specification Section 301).

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 January 9th, 2025.**

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 fully completed Sworn Statement of Qualifications must be submitted to the Engineering Department of the City of Birmingham prior to the bid opening. This shall be done for the above project before the close of business **(5:00 p.m.) on Thursday, January 23rd, 2025**. Copies of the Sworn Statement form will be sent by email to prospective bidders upon request. The qualifications and list of references for the General Contractor and all Subcontractors to be used on the project will be reviewed on the basis of the proposed bidder's past performance on work of a similar nature for the City of Birmingham and other owners. Those bidders and bidder's 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. This information may be emailed to the contact below and confirmed by calling (248) 530-1850:

Attention: Mr. Cory Borton, Assistant Director of Engineering, cborton@bhamgov.org

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

SECTION 301
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

1.01 TIME OF COMPLETION

Upon review of the submitted bids received on **Thursday, February 6th, 2025,** 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, February 24th, 2025.** The Contractor shall be allowed to commence the project once 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, in accordance with the following scheduling parameters:

Project work is required to coordinate with several nearby K-12 school facilities, which close for summer break on Friday June 13th, 2025, and re-open on Monday September 1st, 2025. As such, the following specific scheduling constraints will be incorporated into the contract:

1. **No paving or utility work may commence within the physical "curb to curb" width of Adams Road until Monday, June 16th, 2025.**
    a. Work may be completed prior to this date behind the east or west curb lines of Adams Road so long as no shoulder or lane closures on Adams Road are required to perform said work, and applicable advanced warning and other traffic control signage is in place for adjacent side streets and other affected areas.
    b. Portions of the proposed water main work, which are mostly located behind the westerly curb line of Adams Road, can conceivably be completed in advance of the school closure.
2. **Most of the overall project work will be required to be completed between Monday June 16th, and the substantial completion date noted below of Friday August 29th, 2025, with the following stipulation:**
    a. Within this timeframe, to accommodate the 2024 Woodward Avenue Dream Cruise, the contractor shall schedule & stage the work to allow Adams Road and all adjacent side streets to be safely opened to traffic without restrictions for the following dates: **Friday August 15th, Saturday August 16th, and Sunday August 17th.** Any additional work and associated costs required to safely open the work zone to traffic during these dates shall be the responsibility of the Contractor.

The Contractor shall have the project substantially completed by Friday, August 29th, 2025. Substantial completion shall be defined by having all utility construction completed, all roadway, sidewalk, and driveway pavements being installed and cured, all pavement markings placed, and all greenbelt areas restored to final grade using with applicable lawn restoration pay items.

The Contractor shall have the project finally completed by Friday, September 26th, 2025. Final completion shall be defined as having all punch list work completed, 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 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: 248-530-1850
   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. 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.
5. 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

CITY OF BIRMINGHAM

SPECIAL PROVISION
FOR
BRIDGE BARRIER RAILING, TYPE 6, REPLACEMENT, MODIFIED

AEW:KEZ 1 of 1 January 2025

a. Description. This work consists of constructing bridge railing in accordance with sections 711 and 712 of the Standard Specifications for Construction, the plans, and as specified herein.

b. Materials. Furnish materials in accordance with subsection 711.02 of the Standard Specifications for Construction.

c. Construction. Construct bridge railings in accordance with subsection 711.03 of the Standard Specifications for Construction, as shown on the plans and this special provision.

1. Construct the length of barrier from MDOT Special Detail B-29-A, Section A-A, except as modified with adhesive anchors into existing concrete deck as detailed on the plans.
2. Provide joint detail at existing deck expansion joints per MDOT Standard Design Guide 6.29.11 to match existing barrier railings skew angle and joint width.
3. Submit reinforcing steel submittal indicating bar dimensions and quantities for approval prior to fabrication.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	**Pay Unit**
Bridge Barrier Railing, Type 6, Replacement, Modified	Foot

Bridge Barrier Railing, Type 6, Replacement, Modified will be measured based on plan quantities. **Bridge Barrier Railing, Type 6, Replacement, Modified** includes providing and placing concrete, constructing joints, and forming, finishing, curing, and coating the concrete.

Included in this item are Adhesive Anchoring of Vertical Bars as specified in subsection 712.03.J, Reinforcement, Steel, Epoxy Coated as specified in subsection 706.03.E, and Concrete Surface Coating as specified in MDOT Special Provision, of the MDOT Standard Specifications for Construction.

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 acceptance; 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, Bodlly 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 the 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 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 always present or available, 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 make such reasonable requirements that in his judgment are 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 personnel, 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 regarding 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, batter boards, 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 executed 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 are 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 act. When dry conditions are declared by the Engineer, the Contractor shall always have a water truck and calcium chloride on site, 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 to 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.

I.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 consequences.

I.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.

I.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 based on 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.

I.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 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 ensure 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 which conform to the specifications. 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 defects to be remedied before final acceptance.

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.

C. Request for Final Payment shall be made by an officer of the company submitting 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. If 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

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 six hundred and fifty ($650) 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) hours 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 Re-steel.

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. Half Day = $325.00

2. Full Day = $650.00

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 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 standard 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.

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 nozzle, all opening left, 5'6" bury, plugged drain, block bolts.

2.05 GATE VALVES AND BOXES

A. All gate valves shall be of the resilient seat wedge type with mechanical joints.

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. Valve boxes 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 Mueller Model No. H-15154

F. Curb stop valves shall be Mueller Model No. H-10300.

G. Curb stop boxes shall be cast iron extension type with lid and plug and shall have a Minneapolis pattern base with a 1-1/4" inner diameter upper section. Curb stop boxes shall be furnished to include a valve box riser (EJIW 8500) and cover (EJIW 6800) to allow for a flush rim elevation to the sidewalk grade.

PART 3. CONSTRUCTION

3.01 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.

3.02 MATERIALS FURNISHED BY THE CITY

A. See the "General Requirements" section for materials furnished by the City.

3.03 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.

3.04 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.

3.05 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 (5) feet.

C. The bottom of trench shall be excavated neatly to the required grade and filled two (2) 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.

3.06 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 completion of the construction 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.

3.07 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.

3.08 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.

3.09 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.

3.10 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.

3.11 COATING OF BOLTS

A. All bolts and nuts installed by the Contractor shall be coated with coal tar.

3.12 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.

3.13 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.

3.14 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.

3.15 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-case concrete meeting ASTM C-471, concrete block masonry, or brick masonry laid in full and close joint of cement mortar. 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.

3.16 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.

3.17 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.

3.18 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.

3.19 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.

3.20 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 service to the property line.

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.

3.21 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.

3.22 SURFACE RESTORATION

A. Surfaces removed or damaged for the construction shall be replaced as follows, unless otherwise specified on the plans:

	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.

3.23 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.

3.24 PRESSURE TEST

A. The completed main shall be pressure tested with water at a pressure of 150 pounds per square inch. This pressure shall be maintained for at least two hours and for such longer time as the Engineer may require. 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 11.65 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.

3.25 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. All new mains and pipe shall be chlorinated with up to fifty (50) 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 twenty-five (25) parts per million. If less than twenty-five (25) 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 twenty-five (25) 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).

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. 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.

3.26 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.

3.27 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	0.74
6	196	1,470	0.94	1.10
8	349	2,610	1.67	1.47
10	545	4,080	2.62	1.84
12	785	5,880	3.77	2.21
16	1,396	10,400	6.67	2.94

*L = 11.65 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 as designated on the drawings or special design conforming to ASTM C655;

2. ABS Solid Plastic Pipe: ASTM D-2751, SDR 23.5;

3. PVC Schedule 40 Sewer Pipe: ASTM D1785 "Standard Specification for PolyVinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120";

4. Polyvinyl Chloride Pipe (PVC) - ASTM D-2241, SDR 26. PVC compounds to meet ASTM D-1784.

5. Polyvinyl Chloride Pipe (PVC) - ASTM D-2241, SDR 23.5. PVC compounds to meet ASTM D-1784.

B. Precast Concrete Pipe shall meet the requirements of ASTM C76.

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-section on the plan. The gradation requirements for the crushed stone chips shall be according to the following:

1. Crushed stone chips shall be made from crushing sound limestone, dolomite ledge rock, or other materials as approved by the Engineer. Material shall be hard, tough, and durable. The crushing process shall produce material of which 85% to 100% of the particles shall have at least one machine fractured face. Crushed pea gravel will be acceptable if it meets this criteria:

a. For sewer pipe 18" in diameter or less, crushed stone chips meeting the gradation requirements of the following table may be used:

GRADATION REQUIREMENTS FOR 3/8" CRUSHED STONE CHIPS
(18" DIAMETER PIPER OR SMALLER)

Sieve Size	Percentage Passing by Weight
½"	100%
3/8"	90 - 100%
No. 8	0 - 15%
No. 30	0 - 3%

For purposes of this specification, MDOT Aggregate Mix No. 29A, using crushed limestone, will meet the requirements of this specification.

b. For pipe larger than 18" in diameter, crushed stone chip bedding meeting the requirements of the following table may be used:

GRADUATION REQUIREMENTS FOR 3/4" CRUSHED STONE CHIPS
(LARGER THAN 18" DIAMETER)

Sieve Size	Percentage Passing by Weight
1"	100%
3/4"	90 - 100%
3/8"	20 - 55%
No. 4	0 - 10%
No. 8	0 - 5%

For purposes of this specification, MDOT Aggregate Mix No. 17A, using crushed limestone, will meet the requirements of this specification.

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.

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. Drainage structure frames and covers shall be E.J.I.W. #5080 with M1 grates, 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 space 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 the 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 605
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.

1.2 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

1.3 QUALIFICATIONS

A. The Contractor performing the work shall be a company specializing in performing internal sewer inspections, and shall have a minimum experience of at least three other projects of similar size and scope 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.

1.4 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.

1.5 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.

1.6 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, 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. All pipes, manholes, laterals and other structures shall be in identified using Owner naming convention. The operators NASSCO certification number shall be recorded on the Report.

B. Location of defects shall be given as a distance from the starting point and location around the pipe (i.e., 2 o'clock)

C. 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, include;
      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, include;
      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

D. Submit Samples of Contractor Reports for Owner approval prior to starting project.

E. Provide Final Reports in accordance with Required Deliverables.

F. Sample reports are provided at the end of this Section.

1.7 REQUIRED DELIVERABLES

A. The Contractor shall deliver to the Owner one hard copy each of the Graphic Report and Tabular Report for each segment inspected, and one hard copy of the Defects by Inspection Report that summarizes all segments inspected during the project. The copies shall be housed in protective three-ring binders labeled to include the Project Name, Contractor Contact Information, Project Date and area surveyed. The Contractor shall also submit preliminary copies of the Graphic Report and Tabular Report for areas completed for review by the Owner as the project progresses. All reports shall also be provided in Adobe PDF format. The final Defects by Inspection report shall also be provided in an editable format, such as Microsoft Excel format.

B. 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.

C. 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.

D. 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.

E. All video recordings, still images and reports shall become property of the Owner without restriction for copying, re-use or publication.

1.8 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.

1.9 SAMPLE REPORTS

A. Sample of the required reporting is provided at the end of this Specification (Section 3.8).

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. 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.
3. 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.Manhole CCTV.
6. 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.

D. 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 cleaned 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 acceptable 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.

3.8 SAMPLE REPORT

Tabular Report Owner Asset ID#

Setup XXX	**Surveyor** XXX	**Certificate #** XXX	**System Owner** OWNER NAME
Drainage	**Survey Customer** OWNER NAME		
P/O #	**Dete** 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**	**Grede 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		Grede	In1	In2	%	JntFr	To	ImRef	Remerks
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				05	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			FH	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

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. Concrete Grade 3500HP requires optimized aggregate gradation and 25 to 40 percent replacement of the Portland cement in the concrete mixture with a supplementary cementitious material (slag cement, fly ash). Do not use other concrete Grades or Types in lieu of Grade 3500HP. Prepare the optimized aggregate gradation and perform process control according to the procedure for Optimized Aggregate Gradation included in the contract.

B. 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.

C. 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.

D. Admixtures - Admixtures shall be used only when specified or authorized by the Engineer.

E. 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.

F. 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 twelve (12) inches in back of the proposed curb line. The above limits may be exceeded only with specific authorization by the City Parks and Recreation Department.

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. 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.

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. 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 - Transverse contraction joints shall be made of pre-molded bituminous material one-quarter (1/4) inch thick. Contraction joints shall be edged at the curb. Contraction joints shall be properly aligned and shall butt against adjacent sections, with no space between ends.

D. All the longitudinal 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. 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. Joints shall be sealed with a hot poured rubber asphalt type joint sealing material applied with pressure equipment designed for that particular purpose.

E. 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.

F. 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. The concrete mixture shall meet the requirements of MDOT Mixture 3500, with 3,500 PSI minimum compressive strength, and utilize 6AA coarse aggregate and Type 1A Portland Cement.

B. 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).

C. Admixtures shall be used only when specified or authorized by the Engineer.

D. 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.

E. 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. Black asphalt dip finish is acceptable as well, as long as all of the detectable warning plates at each intersection (all corners) that are constructed as a part of the work have the same finish.

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.

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-moulded 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. In repairing existing sidewalk, at least one and one-half (1 1/2) inch expansion joints shall be used in the repair, unless existing expansion joints are less than thirty (30) feet on either side of the repair.

F. One-half (1/2) inch thick expansion joints shall also be placed at junctions with sidewalks, drives, buildings and other rigid structures. Three-quarter (3/4) inch thick by five (5) inch expansion joints shall be placed at all curb junctions and also between sidewalk and abutting parallel curb or gutter.

G. 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.

H. 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. The hot mix asphalt pavements shall meet the requirements of the MDOT Special Provision for Recycled Hot Mix Asphalt Mixtures (20SP501(F)) for the mixes designated on the plans or elsewhere in the specifications, except as modified on the plans or in these specifications.

C. Binder from Recycled Asphalt Pavement (RAP) materials shall be limited to not more than 17 percent of the total mix binder content by weight for HMA mixes designated as "Tier 1". Binder from Recycled Asphalt Pavement (RAP) materials shall be between 18 percent and 27 percent of the total mix binder content by weight for HMA mixes designated as "Tier 2". Final binder for all mixes shall meet specification requirements for Performance-Grade PG64-22.

D. 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 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 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.

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.

1.04 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.

1.05 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. Adjustments for new catch basin and inlet structures located in curb lines shall be performed in accordance with the "Adjust Structure Cover" pay item.

1.06 NEW MANHOLE, VARIOUS SIZES

A. All new manhole structures shall include an EJ 1040CGS, with "City of Birmingham Sewer" noted on it.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure. Adjustments for new manholes located in pavement shall be performed in accordance with the "Adjust Structure Cover (Cored)" pay item.

1.07 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.

1.08 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.

1.09 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.

1.10 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.

1.11 REMOVE AND REPLACE STRUCTURE COVER

A. As a part of the work of this pay item, the Contractor shall furnish and install the specified manhole covers or inlet covers, along with any adjusting rings necessary to bring the structures to grade. There are also several manholes, catch basins, inlets, and gate well frames and covers that are noted to remain in service. The Engineer and Contractor shall inspect each casting to verify its suitability to continued service. Those castings that, in the opinion of the Engineer, should be replaced shall be removed and replaced under this pay item, with the weight of the new casting

being used to determine the value. Any existing frames and castings removed shall be 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.

1.12 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.

1.13 ABANDON EXISTING MANHOLES & DRAINAGE STRUCTURES

A. The Contractor shall bulkhead any other openings in the structure, remove and dispose of the upper three 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.

1.14 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.

1.15 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.

1.16 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 remove from the structure and the structure will be maintained.

1.17 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 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 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.

1.18 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.

1.19 ABANDON 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.

1.20 GATE VALVE & WELL, VARIOUS SIZES

A. All new gate well structures shall include an EJ 1040CGS, with "City of Birmingham Water" noted on it.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure. Adjustments for new gate wells located in pavement shall be performed in accordance with the "Adjust Structure Cover (Cored)" pay item.

1.21 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 a new EJIW 5-BR with a six (6) inches mechanical joint inlet, two (2) pumper nozzles, plug drain and block bolts. 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.

1.22 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.

1.23 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.

1.24 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.

1.25 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.

1.26 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.

1.27 HYDRA-STOP, INSTA-VALVE 250, 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 insta-valve system shall be available to install a temporary line stop with permanent valve to 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 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-Stop Insta-Valves only if an inappropriately large shutdown area will be required to implement the connection work.

C. The costs for hydra-stop insta-valve 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). The cost shall also include a permanent valve box structure to be installed in conjunction with the valve in accordance with City specifications.

1.28 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 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.

1.29 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.

1.30 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.

1.31 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 compacted 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.

1.32 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 compacted 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.

1.33 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.

1.34 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.

1.35 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.

1.36 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.

1.37 REMOVING PAVEMENT FULL DEPTH (CURB & GUTTER INCLUDED)

A. This pay item shall apply to the full depth removal of the existing asphalt, concrete, and composite pavements and curb and gutter within the project limits where shown on the drawings, or determined to be required during construction. Removal of driveway approaches and sidewalks behind the road curb are covered under separate pay items. Refer to plan sheets for removal limits and existing and proposed road cross-sections, and the geotechnical investigation report (Appendix A) for the details regarding existing pavements.

B. In all areas, the payment for this item includes full-depth pavement removal to the existing base below the pavement as required to complete the work.

C. The Contractor is encouraged to use care when considering methods of pavement destruction and removals.

D. After main line pavement removal, and during the underground work, the Contractor shall be expected to maintain traffic to all adjacent driveways. Removal of the pavements in the various pay items shall be timed in such a way that makes this maintenance of traffic as simple and effective as possible.

1.38 COLD MILLING HMA SURFACE

A. This pay item shall include all labor, equipment, and materials required to perform milling of the existing road surface to the specified depth in accordance with applicable portions of the 2020 MDOT Standard Specifications for Construction.

1.39 PAVT JOINT AND CRACK REPR, DETAIL 7 & 8

A. These pay items shall include all labor, equipment, and materials required to perform the work in accordance with applicable portions of the 2020 MDOT Standard Specifications for Construction.

1.40 AGGREGATE BASE, MDOT 21AA LIMESTONE, 8"

A. This pay item shall include sub-base compaction required to provide a stable surface to install the eight (8) 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. Aggregate base placement shall extend a minimum of 12 inches beyond the proposed back of curb for full-depth pavement replacement.

C. 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.

1.41 CONCRETE PAVEMENT, NONREINFORCED, INCL. INTEGRAL 6" CURB

A. This work consists of constructing a jointed Portland cement concrete pavement in accordance with Section 602 of the MDOT 2020 Standard Specifications for Construction.

B. A form riding paving machine or slip-form paving machine which meets the requirements of Section 602.03A of the MDOT 2020 Standard Specifications for Construction shall be utilized to construct the mainline concrete pavement on this Project. A roller screed, power screed, truss screed, etc., will NOT be considered as equivalent to a form riding or slip-form paving machine. A list of the proposed paving equipment shall be provided to the Engineer at the Pre-Construction Meeting. The requirement to use a paving machine can be relieved in areas such as on Brookwood where the curve does not allow the use of the machine. In areas where existing trees do not allow the use of a paver, the Contractor may use other methods to be reviewed and approved by the Engineer. No machine shall be used that would require more removal of roots at the base of trees as compared to installing a form and paving by hand.

C. There will be no separate measurement and payment for providing the specified equipment. The cost shall be considered incidental to Concrete Pavement pay item.

D. This pay item shall include all concrete pavement with integral curb and gutter, measured by the square yard, where designated on the plan. Sawcutting and sealing of the joints shall be included in the cost per square foot. Hook bolts shall be provided at 40" O.C. when butting up against existing concrete pavement. No separate payment will be provided for this preparatory work.

E. The concrete pavement provided under this pay item, along with all other concrete pay items, shall comply with Section 711 for durability and resistance to alkali-silica reactivity. The Contractor shall be responsible to close the area off entirely as needed to ensure that the new pavement is not driven on by any vehicles for a minimum of seven (7) days.

F. The Contractor shall plan to pour the integral curb and gutter section as a part of the mainline concrete pour. Separate pours for the concrete curb and gutter section shall not be approved.

G. The Contractor may be allowed to perform 'full' width paving, provided it can be demonstrated that it can be done in a timely manner, and also without causing unwarranted damage to the base of adjacent trees.

H. All sawcutting and joint sealing, as detailed in Section 710 of these Specifications, shall be incidental to this pay item.

I. The Contractor shall execute the paving portion of the Contract such that removing excess base materials, installation of new limestone base, and installation of new main line concrete with cure time shall be kept to no more than the time specified in Section 301 of these Contract Documents.

1.42 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.

1.43 CONCRETE SIDEWALK, VARIOUS THICKNESSES

A. This pay item is for new or replacement areas of concrete sidewalk as indicated on the plans.

B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches of compacted MDOT Class II sand base, forming, and pouring the concrete sidewalk, and saw-cutting the sidewalk joints per the plans.

1.44 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.

1.45 REMOVE AND REPLACE GUARDRAIL

A. This pay item includes the removal of existing and installation of replacement guardrail where indicated on the plans.

B. Unit price shall include all equipment, labor, and materials to perform this work, including excavation and backfill of the guardrail posts and footings. The Contractor shall provide material shop drawings for review and approval by the City prior to furnishment of materials. All materials

shall be provided to match existing guardrails within the work area, and in accordance with applicable M.D.O.T standard specifications.

1.46 ADJUST STRUCTURE COVER (CORED)

A. All existing manhole and gate-well covers that are within the work area that need adjustment, are denoted as receiving a "cored" 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 manhole and gate-well structures shall be included in the price of the new structure, and shall not be paid for under this pay item.

B. This work shall include all equipment, labor, and materials to provide final adjustment for the structure rims after the final pavement surface has been installed, and to provide a circular, 8" thick concrete collar centered on the casting with a minimum diameter of 5.0 feet.

C. Unit price shall also include all time and coordination required from the Contractor to assist the City in field verification of all structure locations that require cored adjustment, such that they may be surveyed prior to HMA wearing course placement to document locations and allow for accurate locations to be provided for final adjustment and installation of the concrete collar.

1.47 ADJUST STRUCTURE COVER

A. All catch basin and inlet 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 catch basin and inlet structures shall be included in the price of the new structure, and shall not be paid for under this pay item.

B. In accordance with M.D.O.T. specifications for "case 1" structure adjustments, each adjustment shall also include: saw-cutting of existing pavement or curb surrounding the structure as needed to perform the adjustment, and removing and replacing the pavement adjacent to the adjusted cover in accordance with MDOT Standard Plan R-37 Series.

1.48 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.

1.49 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.

1.50 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, Adams Road shall be kept open for two-way traffic whenever possible to avoid disruptions to this heavily utilized public roadway. Where required, lane shifts shall be utilized to help maintain two-way traffic, and shall be performed in accordance with applicable M.D.O.T. maintaining traffic typicals, including traffic control signage, barricades, channelizing devices, and use of flagger control, all to be included within the lump sum pay item for "Traffic Maintenance and Control".

2. Due to utility work proposed within Adams Road, there will be times when a closure of north-bound, south-bound, or both directions of traffic on Adams Road is required. Any instance where both lanes of a travel direction need to be closed require prior notification with the City of Birmingham (minimum 36 hours in advance of the closure to allow sufficient time for public notification), and implementation of application detour signage. These instances will be limited to work that involves open-cut trenching of utilities perpendicularly across the road. Full road closures in either or both directions of travel will not be allowed for utilities which are being installed parallel to Adams Road. Instead, lane shifts, speed reductions, and other means of traffic controls shall be implemented in accordance with M.D.O.T. standards to allow for two-way traffic whenever possible.

3. At all times, the Contractor shall maintain passable and safe ingress and egress routes through the construction zone at the following locations, which do not have alternate means of access other than Adams Road: residential driveways which abut Adams Road; several multi-family parcels within the construction zone on the east side of Adams and north of Derby Road; for Manchester Road and Westboro Drive traffic (both public streets are dead-ends).

4. If concrete or asphalt work is required within or 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.

5. 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.

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.

1.51 INSPECTOR CREW DAYS

A. The "Inspector Crew Days" provision as stated in the "General Requirements" section of the Contract shall be modified as noted below:

A. Saturday or Sunday work for this project shall be charged similar to the other weekdays.

B. All days shall be charged to a maximum of one (1) day per inspector on the site, regardless of total number of hours spent on the project per day.

C. 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.

D. 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.

1.52 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.

1.53 PAVEMENT MARKINGS

A. All pavement markings must be provided to the size and color as noted, and using the material noted. All materials and installation procedures shall comply with MDOT standard specifications.

1.54 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.

1.55 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.

1.56 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.

1.57 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.

1.58 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.

1.59 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.

1.60 INLET FILTER

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 during all excavation, removal, subbase preparation, etc.

1.61 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.

1.62 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.

END OF SECTION

APPENDIX – A

ADAMS ROAD PAVING PROJECT

(CONTRACT #12-24P)

SOIL BORING AND PAVEMENT CORE INFORMATION

CONSULTING
GROUP

Report on Geotechnical Investigation

Adams Road
Paving Project
Evergreen Road to
Madison Street
Birmingham, Michigan

Latitude 42.558292° N
Longitude 83.206336° W

Prepared for:

Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

G2 Project No. 230863
March 25, 2024

g2consultinggroup.com

Headquarters	1866 Woodslee St	Troy, MI 48083	P 248.680.0400	F 248.680.9745
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CONSULTING
GROUP

March 25, 2024

Mr. Brett J. Buchholz, P.E.
Principal
Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

Re: Report on Geotechnical Investigation
Adams Road Paving Project
Evergreen Road to Madison Street
Birmingham, Michigan
G2 Project Number 230863

Dear Mr. Buchholz:

We have completed the geotechnical pavement investigation for the proposed paving improvements along Adams Road from Evergreen Road to Madison Street in the City of Birmingham, Oakland County, Michigan. This report presents the results of our observations and analyses and our recommendations for pavement section design and construction as they relate to the geotechnical conditions along the route.

We appreciate the opportunity to be of service to 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

Noel J. Hargrave-Thomas, P.E.
Principal

JMH/NJHT/ljv

Enclosures

EXECUTIVE SUMMARY

The project consists of pavement improvements for Adams Road from Evergreen Road to Madison Street within the City of Birmingham, Oakland County, Michigan. The Adams Road improvements will include rehabilitation of the roadway alignment by cold milling the profile of the pavements 2 inches and construct a new 2 inch thick overlay with full depth replacement patching as needed. In addition, isolated areas of water main and combined sewer replacement in conjunction with the proposed paving improvements will be performed. It is our understanding that underground utilities will be replaced using open-cut installation methods. Invert depths of the proposed water main will range between 5 and 6 feet below grade and the combined sewer invert depth will ranges between 8 and 10 feet below existing grades.

Bituminous concrete is present at the ground surface of the borings and ranges in thickness from 5 to 10-1/2 inches. Portland cement concrete underlies the bituminous concrete within borings B-3 through B-5 and measures 6 to 7-1/2 inches thick. Aggregate base fill is present below the bituminous concrete with borings B-1 and B-6 and extends to an approximate depth of 12 inches and 15 inches, respectively. No aggregate base or Portland cement concrete underlies the bituminous concrete pavement within boring B-2.

Loose to medium compact sand fill underlies the pavement section within borings B-1, B-5, and B-6, extending to depths ranging from 3-1/2 to 6 feet below grade. Medium to very stiff silty clay fill with trace organic matter, is present below the pavement section within borings B-2 through B-4 and sand fill within boring B-1 and extends to depths ranging from 3 to 12 feet within borings B-2 through B-4 and the explored depth of 5 feet within boring B-1. Native stiff to hard silty clay underlies the fill soils within borings B-2 through B-6 and extends to the explored depth of 15 feet. No measurable groundwater was observed within the borings during or upon completion of drilling operations.

Based on the results of our analyses, we recommend a minimum pavement section for the proposed profile mill and overlay consisting of 2 inches of MDOT 5EML bituminous concrete wearing course. After milling and full depth patching, as required, a bituminous tack coat must be placed prior to placement of the overlays. Binder grades PG 64-22 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 reflective cracking. This pavement improvement recommendation will provide an additional 8-10 years of pavement design life. It should be noted that reflective cracks will appear within the new overlay within 2-3 years of freeze/thaw cycles

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 1-1/2H:1V (horizontal: vertical) within the existing loose to loose granular soils and medium to stiff cohesive soils, and at a minimum of 1H:1V within the very stiff 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. We anticipate construction operations to be performed in dry conditions. However, any accumulations from groundwater seepage or runoff should be controllable from pumping properly constructed sumps.

Do not consider this summary separate from the entire text of this report, with all the conclusions and qualifications 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 pavement improvements for Adams Road from Evergreen Road to Madison Street within the City of Birmingham, Oakland County, Michigan. An existing bridge over a railroad is present between Evergreen Road and Tottenham Road. The pavements on the existing bridge are not within the scope of this project. The Adams Road improvements will include rehabilitation of the roadway alignment by cold milling the profile of the pavements 2 inches and construct a new 2 inch thick overlay with full depth replacement patching as needed. The traffic volume (AADT) along Adams Road in the year of 2019 was 13,756 vehicles per day. We assume commercial vehicles will make up 3 percent of the total traffic.

In addition, isolated areas of water main and combined sewer replacement in conjunction with the proposed paving improvements will be performed. Locations of the proposed underground utility replacements were not available upon completion of this report. However, most of the existing utility repair areas are anticipated to be in the adjacent greenbelt areas and not beneath the existing pavements. It is our understanding that underground utilities will be replaced using open-cut installation methods. Invert depths of the proposed water main will range between 5 and 6 feet below grade and the combined sewer invert depth will ranges between 8 and 10 feet below existing grades.

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 full depth pavement core samples at six (6) locations, B-1 through B-6, within alternating lanes of Adams Road within the project limits.

2. We drilled a total of six (6) soil borings at the pavement core locations. Soil borings B-1 was performed on Adams Road, north of the existing railroad bridge present between Evergreen Stret and Tottenham Road. Soil borings B-2 through B-6 were performed along Adams Road from south of the existing railroad bridge, extending to a depth of 15 feet below grade.

3. We performed laboratory testing on samples obtained from the soil borings. Laboratory testing included visual engineering classification, natural moisture content, organic matter content (loss-on-ignition), dry density, and unconfined compressive strength determinations.

4. We prepared this engineering report. The report includes recommendations for design pavement sections, paving materials, and construction considerations for underground utility construction and pavement construction including grade preparation and subgrade stabilization as necessary.

FIELD OPERATIONS

G2 Consulting Group, LLC (G2) selected the core sample locations and the locations and depths of the soil borings in consultation with Nowak & Fraus Engineers (NFE). The soil boring locations were determined in the field and staked by a representative of G2 prior to drilling operations. The approximate soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available upon completion of this report. We recommend ground surface elevations at soil boring locations be surveyed so the subsurface conditions can be referenced by elevation during construction.

We used an electrically powered core rig equipped with a 6-inch diameter diamond-tipped core barrel to core the pavement at the pavement core/soil boring locations. Pavement cores were drilled through the

full depth of the existing pavement structure to obtain an accurate determination of the pavement thickness. Core samples were delivered to our laboratory for length measurements and photographs.

Soil borings B-1 through B-6 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 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, a G2 staff engineer 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

Pavement core samples and soil samples from the borings were delivered to the G2 laboratory in Troy, Michigan for photographs and length measurements of the core samples and basic index tests on soil samples. Photographs and length measurements for the core samples are presented as Figure Nos. 8 through 13 in the Appendix.

Laboratory testing included natural moisture content, organic matter content (loss-on-ignition), dry density, and unconfined compressive strength determinations. The organic matter content of representative samples was determined in accordance with ASTM Test Method D 2974, "Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils". The unconfined compressive strengths were determined by ASTM Test Method D2166 and using a spring-loaded hand penetrometer. Per ASTM D2166, the unconfined compressive strength of cohesive soils is determined by axially loading a small cylindrical soil sample under a slow rate of strain. The unconfined compressive strength is defined as the maximum stress applied to the soil sample before shear failure. If shear failure does not occur prior to a total strain of 15 percent, the unconfined compressive strength is defined as the stress at a strain of 15 percent. 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, organic matter content, dry density, and unconfined compressive strength laboratory tests are indicated on the soil boring logs at the depths the samples were obtained. Unconfined Compressive Strength Test are shown graphically on Figure No. 7 within the Appendix. 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 Adams Road, approximately 50 feet south of Madison Street. The roadway consists of 2 lanes of travel and a center turn lane until the intersection with Madison Street, where the center turn lane is converted into an additional north bound lane of travel. The road composition with 2 north bound lanes and one south bound lane continues north of Madison Street to Rivenoak Street, approximately 300 feet north. The four lane roadway (two north bound lanes and two south bound lanes) is present from Rivenoak Street to the north project limits of a pavement joint located just south of Evergreen Road.

Residential properties are present along Adams Road within the project limits. A topographic survey was not available upon completion of this report. However, site grades along Adams Road appear to gradually increase in elevation from Madison Street to Evergreen Road. Site grades near the existing bridge over the railroad change more drastically.

The existing bituminous concrete pavements are generally in fair to poor condition with less than half of the pavement surface exhibiting moderate to high transverse and longitudinal cracking. However, areas of high severity fatigue and block cracking are present to a lesser extent, particularly along the outside lane of north bound Adams Road. It appears some cold patching, crack sealing, and surface patching of the bituminous concrete had been performed in the past. The pavements are crowned, allowing surface runoff water to drain into the adjacent Portland cement concrete curbs present along the pavement edge.

Bituminous concrete is present at the ground surface of the borings and ranges in thickness from 5 to 10-1/2 inches. Portland cement concrete underlies the bituminous concrete within borings B-3 through B-5 and measures 6 to 7-1/2 inches thick. Aggregate base fill is present below the bituminous concrete with borings B-1 and B-6 and extends to an approximate depth of 12 inches and 15 inches, respectively. No aggregate base or Portland cement concrete underlies the bituminous concrete pavement within boring B-2.

Sand fil underlies the pavement section within borings B-1, B-5, and B-6, extending to depths ranging from 3-1/2 to 6 feet below grade. Silty clay fill with trace organic matter, is present below the pavement section within borings B-2 through B-4 and sand fill within boring B-1 and extends to depths ranging from 3 to 12 feet within borings B-2 through B-4 and the explored depth of 5 feet within boring B-1. Native silty clay underlies the fill soils within borings B-2 through B-6 and extends to the explored depth of 15 feet.

The sand fill is loose to medium compact with Standard Penetration Test (SPT) N-values ranging from 8 to 16 blows per foot (bpf). The silty clay fill is medium to very stiff in consistency with moisture contents ranging from 7 to 28 percent, an organic matter content of 4.3 percent, a dry density of 107 pounds per cubic foot (pcf), and unconfined compressive strengths ranging from 1,500 to 7,500 pounds per square foot (psf). The native silty clay is stiff to hard in consistency with natural moisture contents ranging from 14 to 19 percent, dry densities ranging from 114 to 132 pcf, and unconfined compressive strengths ranging from 2,500 to 9,000 psf.

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 Unconfined Compressive Strength Test, Figure No. 7, are presented in the Appendix. Photographs of the pavement core samples are included as Figure Nos. 8 through 13. 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. 14.

GROUNDWATER CONDITIONS

Groundwater observations were made during and upon completion of drilling operations. No measurable groundwater was observed within the borings during or 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. It should also be noted that groundwater observations made during drilling operations in predominantly cohesive soils are not necessarily indicative of the static groundwater level. This is due to the low permeability of such soils and the tendency of drilling operations to seal off the natural paths of groundwater flow.

PAVEMENT RECOMMENDATIONS

General

The proposed Adams Road pavement improvements are to rehabilitate the pavements by cold milling the existing bituminous pavement 2 inches along the pavement edge and construct a new 2-inch thick bituminous concrete overlay to improve the drainage characteristics of the roadway. This pavement improvement recommendation will provide an additional 8-10 years of pavement design life. It should be noted that reflective cracks will appear within the new overlay within 2-3 years of freeze/thaw cycles. However, we anticipate a large amount of full depth replacement patching will be required along the outside line of north bound Adams Road. We recommend a budget be allocated for full depth replacement repairs within this portion of Adams Road.

Milling and Overlay Recommendations

The existing bituminous concrete along Adams Road within the project limits will be profile milled 2 inches along the pavement edge. Prior to overlay placement, any existing cracks or joints in the pavement surface wider than 1/8 inch should be cleaned, covered with emulsified tack, then fill with a hand patching bituminous concrete mix. Any areas of the pavement that exhibit excessive fatigue cracking or deterioration should be completely removed and replaced with a full depth patch. The bituminous concrete should be saw-cut a minimum 2 feet laterally from the distressed area to be removed. The exposed subgrade or Portland cement concrete slab (PCC) must be evaluated for stability. Any unstable or unsuitable areas noted should be improved by compaction or removed and replaced with properly compacted engineered fill. Any heavily distressed PCC slabs should be removed and replaced with new PCC or bituminous concrete. Prior to placing the full-depth patch, a tack coat should be applied to the sides of the saw-cut pavement. We recommend placing bituminous concrete in lifts of no greater than 2-1/2 inches in thickness to the milled surface grade. All bituminous leveling course should consist of MDOT 4EML material placed in appropriate lift thicknesses.

Subgrade undercuts, if required, should be evaluated by a qualified engineering technician to determine if subgrade stabilization is necessary. 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. 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 loose to medium compact sand fill and medium to very stiff silty clay fill. 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).

The traffic volume (AADT) along Adams Road in 2019 was 13,756 vehicles per day. We estimate commercial vehicles will make up 3 percent of the total traffic. Based on the existing traffic volumes and assuming a truck factor of 1.5, we estimate an equivalent single-axle loads (ESALs) of 1.1 million over a 10-year design life.

For evaluation purposes of bituminous mill/overlay, we estimated the remaining life of the pavements at 30 percent and a condition factor of 0.81, with an existing pavement structural number ranging from 3.2 to 4.76. For evaluation purposes, we have utilized a serviceability loss of 2.0, a standard deviation of 0.49 for flexible pavements, and a reliability factor of 0.95. If traffic volume information changes, G2 Consulting Group should be notified so we can reevaluate our recommendations.

Based on the results of our analyses, we recommend a minimum pavement section for the proposed profile mill and overlay consisting of 2 inches of MDOT 5EML bituminous concrete wearing course. After milling and full depth patching, as required, a bituminous tack coat must be placed prior to placement of the overlays. Binder grades PG 64-22 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 reflective cracking.

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.

Pavement Drainage and Maintenance

The pavement should be properly sloped to promote effective surface drainage and prevent water from ponding. We also recommend pavement subbase materials consist of non-frost-susceptible aggregates where possible. Regular timely maintenance should be performed on the bituminous 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.

UNDERGROUND UTLITY CONSTRUCTION RECOMMENDATIONS

General

The proposed project includes local combined sewer reconstruction and water main replacement within isolated areas along Adams Road and generally within the adjacent greenbelt areas. It is our understanding that underground utilities will be replaced using open-cut installation methods. Invert depths of the proposed water main will range between 5 and 6 feet below grade and the combined sewer invert depth will ranges between 8 and 10 feet below existing grades.

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.

Open Cut Excavations

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 1-1/2H:1V (horizontal: vertical) within the existing loose to loose granular soils and medium to stiff cohesive soils, and at a minimum of 1H:1V within the very stiff 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.

Groundwater Control

No measurable groundwater was observed within the soil boring during drilling operations. Invert depths of the proposed water main will range between 5 and 6 feet below grade and the combined sewer invert depth will ranges between 8 and 10 feet below existing grades. Any accumulations from groundwater seepage or runoff should be controllable from pumping properly constructed sumps.

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 loose to medium compact sand fill, medium to very stiff cohesive fill, stiff to hard native silty clay. In general, these soils are adequate for support of the utilities; however, where loose granular soils are encountered within any open-cut excavations, we recommend the sewer trench invert be compacted to further densify any loose granular material for support of the sewer bedding 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

Clean granular engineered fill should be used to backfill around the sewer and water main and the remainder of the utility trench. The engineered fill for the proposed water main or bedding material for the proposed sewer should be placed 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.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to underground utility construction, site preparation, and pavement rehabilitation 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.

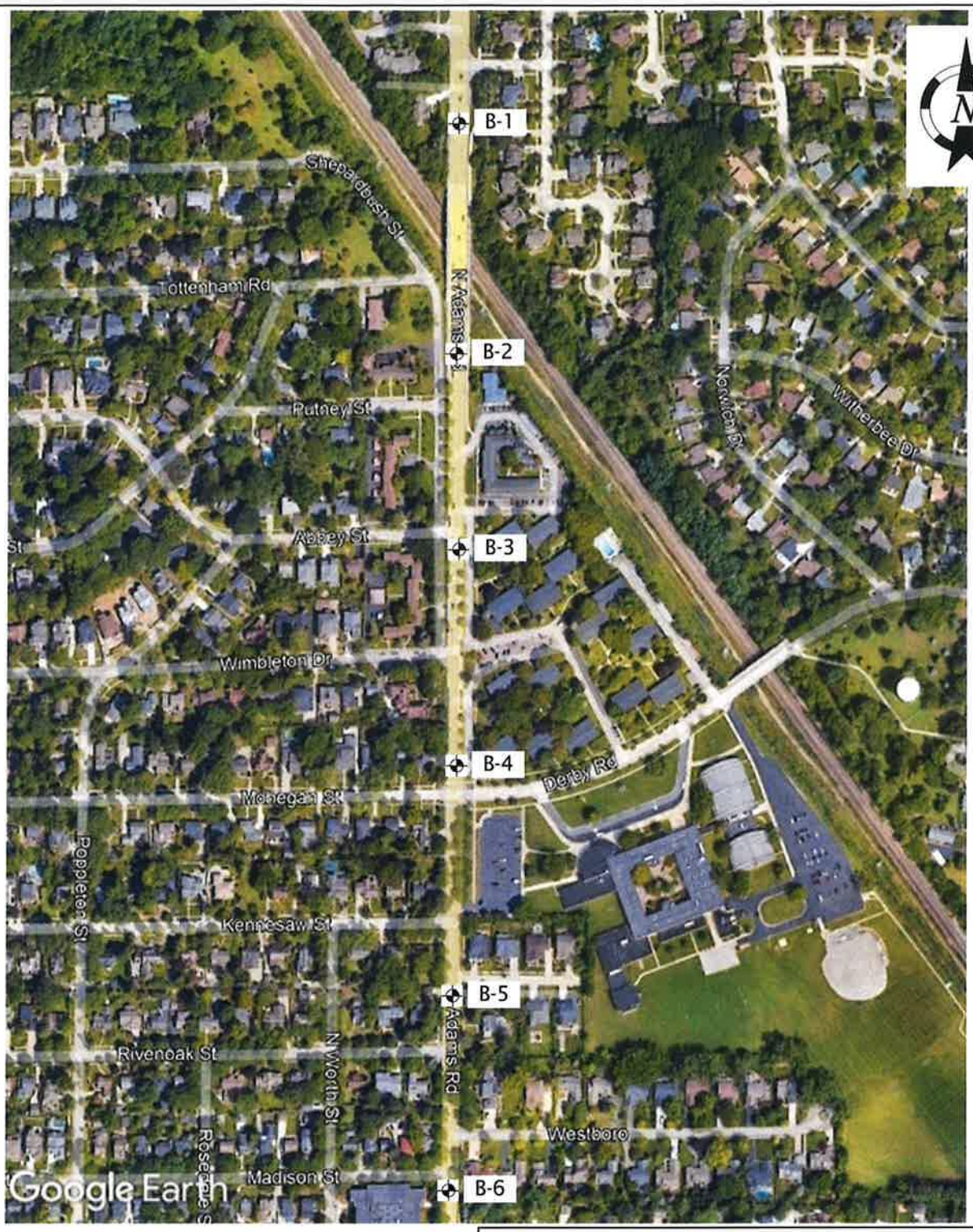
The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the new underground utilities, pavements, and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. 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
Unconfined Compressive Strength Test Results	Figure No. 7
Photographic Documentation	Figure Nos. 8 through 13
General Notes Terminology	Figure No. 14



Legend

Pavement Core/Soil Borings performed by 2G Drilling on January 12, 2024

Soil Boring Location Plan

Adams Road Paving Project
Evergreen Road to Madison Street
Birmingham, Michigan

2G CONSULTING GROUP

Project No. 230863	
Drawn by: JMH	
Date: 3/20/24	Plate No. 1
Scale: NTS	

Project Name: Adams Road Paving Project

Project Location: Evergreen Road to Madison Street
Birmingham, Michigan

G2 Project No. 230863

Latitude: N/A Longitude: N/A

Soil Boring No. B-1

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)
		Bituminous Concrete (8 inches) 0.7							
		Fill: Aggregate Base (4 inches) 1.0							
		Fill: Medium Compact Brown Sand with trace silt and gravel		S-1	12 9 7	16			
		3.5							
5		Fill: Very Stiff Brown and Dark Brown Silty Clay with trace sand and gravel 5.0	5	S-2	12 12 12	24	6.8		7000*
		End of Boring @ 5 ft							
10			10						
15			15						
20			20						

Total Depth: 5 ft
Drilling Date: January 12, 2024
Inspector: J. Lawton
Contractor: 2G Drilling
Driller: H. Pace

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 1

SOIL / PAVEMENT BORING 230863.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/25/24

Project Name: Adams Road Paving Project

Project Location: Evergreen Road to Madison Street
Birmingham, Michigan

G2 Project No. 230863

Latitude: N/A Longitude: N/A

Soil Boring No. B-2

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)
		Bituminous Concrete (10-1/2 inches) 0.9							
		Fill: Very Stiff Brown and Dark Brown Silty Clay with trace sand and gravel, occasional sand seams 2.5		S-1	8 6 7	13	15.0		6500*
5			5	S-2	3 S 4	9	16.4		4500*
		Fill: Very Stiff Brown Silty Clay with trace sand and gravel, occasional sand seams 9.0		S-3	2 S 20	25	14.0		7500*
10			10	S-4	12 12 5	17	12.7	107	1010
		Fill: Medium Dark Brown Silty Clay with trace sand and gravel 12.0							
		Hard Brown and Gray Silty Clay with trace sand and gravel 15.0							
15			15	S-5	6 10 12	22	15.7		9000*
		End of Boring @ 15 ft							
20			20						

Total Depth: 15 ft
Drilling Date: January 12, 2024
Inspector: J. Lawton
Contractor: 2G Drilling
Driller: H. Pace

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 2

SOIL / PAVEMENT BORING 230863.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/25/24

Project Name: Adams Road Paving Project

Project Location: Evergreen Road to Madison Street
Birmingham, Michigan

G2 Project No. 230863

Latitude: N/A Longitude: N/A

Soil Boring No. B-3

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)
		Bituminous Concrete (6-1/2 inches) 0.5							
		Portland Cement Concrete (7-1/2 inches) 1.1							
		Fill: Stiff Dark Brown Silty Clay with trace sand, gravel, and organic matter (Organic Matter Content = 4.3%)		S-1	1 3 3	6	28.4		2000*
		3.0							
5		Stiff Brown Silty Clay with trace sand and gravel	5	S-2	1 3 3	6	13.9		3000*
		6.0		S-3	5 11 19	30	13.6		9000*
10		Hard Brown Silty Clay with trace sand and gravel	10	S-4	6 10 14	24	13.4		8000*
		12.0							
15		Very Stiff Gray Silty Clay with trace sand and gravel 15.0	15	S-5	3 5 7	12	15.9		6000*
		End of Boring @ 15 ft							
20			20						

Total Depth: 15 ft
Drilling Date: January 12, 2024
Inspector: J. Lawton
Contractor: 2G Drilling
Driller: H. Pace

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 3

SOIL / PAVEMENT BORING 230863.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/25/24

Project Name: Adams Road Paving Project

Project Location: Evergreen Road to Madison Street
Birmingham, Michigan

G2 Project No. 230863

Latitude: N/A Longitude: N/A

Soil Boring No. B-4

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)
		Bituminous Concrete (5 inches) 0.4							
		Portland Cement Concrete (6 inches) 0.9							
		Fill: Medium Dark Brown Silty Clay with trace sand and gravel, occasional sand seams		S-1	1 1 3	4	28.2		1500*
		3.0		S-2	0 2 3	5	19.4		2500*
5		Stiff to Very Stiff Brown and Gray Silty Clay with trace sand and gravel	5	S-3	3 5 7	12	14.7	114	7140
		8.0		S-4	6 7 12	19	17.4		9000*
10		Hard Brown Silty Clay with trace sand and gravel	10						
		12.0		S-5	3 5 6	11	13.7		5500*
15		Very Stiff Gray Silty Clay with trace sand and gravel 15.0	15						
		End of Boring @ 15 ft							
20			20						

Total Depth: 15 ft
Drilling Date: January 12, 2024
Inspector: J. Lawton
Contractor: 2G Drilling
Driller: H. Pace

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 4

SOIL / PAVEMENT BORING 230863.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/25/24

Project Name: Adams Road Paving Project

Project Location: Evergreen Road to Madison Street
Birmingham, Michigan

G2 Project No. 230863

Latitude: N/A Longitude: N/A

Soil Boring No. B-5

CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Bituminous Concrete (7 inches) 0.6	
		Portland Cement Concrete (7-1/2 inches) 1.1	
5		Fill: Loose to Medium Compact Brown Sand with trace silt and gravel	5
		5.5	
10		Stiff to Very Stiff Gray Silty Clay with trace sand and gravel	10
15		15.0	15
		End of Boring @ 15 ft	
20			20

SOIL SAMPLE DATA

SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
S-1	5 6 7	13			
S-2	4 5 5	10			
S-3	3 4 5	9	12.5		4500*
S-4	2 3 5	8	14.0	131	2960
S-5	2 4 6	10	13.2		4000*

Total Depth: 15 ft
Drilling Date: January 12, 2024
Inspector: J. Lawton
Contractor: 2G Drilling
Driller: H. Pace

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 5

SOIL / PAVEMENT BORING 230863.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/25/24

Project Name: Adams Road Paving Project

Project Location: Evergreen Road to Madison Street
Birmingham, Michigan

G2 Project No. 230863

Latitude: N/A Longitude: N/A

Soil Boring No. B-6

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)
		Bituminous Concrete (8 inches) 0.7							
		Fill: Aggregate Base (7 inches) 1.3							
				5-1	3 3 5	8			
		Fill: Loose to Medium Compact Brown Sand with trace silt and gravel							
5			5	S-2	3 8 3	11			
		6.0							
		Stiff Brown Silty Clay with trace sand and gravel		S-3	2 2 5	7	12.7		3500*
		8.0							
10		Very Stiff Brown and Gray Silty Clay with trace sand and gravel	10	S-4	6 5 9	14	10.7		7000*
		12.0							
		Very Stiff Gray Silty Clay with trace sand and gravel							
15		15.0	15	5-5	3 4 6	10	13.6		5000*
		End of Boring @ 15 ft							
20			20						

Total Depth: 15 ft
Drilling Date: January 12, 2024
Inspector: J. Lawton
Contractor: 2G Drilling
Driller: H. Pace

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

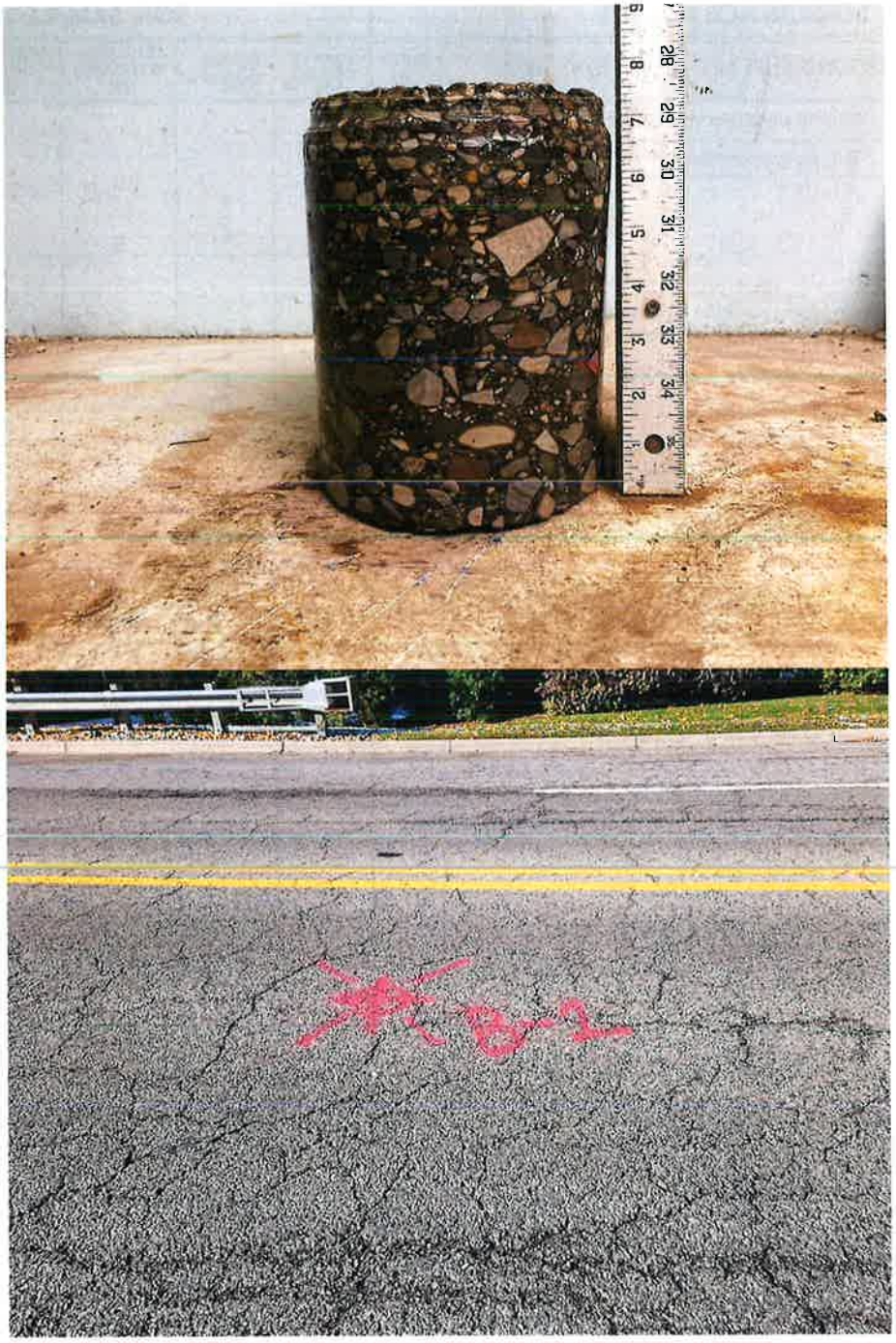
Notes:
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 6

SOIL / PAVEMENT BORING 230863.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/25/24

Photographic Documentation
Adams Paving Project
Birmingham, Michigan
G2 Project No. 230863



Core Photograph of B-1: Bituminous Concrete = 8 inches

Figure No. 8

Photographic Documentation
Adams Paving Project
Birmingham, Michigan
G2 Project No. 230863



Core Photograph of B-2: Bituminous Concrete = 10-1/2 inches

Figure No. 9

Photographic Documentation
Adams Paving Project
Birmingham, Michigan
G2 Project No. 230863



Core Photograph of B-3: Bituminous Concrete = 6-1/2 inches
Portland Cement Concrete = 7-1/2 inches

Figure No. 10

Photographic Documentation
Adams Paving Project
Birmingham, Michigan
G2 Project No. 230863



Core Photograph of B-4: Bituminous Concrete = 5 inches
Portland Cement Concrete = 6 inches

Figure No. 11

Photographic Documentation
Adams Paving Project
Birmingham, Michigan
G2 Project No. 230863



Core Photograph of B-5: Bituminous Concrete = 7 inches
Portland Cement Concrete = 7-1/2 inches

Figure No. 12

Photographic Documentation
Adams Paving Project
Birmingham, Michigan
G2 Project No. 230863



Core Photograph of B-6: Bituminous Concrete = 8 inches
Portland Cement Concrete = 7 inches

Figure No. 13

CONSULTING GROUP

GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM 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.14

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/27/2025

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 rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Brad Stanley	
Ironwood, a Marsh & McLennan Agency, LLC Co 4401 Northside Parkway NW Suite 800 Atlanta GA 30327	PHONE (A/C, No, Ext): (404) 731-8572	FAX (A/C, No): (404) 503-9101
	E-MAIL ADDRESS: brad.stanley@marshmma.com	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
DiPonio Contracting, LLC 51251 Simone Industrial Dr. Shelby Township MI 48316	INSURER A: National Fire Ins. of Hartford	20478
	INSURER B: Valley Forge Ins. Company	20508
	INSURER C: The Continental Ins. Company	22707
	INSURER D: Valley Forge Ins. Company	20508
	INSURER E: Lloyds of London	15792
	INSURER F: Arch Insurance	11150

COVERAGES **CERTIFICATE NUMBER:** CL2532762333 **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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☐ LOC ☒ OTHER: EBL $1M/$2M	Y		8018690335	03/31/2025	03/31/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG EBL Ded	$ 1,000,000 $ 500,000 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $ 1,000
B	AUTOMOBILE LIABILITY ☒ ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY	Y		8018690318	03/31/2025	03/31/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Comp/Coll	$ 1,000,000 $ $ $ $ varies
C	☒ UMBRELLA LIAB ☒ OCCUR EXCESS LIAB ☐ CLAIMS-MADE DED ☒ RETENTION $ 10,000	Y		8018690321	03/31/2025	03/31/2026	EACH OCCURRENCE AGGREGATE 	$ 5,000,000 $ 5,000,000 $
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N ☐ If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		8018690349	03/31/2025	03/31/2026	☒ 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

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Adams Road Paving Project, Contract #12-24(P)

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 are included as additional insured for the General Liability, Automobile Liability and Umbrella policies with respect to the liability resulting from the operations of the Named Insured as required by written contract.
Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal, except 10 days for non-payment, shall be sent to the Finance Department, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012 for General Liability, Auto Liability, Workers Compensation and Umbrella

CERTIFICATE HOLDER

City of Birmingham
151 Martin St.
Birmingham MI 48012

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

Brad Stanley

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AGENCY CUSTOMER ID: 00015037

LOC #:

ADDITIONAL REMARKS SCHEDULE

Page ____ of ____

AGENCY	NAMED INSURED
Ironwood, a Marsh & McLennan Agency, LLC Co	DiPonio Contracting, LLC
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance

coverage as required by written contract and per policy terms, conditions and exclusions. General Liability coverage provided is primary and non-contributory with respect to any similar insurance held by the additional insured as required by written contract.

ACORD 101 (2008/01)

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AGENCY CUSTOMER ID: _____

LOC #: _____

ADDITIONAL REMARKS SCHEDULE

Page ____ of ____

AGENCY	NAMED INSURED
Ironwood, a Marsh & McLennan Agency, LLC Co	DIPonio Contracting, LLC
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance: Notes

Insurer E:

Cyber Liability
Lloyd's of London
Policy Number- ESN0140296780
Effective 3/31/2025- 3/31/2026
$1,000,000 Per Claim Limit
$10,000 Deductible

Insurer F:

Contractors Errors & Omissions & Pollution Incident
Columbia Casualty Company
Policy Number- 591969089
Effective 3/31/2025- 3/31/2026
$1,000,000 Per Claim Limit
$1,000,000 Aggregate Limit
$10,000 Deductible

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/11/2025

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 rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Laura Jones	
Ironwood, a Marsh & McLennan Agency, LLC Co 4401 Northside Parkway NW Suite 800 Atlanta GA 30327	PHONE (A/C, No, Ext): (404) 503-9100	FAX (A/C, No): (404) 503-9101
	E-MAIL ADDRESS: laura.t.jones@marshmma.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Travelers Prop. Casualty Co of America	25674
INSURED DiPonio Contracting, LLC 51251 Simone Industrial Dr. Shelby Township MI 48316	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** CL2531161994 **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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ Owner's & Contractors Prot. Liab. GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:			DT-PRS-8T195212-IND-25	06/01/2025	06/01/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG [blank]	$ 3,000,000 $ $ $ $ 3,000,000 $ $
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) [blank]	$ $ $ $ $
	☐ UMBRELLA LIAB ☐ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $						EACH OCCURRENCE AGGREGATE [blank]	$ $ $
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N / A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						☐ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Adams Road Paving Project - Underground water main installation
Contract #12-24(P), City of Birmingham, MI
Value: $2,289,787.75
Duration: 6/1/2025 - 6/1/2026

City of Birmingham is listed as a Name Insured.

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

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BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

ADAMS ROAD PAVING PRO ECT

CONTRACT - P

SHEET INDEX

C C rS
C U P - N Ad R d S P O B
C U P - N Ad R d S
C U P - N Ad R d S
C U P - N Ad R d S
C U P - N Ad R d S
C U P - N Ad R d S
C U P - N Ad R d S P O E
C S r S r W r M H dr L d Pr
C P P N Ad R d S P O B S
C P P N Ad R d S S
C P P N Ad R d S S
C P P N Ad R d S P O E
C Sr S P - N Ad R d S P O B
C Sr S P - N Ad R d S
C Sr S P - N Ad R d S
C Sr S P - N Ad R d S P O E
C Ad d W r S D r P
C Pr N D P
C Pr N D P
C Pr N D P
C Pr N D P

CITY OF BIRMINGHAM - WATER MAIN STANDARD DETAILS
CITY OF BIRMINGHAM - SEWER STANDARD DETAILS

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 RE UIRED TO CONSTRUCT THE PRO ECT 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

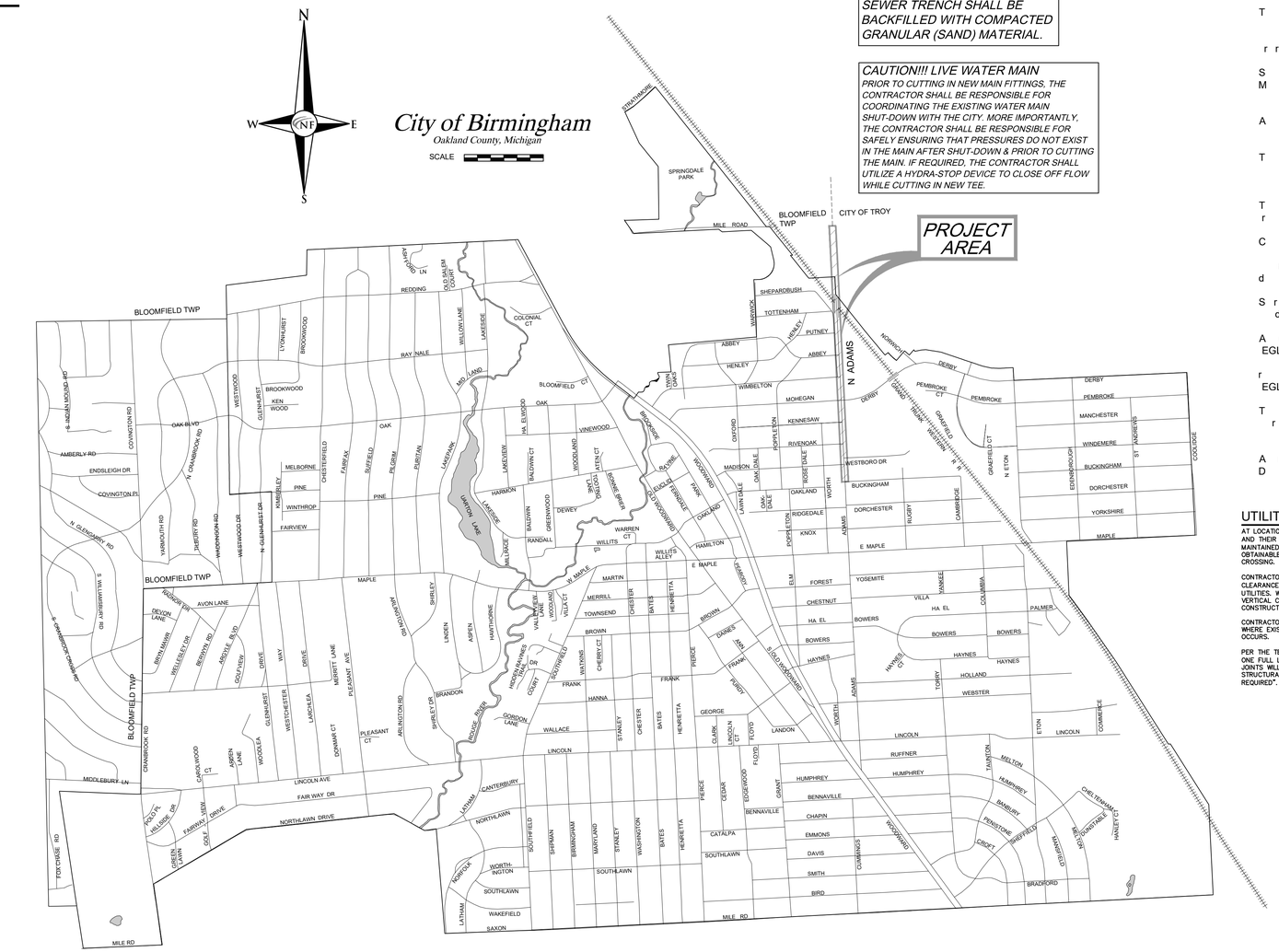
Know what's **below** **Call** before you dig.

BENCHMARK NOTE

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

N W NF E S

City of Birmingham
Oakland County, Michigan
SCALE



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 THE EXISTING WATER MAIN SHUT-DOWN WITH THE CITY. 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.

CONSTRUCTION NOTES

T r r r

T r r MISS DIG - - - r d
d S rd S d d H d r d
C Br E r D r r
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UTILITY CROSSING NOTE

AT LOCATIONS WHERE THERE ARE CROSSING WITH EXISTING UTILITIES AND THEIR DEPTHS ARE UNKNOWN, 18" VERTICAL SEPARATION WILL BE MAINTAINED WHENEVER POSSIBLE. IF THE 18" SEPARATION IS NOT OBTAINABLE, A CONCRETE ENCASEMENT WILL BE INSTALLED AT THE CROSSING.

CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE AND A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN UTILITIES. WHERE 10' SEPARATION CANNOT BE MAINTAINED, 18" VERTICAL CLEARANCE SHALL BE PROVIDED AND UTILITIES SHALL BE CONSTRUCTED IN SEPARATE TRENCHES.

CONTRACTOR SHALL FIELD VERIFY EXACT DEPTH OF EXISTING PIPE WHERE EXISTING CROSSES PROPOSED. CONTACT ENGINEER IF CONFLICT OCCURS.

PER THE TEN STATES STANDARDS, ARTICLE 8.8.3 (b), "AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE (20') SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED".

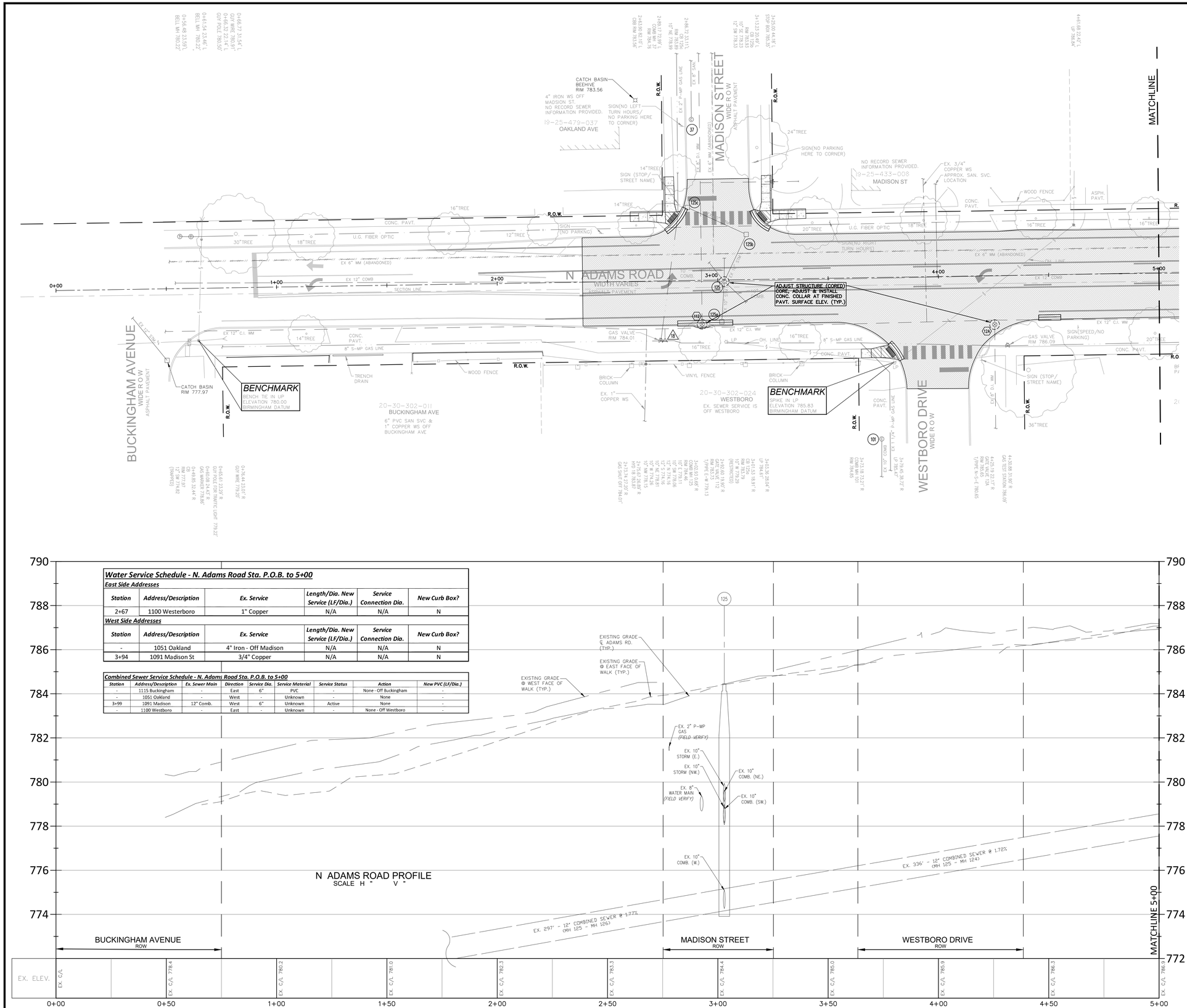
DESIGN ENGINEER SEAL

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

APPROVED DATE

- - Add d

ADAMS ROAD PAVING PRO ECT
CONTRACT - P



Water Service Schedule - N. Adams Road Sta. P.O.B. to 5+00

East Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
2+67	1100 Westerboro	1" Copper	N/A	N/A	N

West Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
-	1051 Oakland	4" Iron - Off Madison	N/A	N/A	N
3+94	1091 Madison St	3/4" Copper	N/A	N/A	N

Combined Sewer Service Schedule - N. Adams Road Sta. P.O.B. to 5+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
-	1115 Buckingham	-	East	6"	PVC		None - Off Buckingham	-
-	1051 Oakland	-	West	-	Unknown	-	None	-
3+99	1091 Madison	12" Comb.	West	6"	Unknown	Active	None	-
-	1100 Westboro	-	East	-	Unknown	-	None - Off Westboro	-

SEWER STRUCTURE SCHEDULE

37 **MAINTAIN**
2+89.17 72.99° L
COMB MH 37
RIM 784.76

101 **MAINTAIN**
3+73.18 73.21° R
COMB MH 101
RIM 784.85

125 **ADJUST (CORED)**
3+02.93 0.68° R
COMB MH 125
RIM 784.46
PR. RIM 784.50
10" E 779.11
10" SW 778.06
12" N 774.16
12" S 774.16
10" NE 778.81
10" W 774.26
10" NW 778.15

STORM STRUCTURE SCHEDULE

125a **ADJUST**
3+01.53 18.91° R
CB 125a
RIM 783.79
PR. RIM 783.80
10" W 779.29
(RESTRICTED)

125b **ADJUST**
3+13.23 20.49° L
CB 125b
RIM 783.93
PR. RIM 783.93
10" SE 778.23
12" SW 778.33

125c **ADJUST**
2+86.72 33.11° L
CB 125c
RIM 783.89
PR. RIM 783.89
10" NE 778.99

WATER MAIN SCHEDULE

18 **MAINTAIN**
2+75.67 26.89° R
HYD 18 783.87

112 **ADJUST (CORED)**
2+92.60 19.90° R
GATE VALVE 112
RIM 783.73
PR. RIM 783.73
T/PIPE E-W 779.13

126 **ADJUST (CORED)**
4+25.19 22.17° R
GATE VALVE 12A
RIM 785.65
PR. RIM 785.65
T/PIPE N-S-E 780.65

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. (7" HMA ON 8" 21AA)
- PR. FULL-DEPTH ASPH. (3" HMA ON 8" 21AA)
- PR. PARTIAL-DEPTH (3") ASPH. MILL AND REPLACE
- PR. 18" MD. CONC. CURB & GUTTER

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WWW.NFE-ENGR.COM

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

SHEET
Utility Plan - N. Adams Road Sta. P.O.B. to 5+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS

DRAWN BY:
K. Withrow
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
EMAIL CONTACT:
ptulikangas@nfe-engr.com
DATE:
12-20-24
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C01

Water Service Schedule - N. Adams Road Sta. 5+00 to 10+00

East Side Addresses

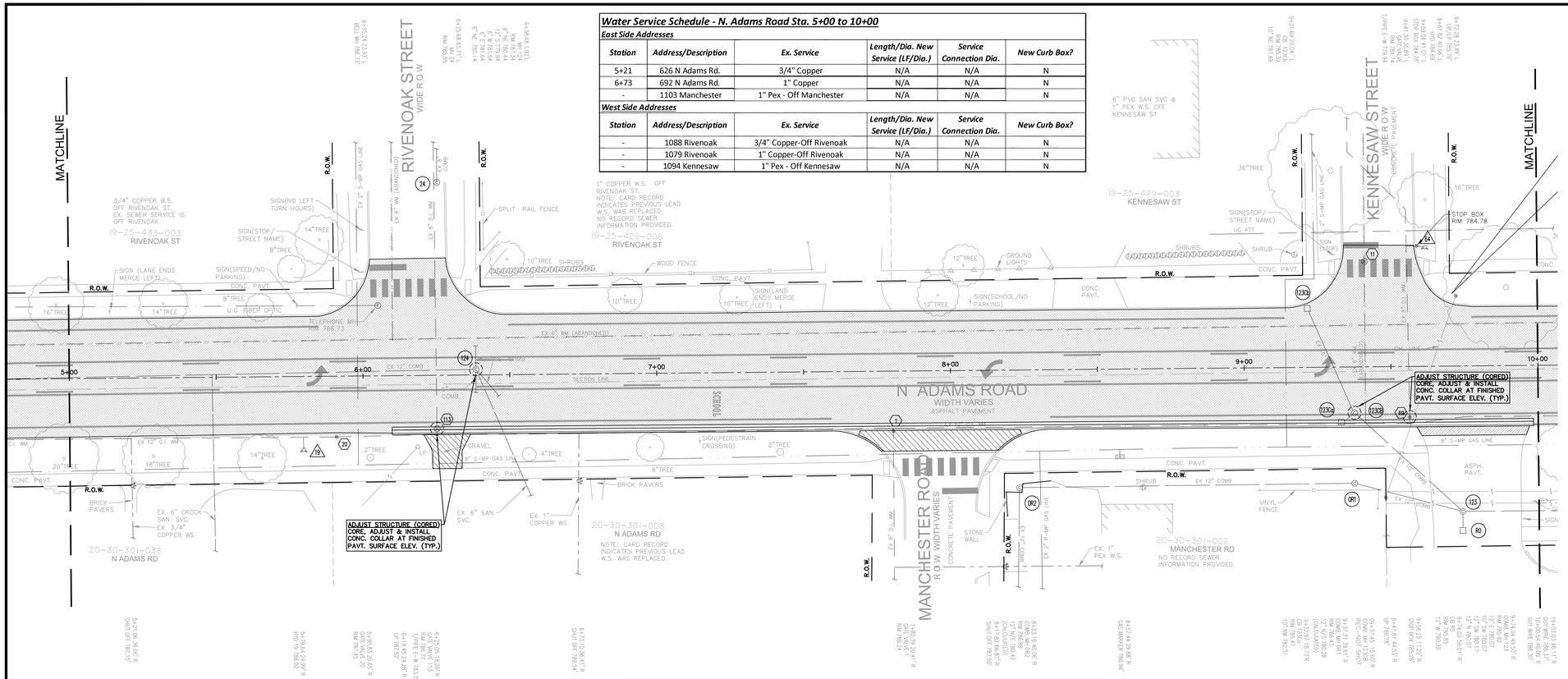
Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
5+21	626 N Adams Rd.	3/4" Copper	N/A	N/A	N
6+73	692 N Adams Rd.	1" Copper	N/A	N/A	N
-	1103 Manchester	1" Pex - Off Manchester	N/A	N/A	N

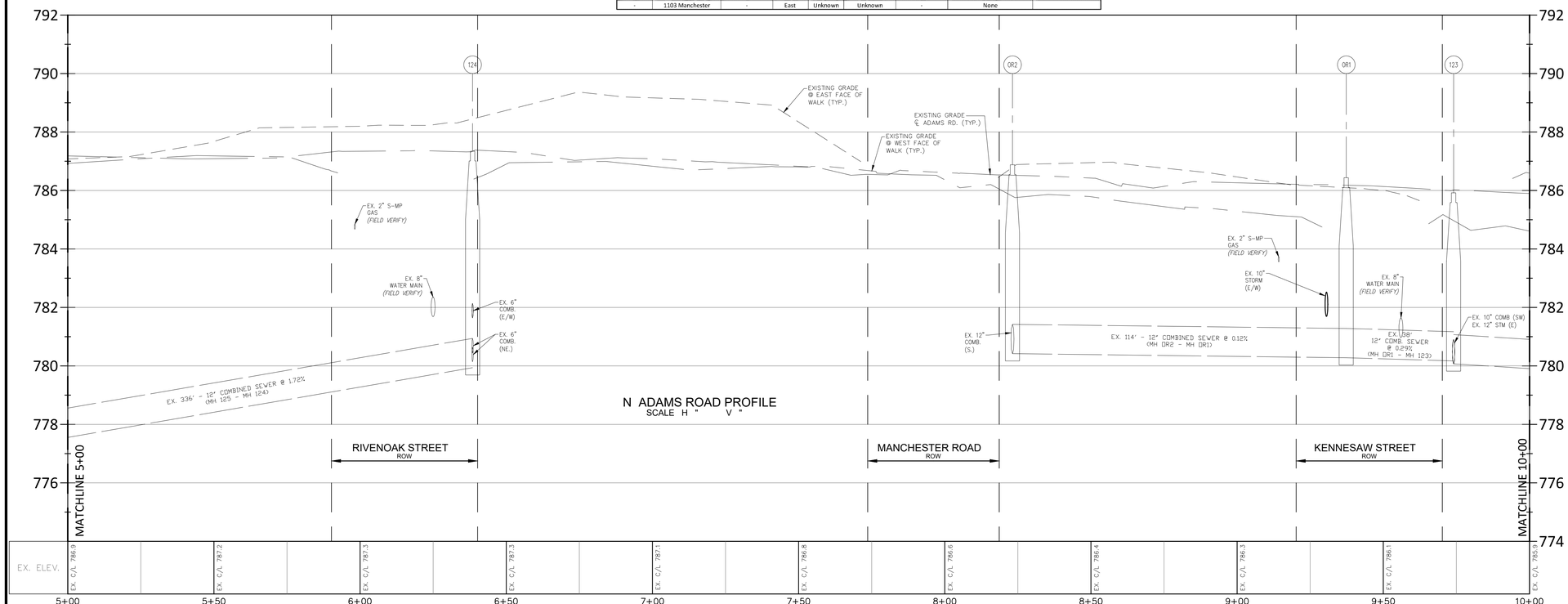
West Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
-	1088 Rivenoak	3/4" Copper-Off Rivenoak	N/A	N/A	N
-	1079 Rivenoak	1" Copper-Off Rivenoak	N/A	N/A	N
-	1094 Kennesaw	1" Pex - Off Kennesaw	N/A	N/A	N

Combined Sewer Service Schedule - N. Adams Road Sta. 5+00 to 10+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (LF/Dia.)
5+48	626 Adams Rd.	12" Comb.	East	6"	Crock	Active	None	-
-	1088 Rivenoak	-	West	Unknown	Unknown	-	None - off Rivenoak	
-	1079 Rivenoak	-	Wst	Unknown	Unknown	-	None	
6+39	692 N. Adams Rd.	12" Comb.	East	6"	Unknown	Active	None	
-	1094 Kennesaw	-	West	6"	PVC	Active	None - off Kennesaw	
-	1103 Manchester	-	East	Unknown	Unknown	-	None	





SEWER STRUCTURE SCHEDULE

- 24 — **MAINTAIN** 6+25.68 65.71' L, MH 24, RIM 785.85
- 124 — **ADJUST (CORED)** 6+38.48 1.92'L, MH 124, RIM 787.34, **PR. RIM 784.36**, 6" NE 780.44, 12" S 779.94, 6" W 781.64, 6" E 781.64, 6" NE 780.14
- OR2 — **MAINTAIN** 8+23.16 40.06" R, COMB. MH OR2, RIM 786.88, 12" N/E 780.42 (CALCULATED)
- OR1 — **MAINTAIN** 9+37.31 39.61" R, COMB. MH OR1, RIM 786.43, 12" N/S 780.28 (CALCULATED)
- 123 — **MAINTAIN** 9+74.04 49.50" R, COMB. MH 123, RIM 785.92, 12" E 780.07, 10" SW 780.07, 12" SW 780.17, 12" N 780.07
- 123C8 — **ADJUST (CORED)** 09+37.45 15.60' R, COMB. MH 123C8, REC—NOT SHOT

STORM STRUCTURE SCHEDULE

- 123C0 — **ADJUST** 9+32.87 18.75'R, CB 123Co, RIM 785.41, **PR. RIM 785.40**, 10" NW 782.51
- R0 — **MAINTAIN** 9+74.02 56.01" R, CB R0, RIM 785.85, 12" W 780.30
- 123C0 — **ADJUST** 9+21.69 20.04 " L, CB 123Cb, RIM 785.39, **PR. RIM 785.39**, 10" NE 781.69

WATER MAIN SCHEDULE

- 19 — **MAINTAIN** 5+19.64 24.99' R, HYD 19 788.02
- 64 — **MAINTAIN** 9+61.82 40.56' L, HYD 784.69'
- 20 — **MAINTAIN** 5+90.83 20.65" R, GATE VALVE 20, RIM 787.45
- 113 — **ADJUST (CORED)** 6+25.05 18.20' R, GATE VALVE 113, RIM 786.77, T/PIPE E—W 783.32
- 1 — **ADJUST** 7+80.29 20.41" R, GATE VALVE 1, RIM 786.24, **PR. RIM 786.24**
- 69 — **ADJUST (CORED)** 9+56.25 17.22' R, STOP BOX 785.26', **PR. RIM 785.26**
- 11 — **ABANDON WELL (IF PRESENT) & ABANDON VALVE (INC.) (CONFIRM EX. WATER MAIN IS ABANDONED)** 9+41.30 35.89' L, GATE VALVE, RIM 784.74, T/PIPE E—W 779.94

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LEGEND

- CLEAN-OUT
- DWL SVC. OVER VIDEO INSP.
- MANHOLE COMB SAN
- CVB
- GVW
- HYDRANT
- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
- RYCB
- MANHOLE
- CB
- END SECTION
- ELEC. METER
- EXISTING STORM SEWER
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- EXISTING BURIED CABLES
- GAS METER
- GAS MARKER
- GAS VALVE
- EXISTING GAS MAIN
- UTILITY POLE
- LIGHT POLE
- GUY WIRE
- STRAIN POLE
- 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. (7" HMA ON 6" 21AA)
- PR. FULL-DEPTH ASPH. (3" HMA ON 6" 21AA)
- PR. PARTIAL-DEPTH (3") ASPH. MILL AND REPLACE
- PR. 10" WD. CONC. CURB & GUTTER

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SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

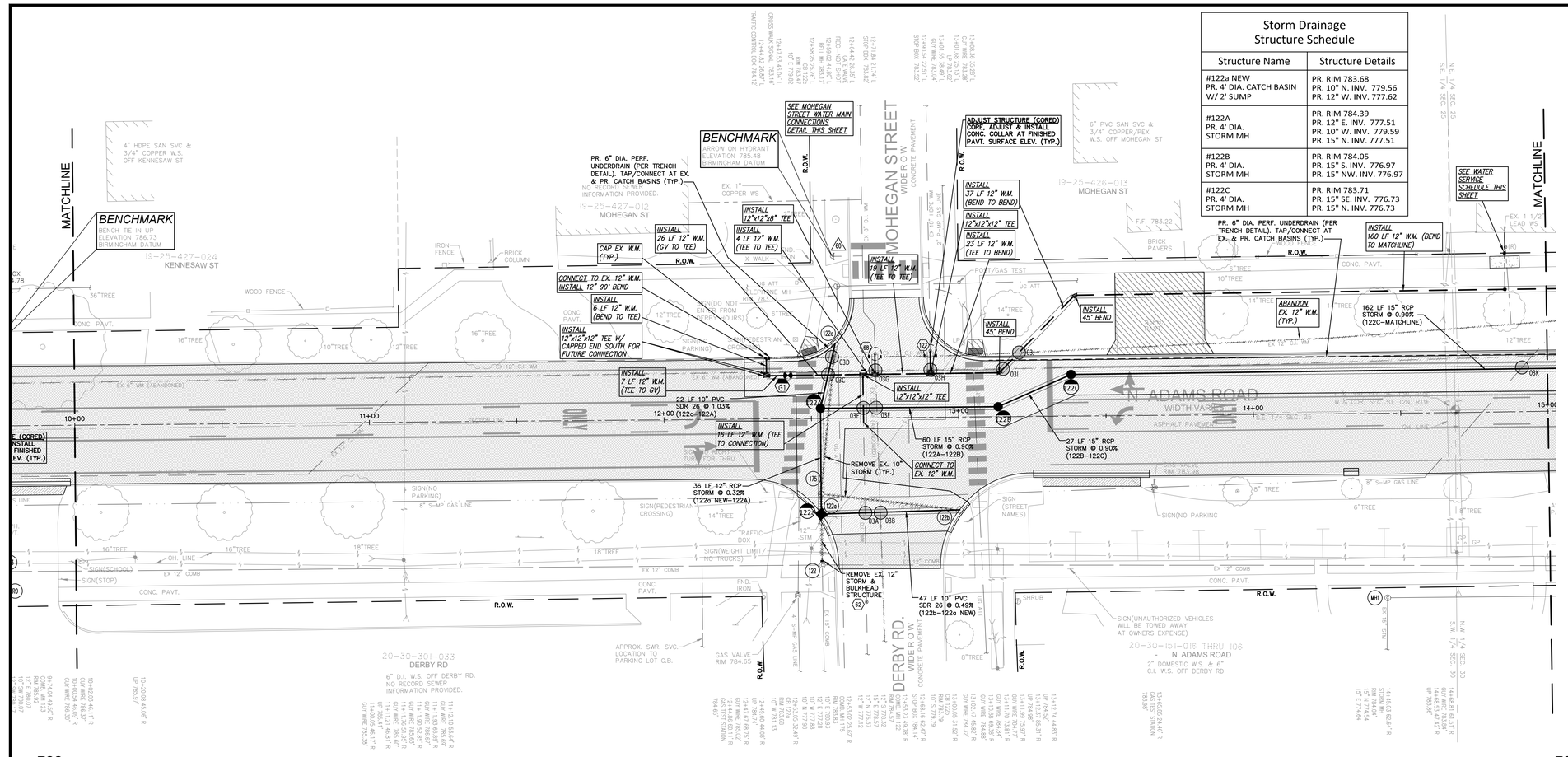
SHEET
Utility Plan - N. Adams Road Sta. 5+00 to 10+00

Know what's **below** **Call** before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. N788
SHEET NO. C02



Storm Drainage Structure Schedule

Structure Name	Structure Details
#122a NEW PR. 4' DIA. CATCH BASIN W/ 2' SUMP	PR. RIM 783.68 PR. 10" N. INV. 779.56 PR. 12" W. INV. 777.62
#122A PR. 4' DIA. STORM MH	PR. RIM 784.39 PR. 12" E. INV. 777.51 PR. 10" W. INV. 779.59 PR. 15" N. INV. 777.51
#122B PR. 4' DIA. STORM MH	PR. RIM 784.05 PR. 15" S. INV. 776.97 PR. 15" NW. INV. 776.97
#122C PR. 4' DIA. STORM MH	PR. RIM 783.71 PR. 15" SE. INV. 776.73 PR. 15" N. INV. 776.73

SEWER STRUCTURE SCHEDULE

175 **REMOVE**
12+53.02 25.62' R
COMB MH 175
RIM 783.83
10" E 780.93 **(REMOVE)**
12" E 777.28 **(REMOVE)**
10" W 777.88 **(REMOVE)**
10" N 777.98 **(REMOVE)**

122 **BULKHEAD**
12+53.23 49.78' R
COMB MH 122
RIM 784.57
12" S 778.32
15" E 778.57
12" N 776.37
12" W 777.12 **(REMOVE & BULKHEAD)**

MH1 **MAINTAIN**
14+45.03 62.64' R
STORM MH
RIM 784.04'
15" N 774.54
15" E 774.64

STORM STRUCTURE SCHEDULE

122a **REMOVE**
12+53.05 32.49' R
CB 122a
RIM 783.68
10" W 781.13 **(REMOVE)**

122b **TAP & ADJUST**
13+00.05 31.52' R
CB 122b
RIM 783.79
PR. RIM 783.79
10" S 779.79 **(REMOVE)**
PR. 10" S INV 779.79 (TAP)

122c **TAP & ADJUST**
12+58.25 25.26' L
CB 122c
RIM 783.47
PR. RIM 783.45
12" E 779.82 **(REMOVE)**
PR. 10" E INV. 779.82 (TAP)
PR. 6" UNDERDRAIN (TAP – 2 EACH)

WATER MAIN SCHEDULE

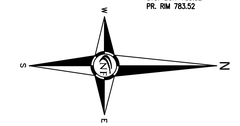
60 **MAINTAIN**
12+57.5 40.56' L
HYD 785.48'

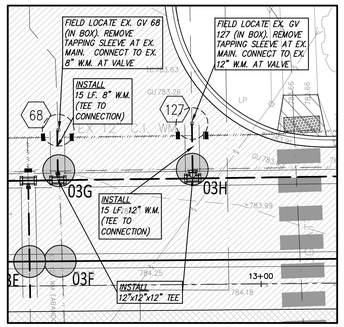
68 **ADJUST (CORED)**
12+71.84 21.74' L
STOP BOX 783.82'
PR. RIM 783.82

127 **ADJUST (CORED)**
12+90.54 22.51' L
STOP BOX 783.52'
PR. RIM 783.52

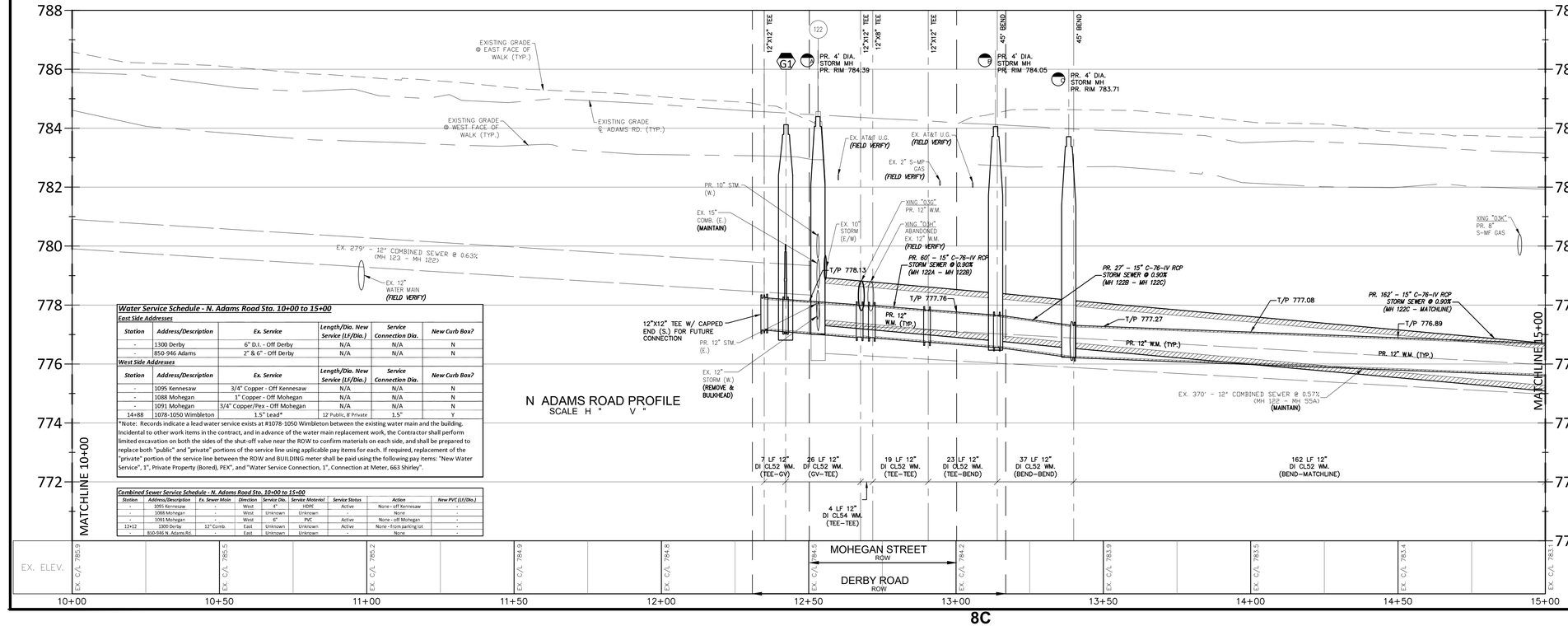
62 **MAINTAIN**
12+68.16 62.47' R
STOP BOX 784.14'

G1 **PR. 12" GATE VALVE IN WELL**
PR. STA. 12+62.33 14.65' L
PR. RIM. 784.14
PR. T/PIPE 778.18





MOHEGAN ST. WATER MAIN CONNECTIONS DETAIL
SCALE: 1"=10'



N ADAMS ROAD PROFILE
SCALE H " V "

Water Service Schedule - N. Adams Road Sta. 10+00 to 15+00

East Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (Lf/Dia.)	Service Connection Dia.	New Curb Box?
-	1300 Derby	6" D.I. - Off Derby	N/A	N/A	N
-	850-946 Adams	2" & 6" - Off Derby	N/A	N/A	N

West Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (Lf/Dia.)	Service Connection Dia.	New Curb Box?
-	1095 Kennesaw	3/4" Copper - Off Kennesaw	N/A	N/A	N
-	1088 Mohegan	1" Copper - Off Mohegan	N/A	N/A	N
-	1091 Mohegan	3/4" Copper/Pex - Off Mohegan	N/A	N/A	N
14+88	1078-1050 Wimbleton	1.5" Lead*	12' Public, 8' Private	1.5"	Y

*Note: Records indicate a lead water service exists at #1078-1050 Wimbleton between the existing water main and the building. Incidental to other work items in the contract, and in advance of the water main replacement work, 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 BUILDING 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, 663 Shirley".

Combined Sewer Service Schedule - N. Adams Road Sta. 10+00 to 15+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dia.	Service Material	Service Status	Action	New PVC (Lf/Dia.)
-	1095 Kennesaw	-	West	4"	HDPE	Active	None - off Kennesaw	-
-	1088 Mohegan	-	West	Unknown	Unknown	-	None	-
-	1091 Mohegan	-	West	6"	PVC	Active	None - off Mohegan	-
12+12	1300 Derby	12" Comb.	East	Unknown	Unknown	Active	None - from parking lot	-
-	850-946 N. Adams Rd.	-	East	Unknown	Unknown	-	None	-

UTILITY CROSSING SCHEDULE

03A PR. 10" STM. B/P 779.61
EX. 12" W.M. T/P 778.53 (V.I.F.)
VERTICAL CLEARANCE: 1.08 FT

03B PR. 10" STM. B/P 779.63
EX. 12" ABND. W.M. V.I.F. (REMOVE)

03C PR. 10" STM. B/P 779.76
PR. 12" W.M. T/P 778.52
VERTICAL CLEARANCE: 1.50 FT

03D PR. 10" STM. B/P 780.19
EX. 12" W.M. T/P 778.37 (V.I.F.) (ABANDON)
VERTICAL CLEARANCE: 1.82 FT

03E PR. 15" STM. B/P 777.38
PR. 12" W.M. T/P 775.88
VERTICAL CLEARANCE: 1.5 FT MIN.
*LOWER PR. W.M. USING VERT. BENDS AS REQ. TO MEET CLEARANCE REQ.

03F PR. 15" STM. B/P 777.34
EX. 12" ABND. W.M. B/P V.I.F. (REMOVE)

03G PR. 12" W.M. T/P 775.03
EX. ABND. 6" W.M. T/P V.I.F. (REMOVE)

03H PR. 12" W.M. T/P 778.38
EX. ABND. 6" W.M. T/P 778.38 (REMOVE)
FG 783.88

03I PR. 12" W.M. T/P 777.80
EX. ABND. 6" W.M. V.I.F. (REMOVE)

03J EX. 12" W.M. B/P V.I.F. (ABANDON*)
PR. 12" W.M. T/P/ 777.60
*UTILITY VERT. BENDS AS REQ. TO CROSS ACTIVE W.M.

03K PR. 15" STM. B/P 776.60
EX. 8" GAS LINE B/P 780.40 (V.I.F.)
VERTICAL CLEARANCE: 3.8 FT
FG 782.83

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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
- 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. (7" HMA ON 8" 21AA)
- PR. FULL-DEPTH ASPH. (3" HMA ON 8" 21AA)
- PR. PARTIAL-DEPTH (3") ASPH. MILL AND REPLACE
- PR. 15" RD. CONC. CURB & GUTTER

NF ENGINEERS
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LAND SURVEYORS
LAND PLANNERS

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

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

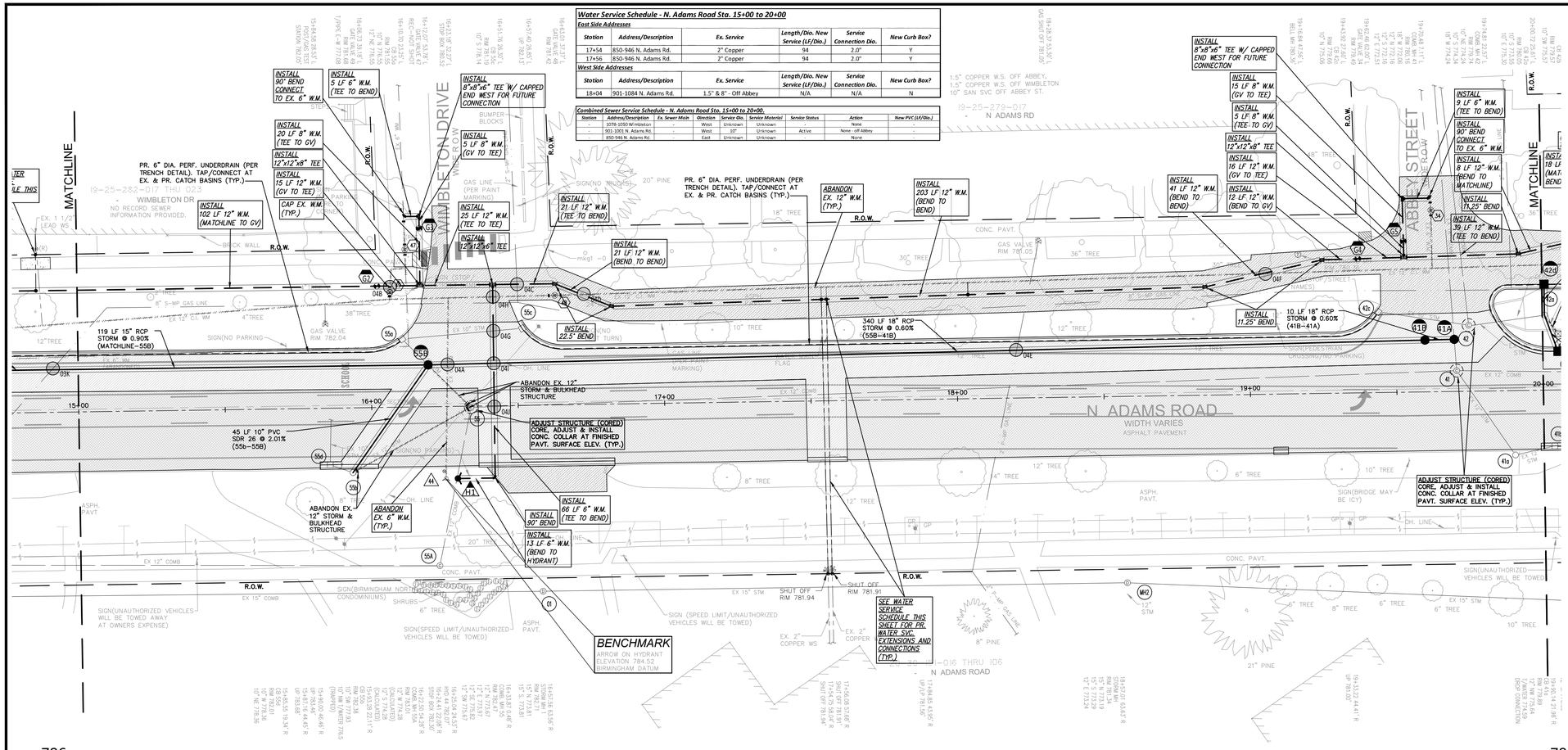
SHEET
Utility Plan - N. Adams Road Sta. 10+00 to 15+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. N788
SHEET NO. C03



Water Service Schedule - N. Adams Road Sta. 15+00 to 20+00

East Side Addresses

Station	Address/Description	Ex. Service	Length/Dio. New Service (LF/Dio.)	Service Connection Dio.	New Curb Box?
17+54	850-946 N. Adams Rd.	2" Copper	94	2.0"	Y
17+56	850-946 N. Adams Rd.	2" Copper	94	2.0"	Y

West Side Addresses

Station	Address/Description	Ex. Service	Length/Dio. New Service (LF/Dio.)	Service Connection Dio.	New Curb Box?
18+04	901-1084 N. Adams Rd.	1.5" & 8" - Off Abbey	N/A	N/A	N

Combined Sewer Service Schedule - N. Adams Road Sta. 15+00 to 20+00

Station	Address/Description	Ex. Sewer Main	Direction	Service Dio.	Service Material	Service Status	Action	New PVC (LF/Dio.)
-	1078-1050 Wimbleton	-	West	Unknown	Unknown		None	-
-	901-1001 N. Adams Rd.	-	West	10"	Unknown	Active	None - Off Abbey	-
-	850-946 N. Adams Rd.	-	East	Unknown	Unknown		None	-

SEWER STRUCTURE SCHEDULE

(55) **BULKHEAD & ADJUST (CORED)**
16+33.87 0.48° R
COMB. MH 55
RIM 782.47
PR. RIM 782.47
12" N 773.67
12" E 773.97
12" SE 775.82 **(BULKHEAD)**
(BULKHEAD)

(55A) **MAINTAIN**
16+22.50 54.28° R
COMB. MH 55A
RIM 783.01
12" W 774.28
(CALCULATED)
12" S 774.28
(CALCULATED)

(41) **ADJUST (CORED)**
19+70.48 7.11° L
COMB. MH 41
RIM 780.18
PR. RIM 780.20
18" W 772.06
12" N 772.16
12" S 772.16
12" E 772.51

(42) **ADJUST (CORED)**
19+74.81 22.57° L
COMB. MH 42
RIM 779.74
PR. RIM 779.75
10" NE 774.24
10" S 774.34
18" W 774.24

(01) **MAINTAIN**
16+57.56 63.56° R
STORM MH 1
RIM 782.71
15" N 773.81
15" S. 773.81

STORM STRUCTURE SCHEDULE

(55a) **TAP & ADJUST**
16+10.70 23.25° L
CB 55a
RIM 781.55
PR. RIM 781.55
10" N 776.55
12" NE 776.55
PR. 6" UNDERDRAIN (TAP – 1 EACH)

(55b) **TAP & BULKHEAD**
15+93.28 22.11° R
CB 55b
RIM 782.38
12" SW 777.93
12" NW T/WATER 776.58
(BULKHEAD/ABANDON)
PR. 10" N.W. INV 776.58 (TAP)

(42c) **TAP**
19+43.92 27.60° L
CB 42c
RIM 779.66
10" N 775.06
PR. 6" UNDERDRAIN (TAP – 1 EACH)

(55c) **TAP ADJUST**
16+51.76 26.30° L
CB 55c
RIM 781.19
PR. RIM 781.19
10" S 778.14
PR. 6" UNDERDRAIN (TAP – 1 EACH)

(55d) **ADJUST**
15+85.55 19.34° R
CB 55d
RIM 782.01
PR. RIM 782.01
10" W 778.36
10" NE 778.36

(41a) **MAINTAIN**
19+90.14 21.98° R
CB 41a
RIM 781.55
12" NW 776.64

WATER MAIN SCHEDULE

(44) **REMOVE**
16+25.04 24.53° R
HYD 44 782.07
16+24.41 22.08° R
STOP BOX 782.30'

(49) **ABANDON WELL (IF PRESENT) & ABANDON VALVE (INC.)**
16+06.73 39.18° L
GATE VALVE 49
RIM 781.68
T/PIPE E–W 777.08

(48) **ABANDON WELL (IF PRESENT) & ABANDON VALVE (INC.)**
16+63.01 37.37° L
GATE VALVE 48
RIM 781.42

(47) **ABANDON WELL (IF PRESENT) & ABANDON VALVE (INC.)**
16+12.07 53.78° L
GATE VALVE 47
REC–NOT SHOT

(34) **ABANDON WELL (IF PRESENT) & ABANDON VALVE (INC.)**
19+62 62.00° L
GATE VALVE 34
RIM 779.46

(H1) *HYDRANT & ASSEMBLY*
STA. 16+29' 25.29° R
F.G. 782.05
PR. T/PIPE 776.55

(G4) *PR. 12" GATE VALVE IN WELL*
PR. STA. 19+37' 45.78' L
PR. RIM. 780.00
PR. T/PIPE 774.50

(G2) *PR. 12" GATE VALVE IN WELL*
PR. STA. 16+05' 41.47' L
PR. RIM. 782.40
PR. T/PIPE 776.30

(G5) *PR. 8" GATE VALVE IN WELL*
PR. STA. 19+57' 50.60' L
PR. RIM. 779.70
PR. T/PIPE 774.20

(G3) *PR. 8" GATE VALVE IN WELL*
PR. STA. 16+17' 60.94' L
PR. RIM. 781.90
PR. T/PIPE 776.40

UTILITY CROSSING SCHEDULE

04A PR. 18" STM. T/P 775.35
EX. 6" W.M. B/P V.I.F.
(ABANDON/REMOVE*)
*ABANDONMENT/REMOVAL OF EX. WATER MAIN MAY BE REQIRED TO OCCUR PRIOR TO STORM INSTALLATION.

04B PR. 12" W.M. T/P 776.20
EX. 8" W.M. B/P V.I.F.
(ABANDON/REMOVE*)
*LOWER PR. W.M. USING VERT. BENDS AS REQ. TO MEET CLEARANCE REQ.

04C PR. 12" W.M. T/P 776.07
EX. 2" GAS LINE (V.I.F.)

04D PR. 12" W.M. T/P 776.05
EX. 12" W.M. (V.I.F.)
(ABANDON/REMOVE*)
*LOWER PR. W.M. USING VERT. BENDS AS REQ. TO MEET CLEARANCE REQ.

04E PR. 18" STM. T/P 774.25
EX. 2" GAS LINE. B/P (V.I.F.)

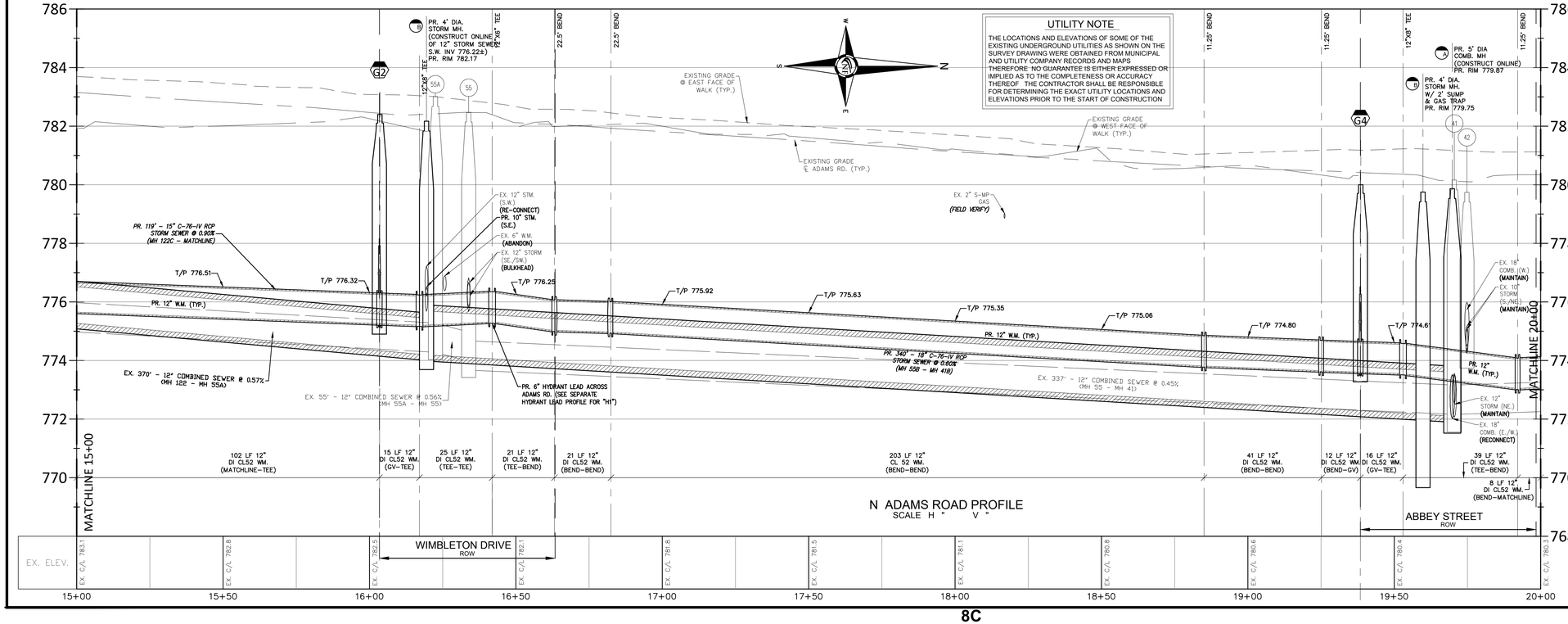
04F PR. 12" W.M. T/P 774.65
EX. 12" W.M. V.I.F.
(ABANDON/REMOVE*)
*LOWER PR. W.M. USING VERT. BENDS AS REQ. TO MEET CLEARANCE REQ.

04G PR. 6" W.M. T/P 776.30
PR. 10" STM. B/P 773.85
VERTICAL CLEARANCE: 2.45 FT

04H PR. 6" W.M. B/P 775.55
EX. 12" W.M. V.I.F.
(ABANDON/REMOVE*)
*LOWER PR. W.M. USING VERT. BENDS AS REQ. TO MEET CLEARANCE REQ.

04I PR. 18" STM. B/P 775.55
PR. 6" W.M. T/P 777.07
VERTICAL CLEARANCE: 1.52 FT

04J PR. 12" W.M. T/P 776.62
EX. 12" COMB. B/P 774.63
VERTICAL CLEARANCE: 1.99 FT



Storm Drainage Structure Schedule	
Structure Name	Structure Details
#41A PR. 5' DIA COMB. MH (CONSTRUCT ONLINE)	PR. RIM 779.87 PR. 18" S. INV. 772.10 EX. 18" E. INV. 772.02 EX. 18" W. INV. 772.02
#41B PR. 4' DIA. STORM MH. W/ 2' SUMP & GAS TRAP	PR. RIM 779.75 PR. 18" S. INV. 772.16 PR. 18" N. INV. 772.16
#55B PR. 4' DIA. STORM MH. (CONSTRUCT ONLINE OF 12" STORM SEWER S.W. INV 776.22±)	PR. RIM 782.17 PR. 15" S. INV. 774.19 PR. 10" SE. INV. 775.68 PR. 18" N. INV. 774.19 EX. 12" SW. INV. 776.22

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. (7" HMA on 8" 21AA)
- PR. FULL-DEPTH ASPH. (3" HMA on 6" 21AA)
- PR. PARTIAL-DEPTH (3") ASPH. MILL AND REPLACE
- PR. 18" WD. CONC. CURB & GUTTER

NF ENGINEERS
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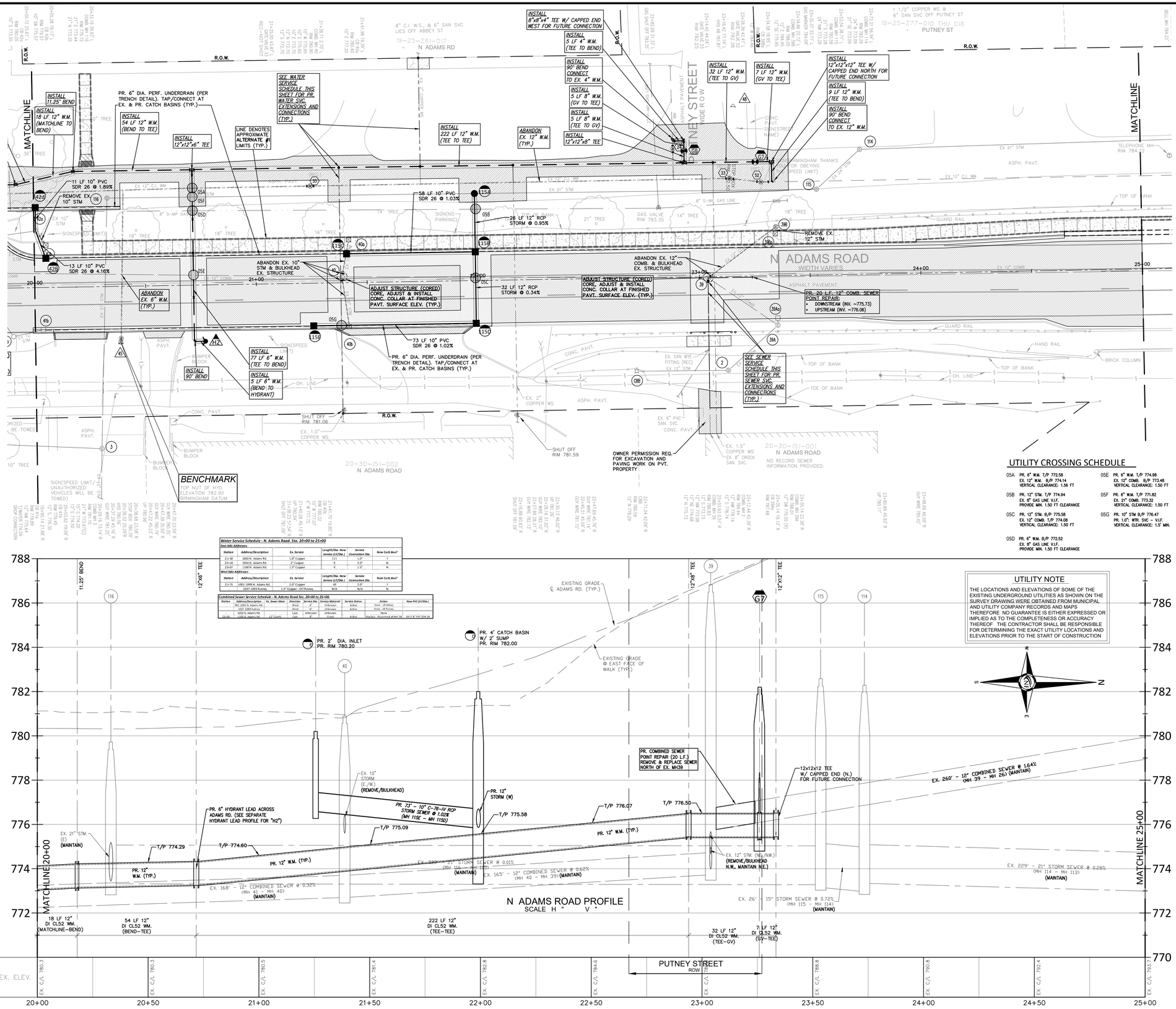
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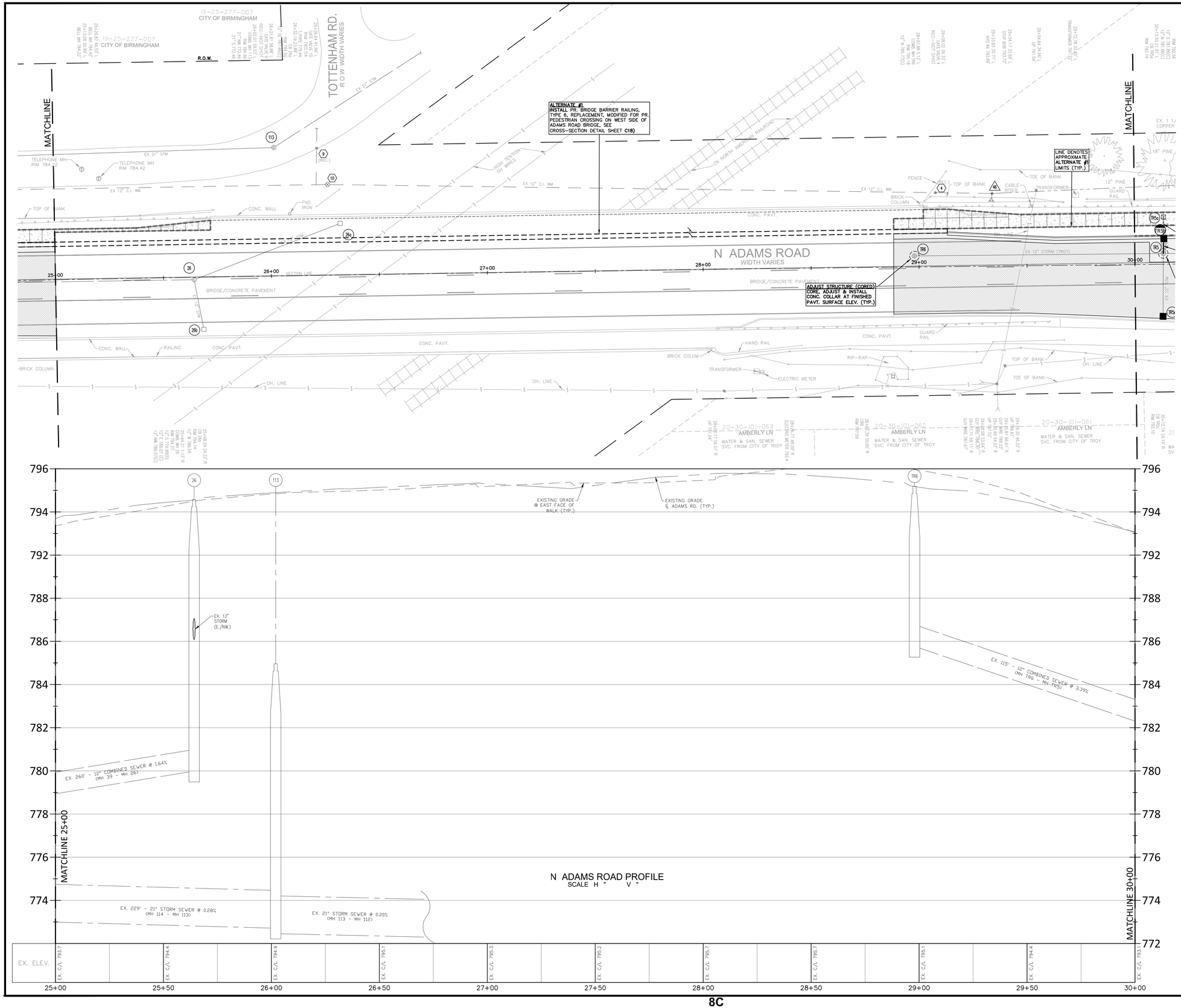
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DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C04


INSTALL 8"x8"x4" TEE W/ CAPPED END WEST FOR FUTURE CONNECTION
INSTALL 5 LF 4" W.M. (TEE TO BEND)
INSTALL 90° BEND CONNECT TO EX. 4" W.M.
INSTALL 5 LF 8" W.M. (GV TO TEE)
INSTALL 5 LF 8" W.M. (TEE TO GV)
INSTALL 12"x12"x8" TEE
INSTALL 32 LF 12" W.M. (TEE TO GV)
INSTALL 7 LF 12" W.M. (GV TO TEE)
INSTALL 12"x12"x12" TEE W/ CAPPED END NORTH FOR FUTURE CONNECTION
INSTALL 9 LF 12" W.M. (TEE TO BEND)
INSTALL 90° BEND CONNECT TO EX. 12" W.M.
INSTALL 11.25° BEND
INSTALL 18 LF 12" W.M. (MATCHLINE TO BEND)
INSTALL 54 LF 12" W.M. (BEND TO TEE)
INSTALL 12"x12"x6" TEE
INSTALL 222 LF 12" W.M. (TEE TO TEE)
ABANDON EX. 12" W.M. (TYP.)
SEE WATER SERVICE SCHEDULE THIS SHEET FOR PR. WATER SVC. EXTENSIONS AND CONNECTIONS (TYP.)
LINE DENOTES APPROXIMATE ALTERNATE #1 LIMITS (TYP.)
PR. 6" DIA. PERF. UNDERDRAIN (PER TRENCH DETAIL). TAP/CONNECT AT EX. & PR. CATCH BASINS (TYP.)
R.O.W.
MATCHLINE
N ADAMS RD
PUTNEY STREET
ASPHALT PAVEMENT
UNDER R.O.W.
11 LF 10" PVC SDR 26 @ 1.89%
REMOVE EX. 10" STM
58 LF 10" PVC SDR 26 @ 1.03%
26 LF 12" RCP STORM @ 0.95%
13 LF 10" PVC SDR 26 @ 4.16%
ABANDON EX. 10" STM & BULKHEAD EX. STRUCTURE
ADJUST STRUCTURE (CORED) CORE, ADJUST & INSTALL CONC. COLLAR AT-FINISHED PAVT. SURFACE ELEV. (TYP.)
ABANDON EX. 6" W.M. (TYP.)
32 LF 12" RCP STORM @ 0.34%
73 LF 10" PVC SDR 26 @ 1.02%
PR. 6" DIA. PERF. UNDERDRAIN (PER TRENCH DETAIL). TAP/CONNECT AT EX. & PR. CATCH BASINS (TYP.)
ABANDON EX. 12" COMB. & BULKHEAD EX. STRUCTURE
ADJUST STRUCTURE (CORED) CORE, ADJUST & INSTALL CONC. COLLAR AT-FINISHED PAVT. SURFACE ELEV. (TYP.)
PR. 20 LF 10" COMB. SEWER POINT REPAIR:
• DOWNSTREAM (INV. ~775.73)
• UPSTREAM (INV. ~776.06)
REMOVE EX. 12" STM.
N ADAMS ROAD
WIDTH VARIES
SEE SEWER SERVICE SCHEDULE THIS SHEET FOR PR. SEWER SVC. EXTENSIONS AND CONNECTIONS (TYP.)
INSTALL 77 LF 6" W.M. (TEE TO BEND)
INSTALL 90° BEND
INSTALL 5 LF 6" W.M. (BEND TO HYDRANT)
SHUT OFF RIM 781.06
SHUT OFF RIM 781.59
OWNER PERMISSION REQ. FOR EXCAVATION AND PAVING WORK ON PVT. PROPERTY
20-30-151-002
N ADAMS ROAD
20-30-151-010
PUTNEY ST
NO RECORD SEWER INFORMATION PROVIDED.
BENCHMARK
TOP NUT OF HYD.
ELEVATION 782.90
BIRMINGHAM DATUM
SIGN(SPEED LIMIT / UNAUTHORIZED VEHICLES WILL BE TOWED)
1 1/2" COPPER WS & 6" SAN SVC OFF PUTNEY ST
TELEPHONE MH
TOP OF BANK
TOE OF BANK
GUARD RAIL
HAND RAIL
BRICK COLUMN
CONC. PAVT.
ASPH. PAVT.
OH. LINE
BUMPER BLOCK
EX. 2" COPPER WS
EX. 6" PVC SAN. SVC.
EX. 1.5" COPPER WS
EX. 8" CROCK SAN. SVC.
EX. 10" COPPER WS
EX. 21" STM
EX. 12" C.I. WM
EX. 8" S-MP GAS LINE
EX. 10" COMB
EX. 8" SAN SVC
EX. SAN MH
EX. SAN WYE FITTING (REC)
EX. 12" STM
EX. 10" STM
EX. 10" WATER
EX. 8" WATER
EX. 6" WATER
EX. 4" WATER
EX. 2" WATER
EX. 12" WATER
EX. 16" WATER
EX. 20" WATER
EX. 24" WATER
EX. 30" WATER
EX. 36" WATER
EX. 42" WATER
EX. 48" WATER
EX. 54" WATER
EX. 60" WATER
EX. 72" WATER
EX. 84" WATER
EX. 96" WATER
EX. 108" WATER
EX. 120" WATER
EX. 132" WATER
EX. 144" WATER
EX. 156" WATER
EX. 168" WATER
EX. 180" WATER
EX. 192" WATER
EX. 204" WATER
EX. 216" WATER
EX. 228" WATER
EX. 240" WATER
EX. 252" WATER
EX. 264" WATER
EX. 276" WATER
EX. 288" WATER
EX. 300" WATER
EX. 312" WATER
EX. 324" WATER
EX. 336" WATER
EX. 348" WATER
EX. 360" WATER
EX. 372" WATER
EX. 384" WATER
EX. 396" WATER
EX. 408" WATER
EX. 420" WATER
EX. 432" WATER
EX. 444" WATER
EX. 456" WATER
EX. 468" WATER
EX. 480" WATER
EX. 492" WATER
EX. 504" WATER
EX. 516" WATER
EX. 528" WATER
EX. 540" WATER
EX. 552" WATER
EX. 564" WATER
EX. 576" WATER
EX. 588" WATER
EX. 600" WATER
EX. 612" WATER
EX. 624" WATER
EX. 636" WATER
EX. 648" WATER
EX. 660" WATER
EX. 672" WATER
EX. 684" WATER
EX. 696" WATER
EX. 708" WATER
EX. 720" WATER
EX. 732" WATER
EX. 744" WATER
EX. 756" WATER
EX. 768" WATER
EX. 780" WATER
EX. 792" WATER
EX. 804" WATER
EX. 816" WATER
EX. 828" WATER
EX. 840" WATER
EX. 852" WATER
EX. 864" WATER
EX. 876" WATER
EX. 888" WATER
EX. 900" WATER
EX. 912" WATER
EX. 924" WATER
EX. 936" WATER
EX. 948" WATER
EX. 960" WATER
EX. 972" WATER
EX. 984" WATER
EX. 996" WATER
EX. 1008" WATER
EX. 1020" WATER
EX. 1032" WATER
EX. 1044" WATER
EX. 1056" WATER
EX. 1068" WATER
EX. 1080" WATER
EX. 1092" WATER
EX. 1104" WATER
EX. 1116" WATER
EX. 1128" WATER
EX. 1140" WATER
EX. 1152" WATER
EX. 1164" WATER
EX. 1176" WATER
EX. 1188" WATER
EX. 1200" WATER
EX. 1212" WATER
EX. 1224" WATER
EX. 1236" WATER
EX. 1248" WATER
EX. 1260" WATER
EX. 1272" WATER
EX. 1284" WATER
EX. 1296" WATER
EX. 1308" WATER
EX. 1320" WATER
EX. 1332" WATER
EX. 1344" WATER
EX. 1356" WATER
EX. 1368" WATER
EX. 1380" WATER
EX. 1392" WATER
EX. 1404" WATER
EX. 1416" WATER
EX. 1428" WATER
EX. 1440" WATER
EX. 1452" WATER
EX. 1464" WATER
EX. 1476" WATER
EX. 1488" WATER
EX. 1500" WATER
EX. 1512" WATER
EX. 1524" WATER
EX. 1536" WATER
EX. 1548" WATER
EX. 1560" WATER
EX. 1572" WATER
EX. 1584" WATER
EX. 1596" WATER
EX. 1608" WATER
EX. 1620" WATER
EX. 1632" WATER
EX. 1644" WATER
EX. 1656" WATER
EX. 1668" WATER
EX. 1680" WATER
EX. 1692" WATER
EX. 1704" WATER
EX. 1716" WATER
EX. 1728" WATER
EX. 1740" WATER
EX. 1752" WATER
EX. 1764" WATER
EX. 1776" WATER
EX. 1788" WATER
EX. 1800" WATER
EX. 1812" WATER
EX. 1824" WATER
EX. 1836" WATER
EX. 1848" WATER
EX. 1860" WATER
EX. 1872" WATER
EX. 1884" WATER
EX. 1896" WATER
EX. 1908" WATER
EX. 1920" WATER
EX. 1932" WATER
EX. 1944" WATER
EX. 1956" WATER
EX. 1968" WATER
EX. 1980" WATER
EX. 1992" WATER
EX. 2004" WATER
EX. 2016" WATER
EX. 2028" WATER
EX. 2040" WATER
EX. 2052" WATER
EX. 2064" WATER
EX. 2076" WATER
EX. 2088" WATER
EX. 2100" WATER
EX. 2112" WATER
EX. 2124" WATER
EX. 2136" WATER
EX. 2148" WATER
EX. 2160" WATER
EX. 2172" WATER
EX. 2184" WATER
EX. 2196" WATER
EX. 2208" WATER
EX. 2220" WATER
EX. 2232" WATER
EX. 2244" WATER
EX. 2256" WATER
EX. 2268" WATER
EX. 2280" WATER
EX. 2292" WATER
EX. 2304" WATER
EX. 2316" WATER
EX. 2328" WATER
EX. 2340" WATER
EX. 2352" WATER
EX. 2364" WATER
EX. 2376" WATER
EX. 2388" WATER
EX. 2400" WATER
EX. 2412" WATER
EX. 2424" WATER
EX. 2436" WATER
EX. 2448" WATER
EX. 2460" WATER
EX. 2472" WATER
EX. 2484" WATER
EX. 2496" WATER
EX. 2508" WATER
EX. 2520" WATER
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EX. 2544" WATER
EX. 2556" WATER
EX. 2568" WATER
EX. 2580" WATER
EX. 2592" WATER
EX. 2604" WATER
EX. 2616" WATER
EX. 2628" WATER
EX. 2640" WATER
EX. 2652" WATER
EX. 2664" WATER
EX. 2676" WATER
EX. 2688" WATER
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EX. 2844" WATER
EX. 2856" WATER
EX. 2868" WATER
EX. 2880" WATER
EX. 2892" WATER
EX. 2904" WATER
EX. 2916" WATER
EX. 2928" WATER
EX. 2940" WATER
EX. 2952" WATER
EX. 2964" WATER
EX. 2976" WATER
EX. 2988" WATER
EX. 3000" WATER
EX. 3012" WATER
EX. 3024" WATER
EX. 3036" WATER
EX. 3048" WATER
EX. 3060" WATER
EX. 3072" WATER
EX. 3084" WATER
EX. 3096" WATER
EX. 3108" WATER
EX. 3120" WATER
EX. 3132" WATER
EX. 3144" WATER
EX. 3156" WATER
EX. 3168" WATER
EX. 3180" WATER
EX. 3192" WATER
EX. 3204" WATER
EX. 3216" WATER
EX. 3228" WATER
EX. 3240" WATER
EX. 3252" WATER
EX. 3264" WATER
EX. 3276" WATER
EX. 3288" WATER
EX. 3300" WATER
EX. 3312" WATER
EX. 3324" WATER
EX. 3336" WATER
EX. 3348" WATER
EX. 3360" WATER
EX. 3372" WATER
EX. 3384" WATER
EX. 3396" WATER
EX. 3408" WATER
EX. 3420" WATER
EX. 3432" WATER
EX. 3444" WATER
EX. 3456" WATER
EX. 3468" WATER
EX. 3480" WATER
EX. 3492" WATER
EX. 3504" WATER
EX. 3516" WATER
EX. 3528" WATER
EX. 3540" WATER
EX. 3552" WATER
EX. 3564" WATER
EX. 3576" WATER
EX. 3588" WATER
EX. 3600" WATER
EX. 3612" WATER
EX. 3624" WATER
EX. 3636" WATER
EX. 3648" WATER
EX. 3660" WATER
EX. 3672" WATER
EX. 3684" WATER
EX. 3696" WATER
EX. 3708" WATER
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EX. 14640" WATER
EX. 14652" WATER
EX. 14664" WATER
EX. 14676" WATER
EX. 14688" WATER
EX. 14700" WATER
EX. 14712" WATER
EX. 14724" WATER
EX. 14736" WATER
EX. 14748" WATER
EX. 14760" WATER
EX. 14772" WATER
EX. 14784" WATER
EX. 14796" WATER
EX. 14808" WATER
EX. 14820" WATER
EX. 14832" WATER
EX. 14844" WATER
EX. 14856" WATER
EX. 14868" WATER
EX. 14880" WATER
EX. 14892" WATER
EX. 14904" WATER
EX. 14916" WATER
EX. 14928" WATER
EX. 14940" WATER
EX. 14952" WATER
EX. 14964" WATER
EX. 14976" WATER
EX. 14988" WATER
EX. 15000" WATER
EX. 15012" WATER
EX. 15024" WATER
EX. 15036" WATER
EX. 15048" WATER
EX. 15060" WATER
EX. 15072" WATER
EX. 15084" WATER
EX. 15096" WATER
EX. 15108" WATER
EX. 15120" WATER
EX. 15132" WATER
EX. 15144" WATER
EX. 15156" WATER
EX. 15168" WATER
EX. 15180" WATER
EX. 15192" WATER
EX. 15204" WATER
EX. 15216" WATER
EX. 15228" WATER
EX. 15240" WATER
EX. 15252" WATER
EX. 15264" W



N ADAMS ROAD PROFILE
SCALE H " V "

SEWER STRUCTURE SCHEDULE

(26) **MAINTAIN**
25+64.21 1.12' R
COMB MH 26
RIM 794.57
12" S 779.99(R)
12" E 786.07 (C)
12" NW 786.07(C)

STORM STRUCTURE SCHEDULE

(26b) **MAINTAIN**
25+68.29 24.22' R
CB 26b
RIM 794.14
12" W 786.54

(26a) **MAINTAIN**
26+32.19 23.88' L
CB 26a
RIM 794.50
12" SE 787.46(C)

(113) **MAINTAIN**
26+02.01 59.53' L
MH 113
RIM 784.96
21" NW 772.46
21" S 772.46

(TR6) **ADJUST (CORED)**
28+97.88 5.12' L
MH TR6
RIM 795.18
PR. RIM 795.20
12" N 785.77(C)

WATER MAIN SCHEDULE

(46) **MAINTAIN**
29+33.83 30.71' L
HYD 46 793.99'
29+34.17 33.69' L
STOP BOB 793.72'

(9) **MAINTAIN**
26+21.81 58.88' L
GATE VALVE 9
REC--NOT SHOT

(4) **MAINTAIN**
29+08.02 34.33' L
GATE VALVE 4
REC--NOT SHOT

(10) **MAINTAIN**
26+26.64 41.99' L
GATE VALVE 10
RIM 785.54
T/PIPE 779.44

Storm Drainage Structure Schedule

Structure Name	Structure Details
#TR5a NEW PR. 4' CATCH BASIN W/ 2' SUMP	PR. RIM 792.40 EX. 12" W. INV. 788.05 PR. 12" E. INV. 788.05

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
- (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
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Contract #12-24(P)

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Birmingham, MI 48012

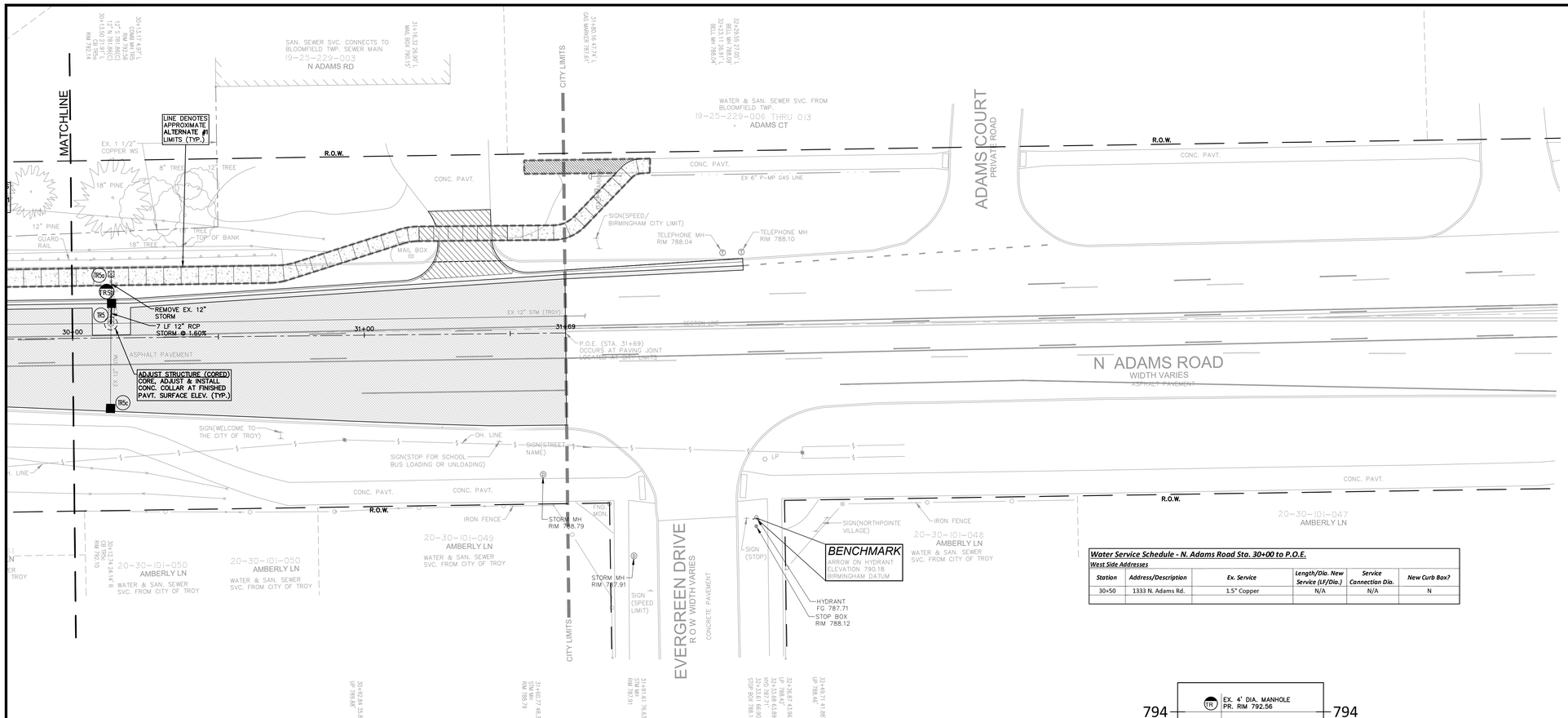
PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

SHEET
Utility Plan - N. Adams Road Sta. 25+00 to 30+00

Know what's **below** **Call** before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
01-28-25	ADDENDUM 1

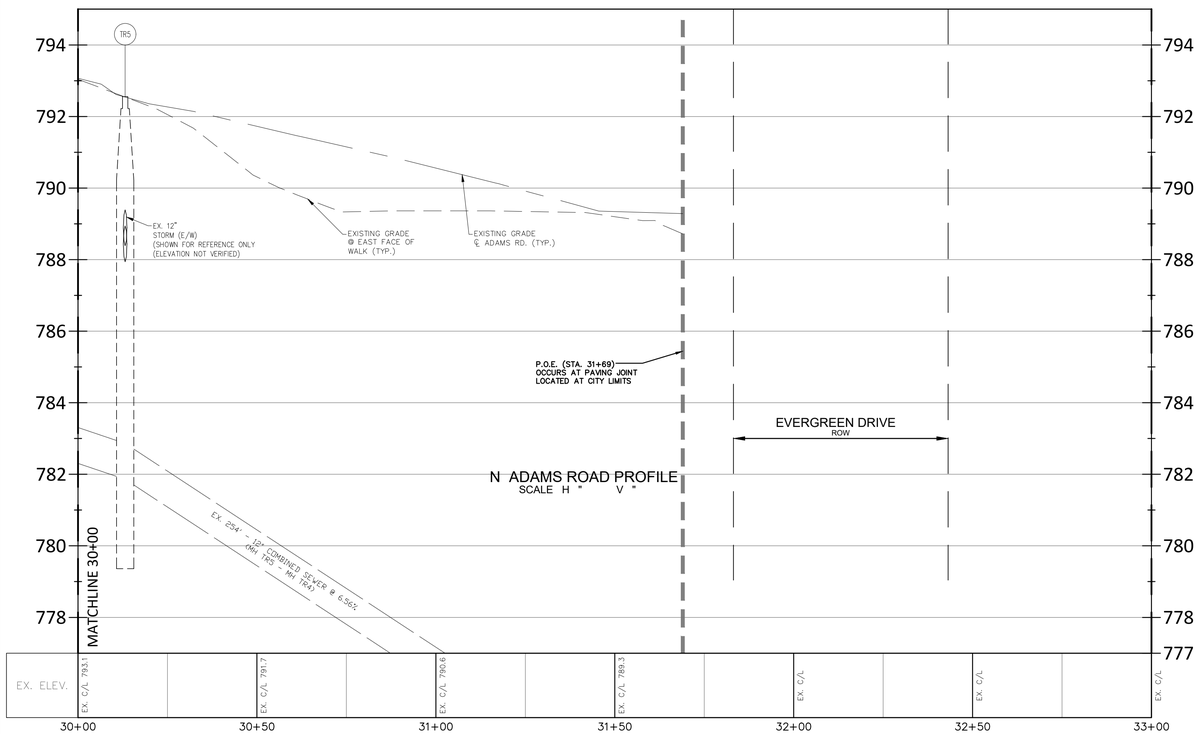
DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30
NFE JOB NO. N788
SHEET NO. C06

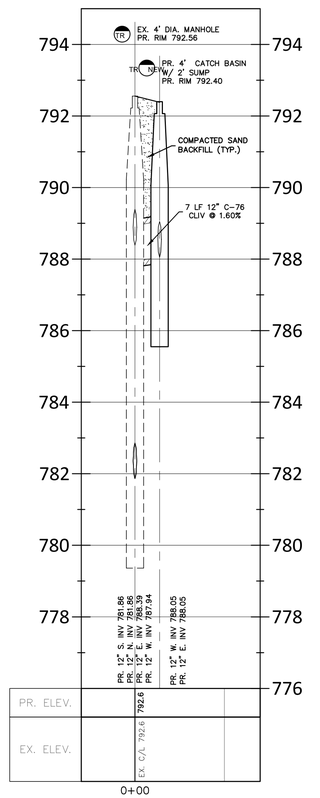


Water Service Schedule - N. Adams Road Sta. 30+00 to P.O.E.

West Side Addresses

Station	Address/Description	Ex. Service	Length/Dia. New Service (LF/Dia.)	Service Connection Dia.	New Curb Box?
30+50	1333 N. Adams Rd.	1.5" Copper	N/A	N/A	N





STORM STRUCTURE SCHEDULE

TR5c — MANTAIN 30+12.74 24.14' R, CB TR5c RIM 792.10

TR5a — REMOVE 30+13.50 21.91' L, CB TR5a RIM 792.14

TR5 — TAP & ADJUST (CORED) 30+13.17 4.97' L, COMB MH TR5 RIM 792.56
PR. RIM 792.56
12" S 781.86(C)
12" N 781.86(C)
12" E FIELD VERIFY
12" W FIELD VERIFY
PR. 12" W. 788.20 (TAP) (BULKHEAD IF REQ.)

Storm Drainage Structure Schedule	
Structure Name	Structure Details
#TR5a NEW PR. 4' CATCH BASIN W/ 2' SUMP	PR. RIM 792.40 EX. 12" W. INV. 788.05 PR. 12" E. INV. 788.05

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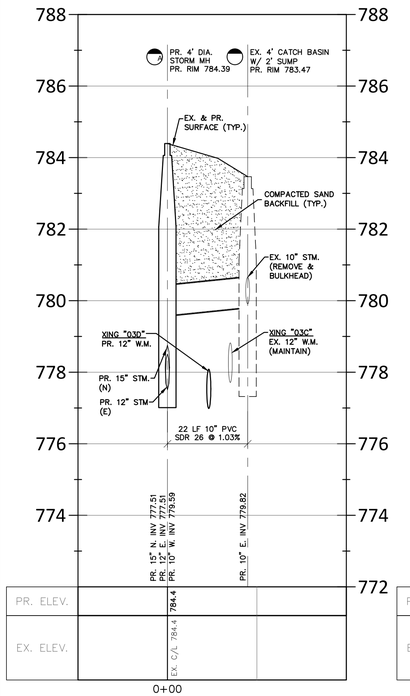
SHEET
Utility Plan - N. Adams Road Sta. 30+00 to P.O.E.

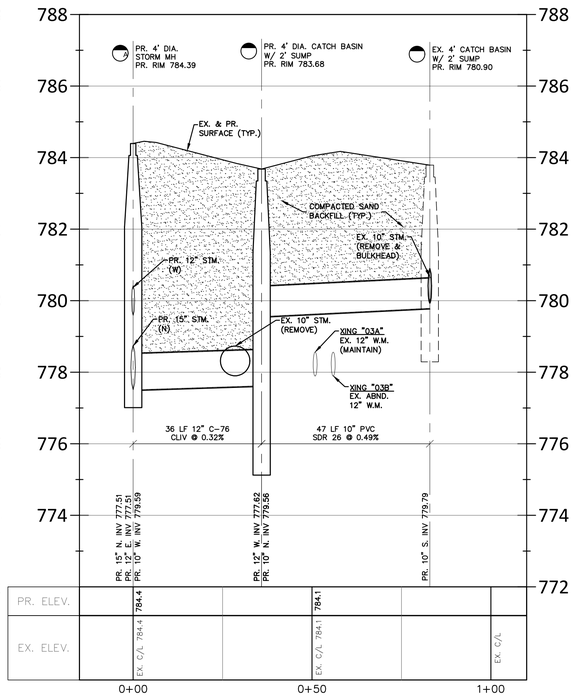
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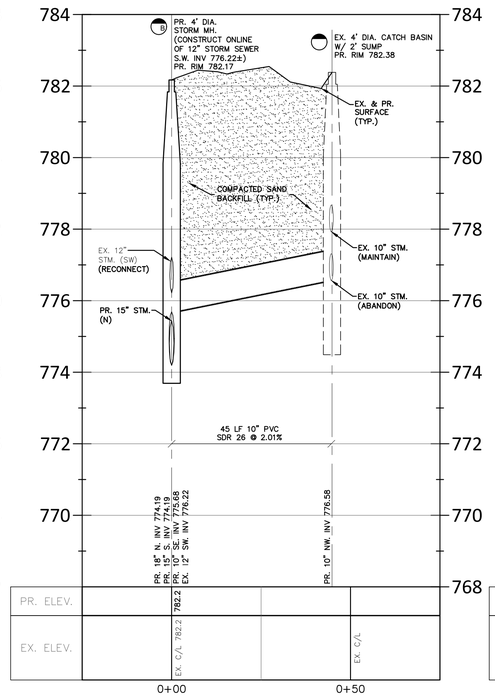
DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
01-28-25	ADDENDUM 1

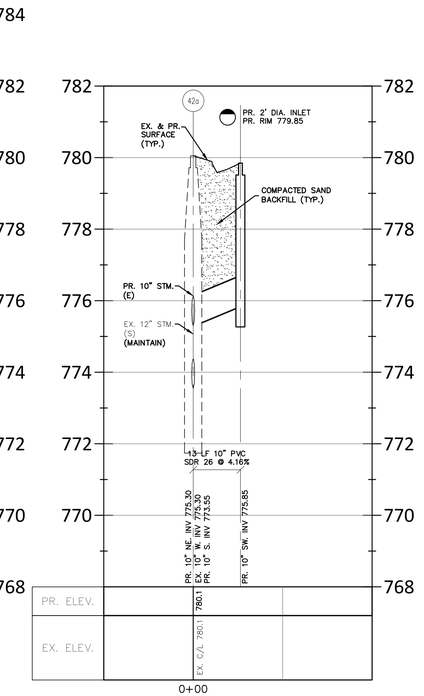
DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20' / 1"=2'

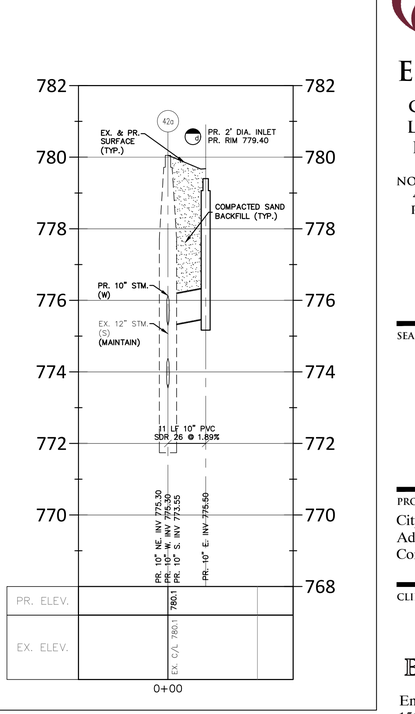
NFE JOB NO. N788
SHEET NO. C07

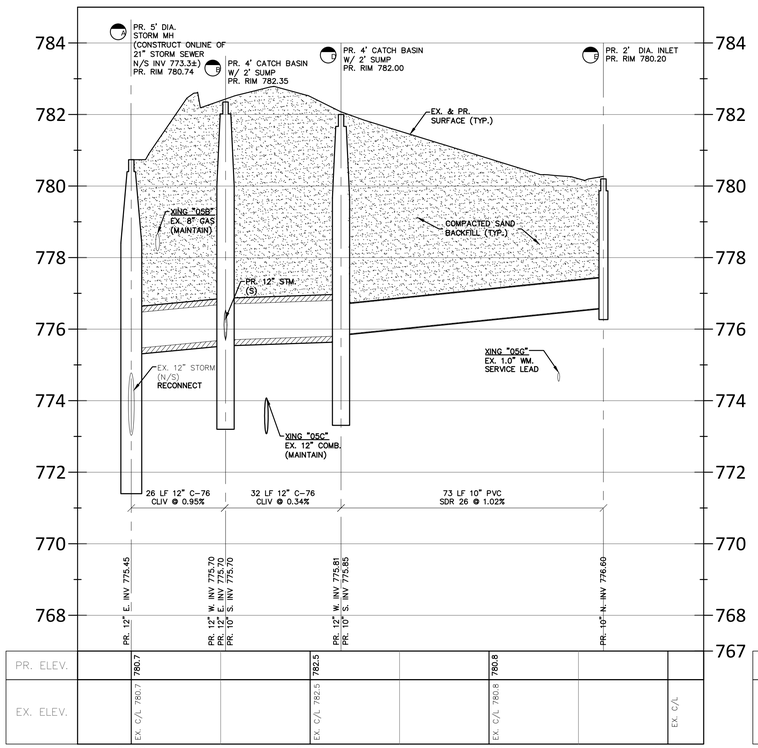


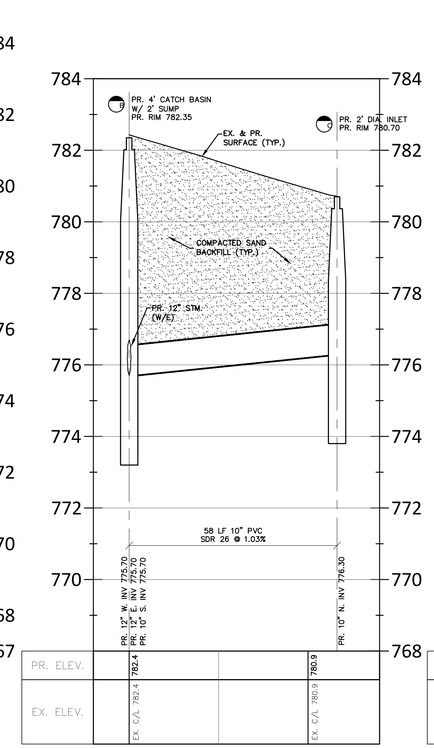


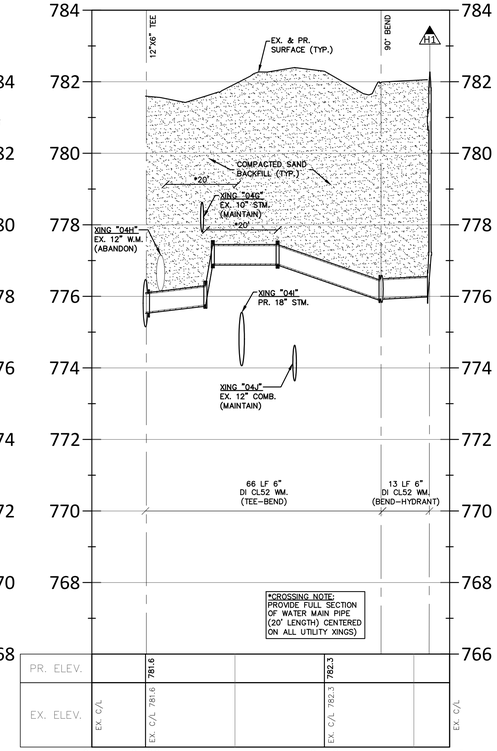


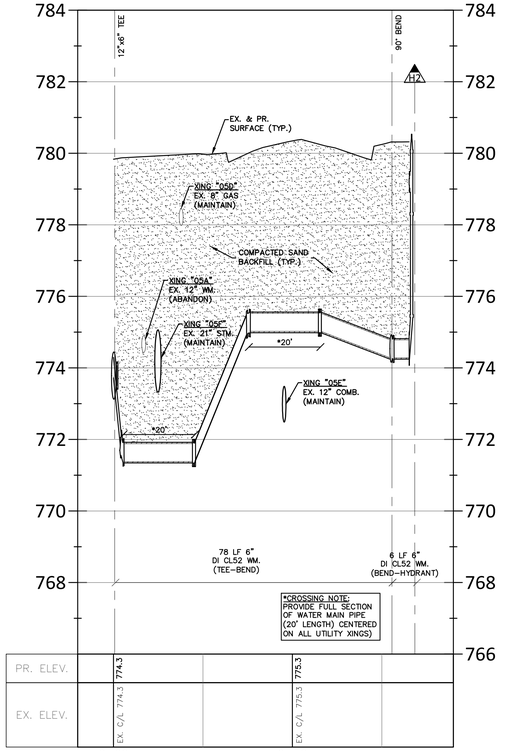












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SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

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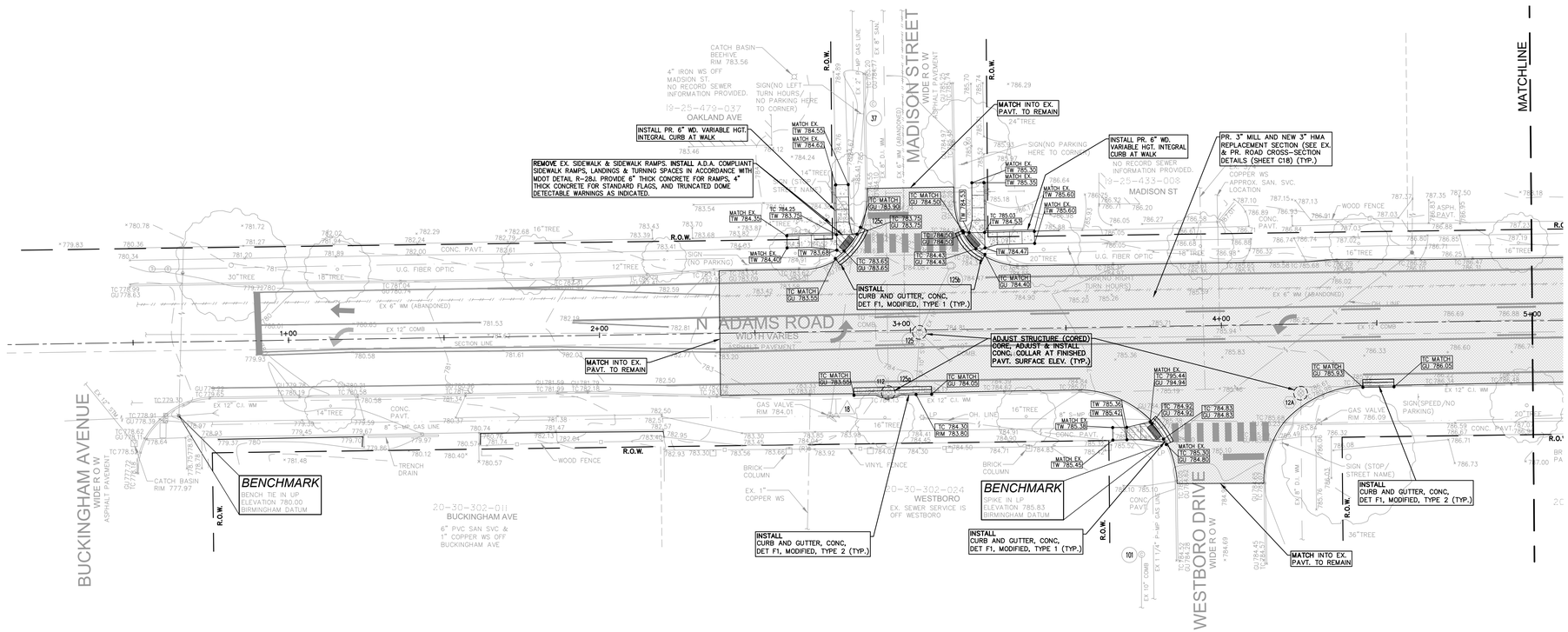
SHEET
Storm Sewer & Water Main Hydrant Lead Profiles

811 Know what's below Call before you dig.

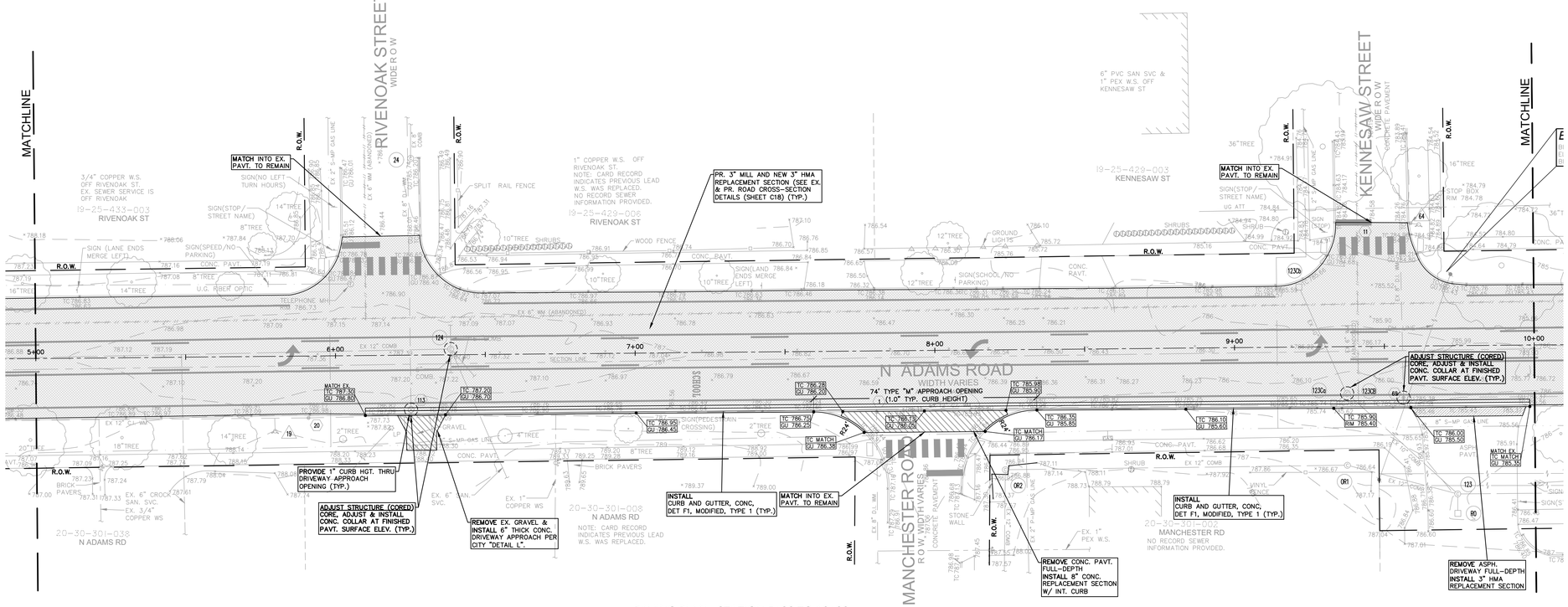
DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C08



PAVING PLAN - STATION P.O.B. TO 5+00



PAVING PLAN - STATION 5+00 TO 10+00

LEGEND

- EXISTING SAN/COMB SEWER
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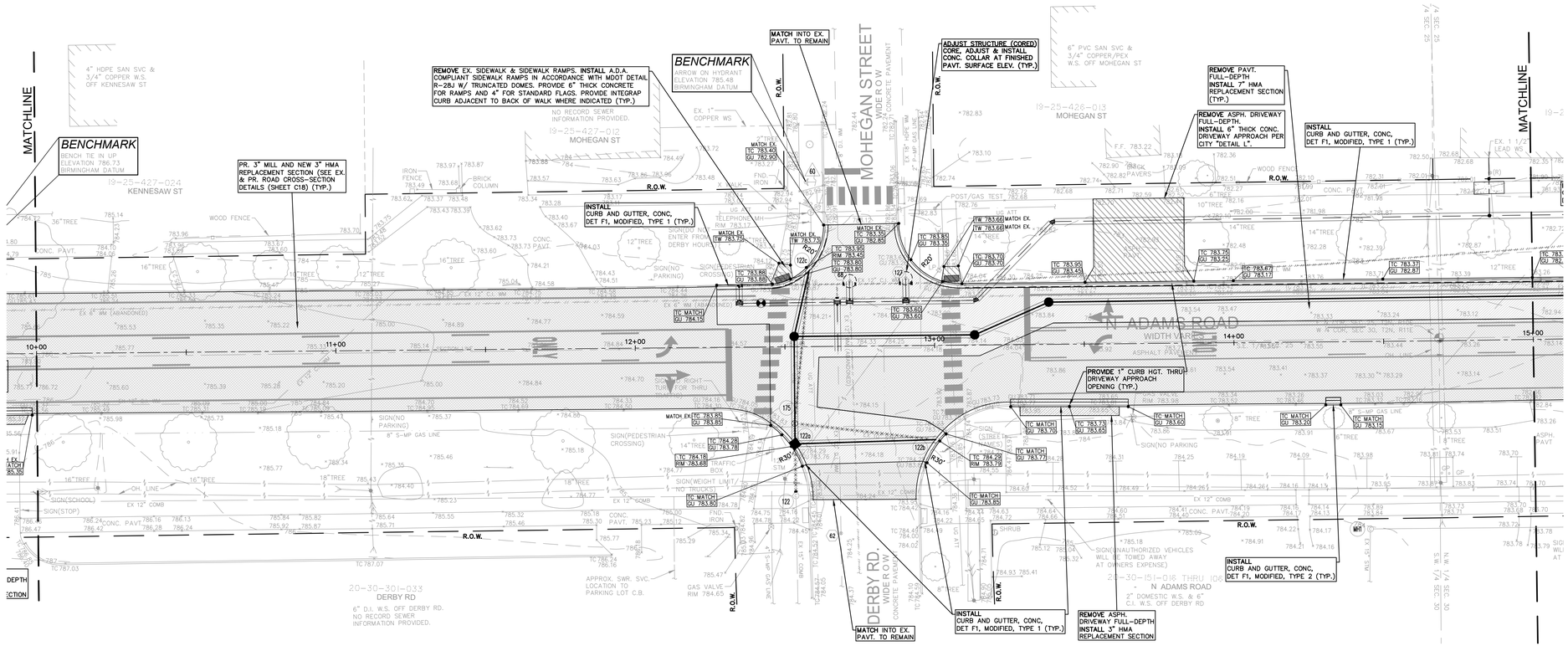
SHEET
Paving Plan N. Adams Road Sta. P.O.B. to Sta. 10+00

Know what's below Call before you dig.

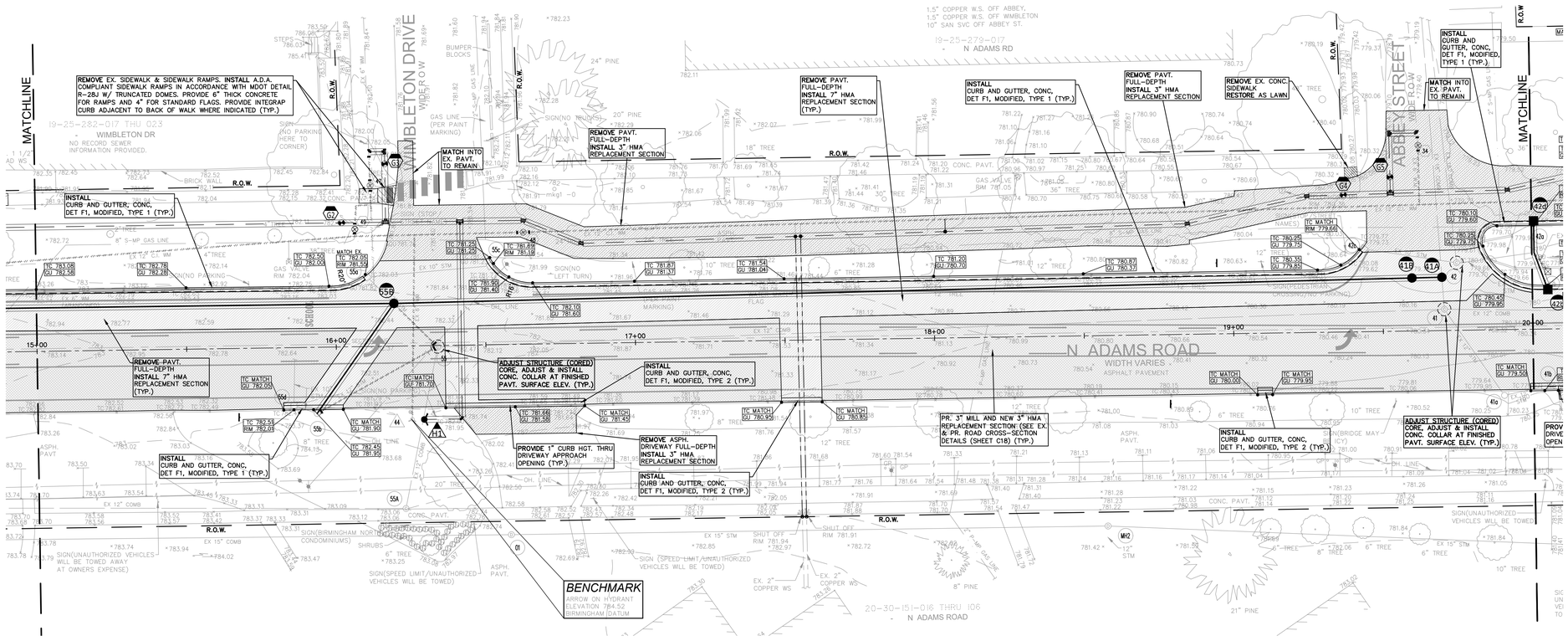
DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS

DRAWN BY:
K. Withrow
DESIGNED BY:
P. Tulikangas
APPROVED BY:
B. Buchholz
EMAIL CONTACT:
ptulikangas@nfe-engr.com
DATE:
12-20-24
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C09



PAVING PLAN - STATION 10+00 TO 15+00



PAVING PLAN - STATION 15+00 TO 20+00

LEGEND

- EXISTING SAN/COMB SEWER
- EXISTING WATER MAIN
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- EXISTING BURIED CABLES
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- PR. 18" WD. CONC. CURB & GUTTER

(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

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Paving Plan N. Adams Road Sta. 10+00 to Sta. 20+00

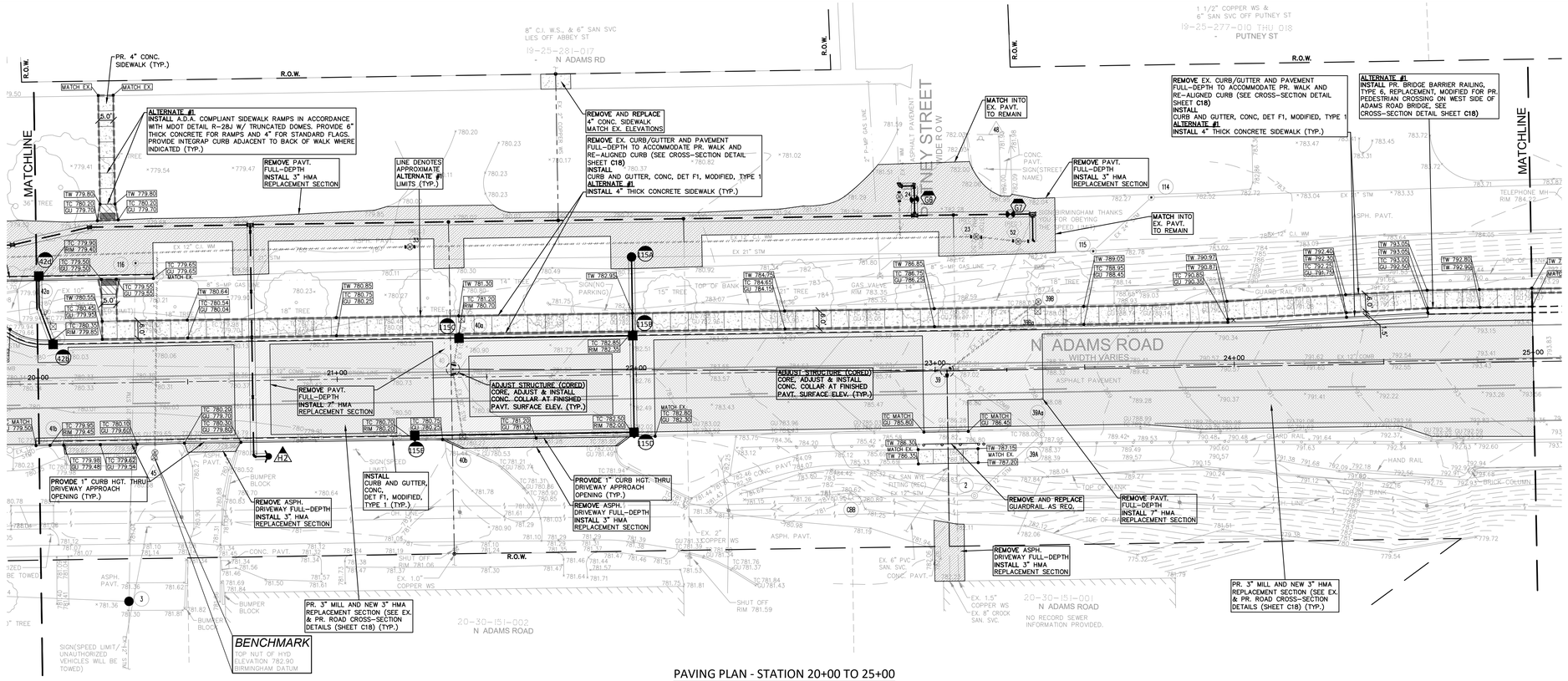
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
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01-09-25	BIDS

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20'

20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C10



PAVING PLAN - STATION 20+00 TO 25+00

PAVING PLAN - STATION 25+00 TO 30+00

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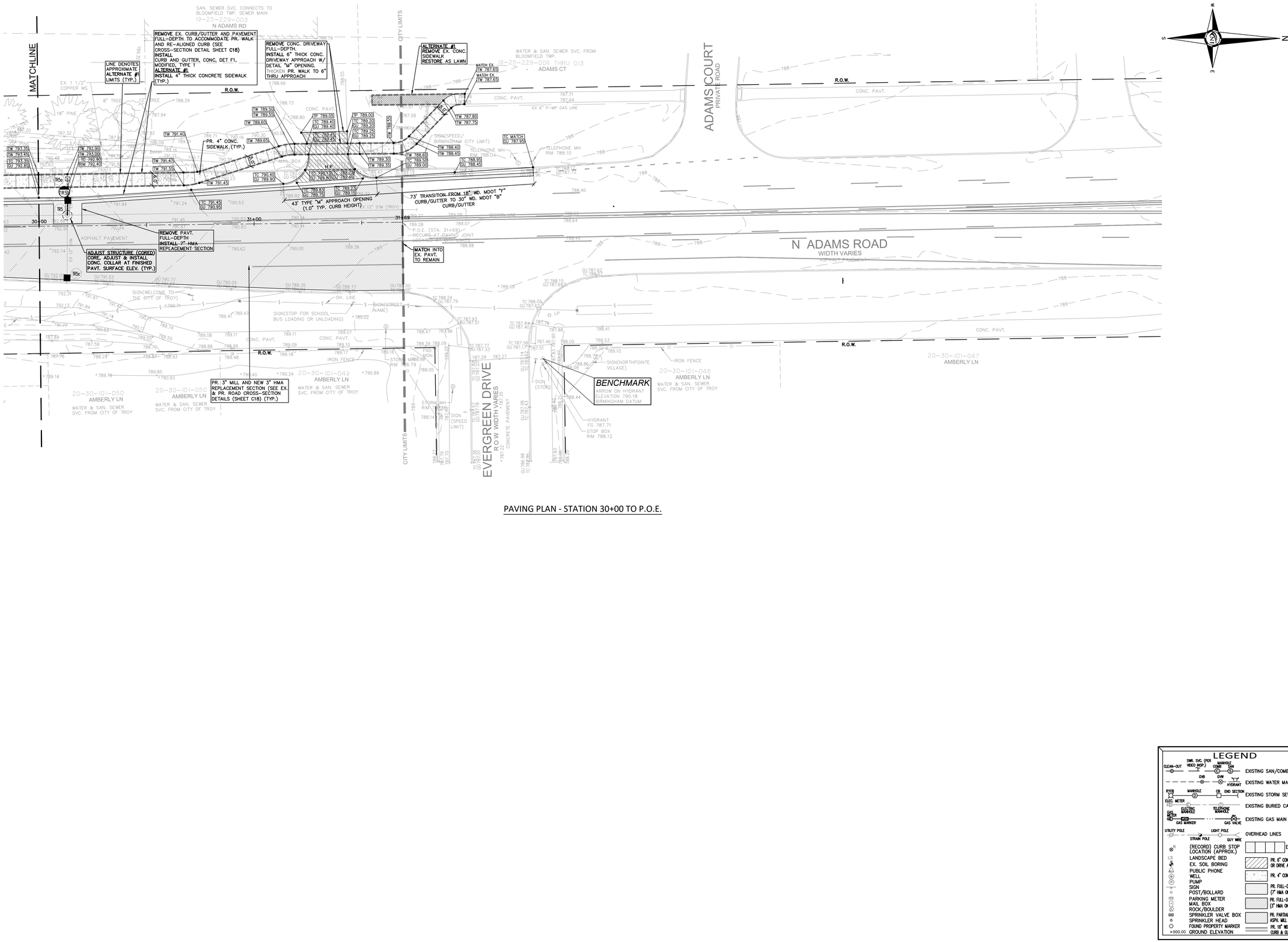
SHEET
Paving Plan N. Adams Road Sta. 20+00 to Sta. 30+00

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DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C11



PAVING PLAN - STATION 30+00 TO P.O.E.

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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.NFE-ENGR.COM

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

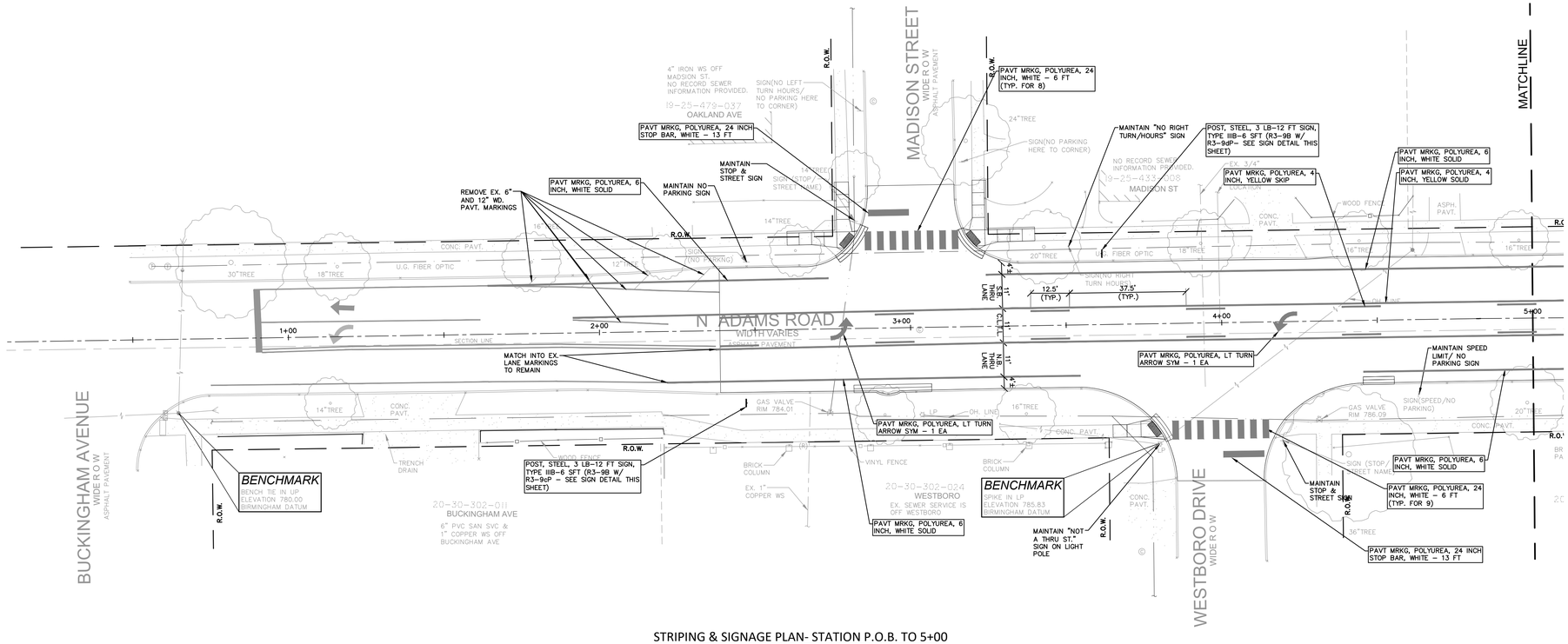
SHEET
Paving Plan N. Adams Road Sta. 30+00 to P.O.E.

811 Know what's below Call before you dig.

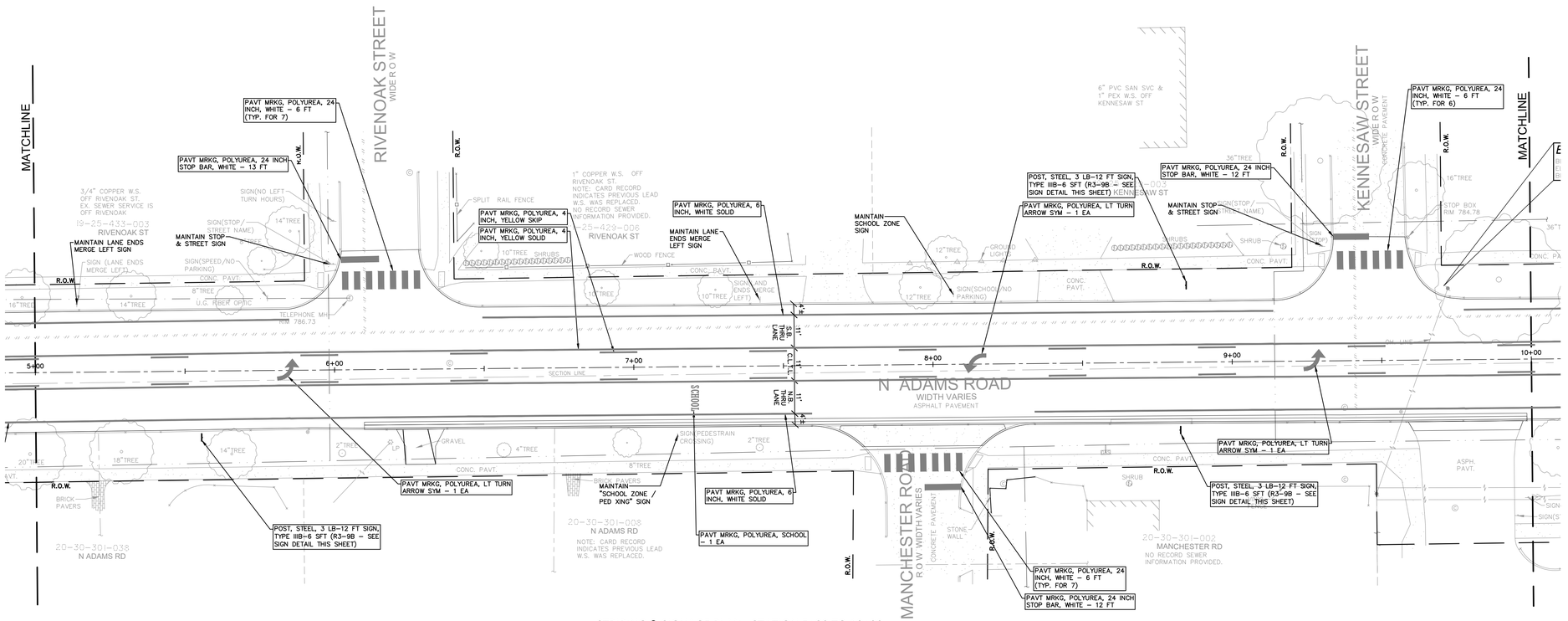
DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
01-28-25	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C12



STRIPING & SIGNAGE PLAN- STATION P.O.B. TO 5+00



STRIPING & SIGNAGE PLAN - STATION 5+00 TO 10+00



TYPE IIIB SIGNS
24" x 36" R3–9B
BLACK LEGEND ON WHITE BACKGROUND
ALSO PROVIDE 12" x 30" R3–9cP ("BEGIN") OR R3–9dP ("END")
BLACK LEGEND ON WHITE BACKGROUND MOUNTED ABOVE 93–9B WHERE SPECIFIED

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- HYDRANT, GATE VALVE — SAN. CLEAN OUT
- MANHOLE, CATCH BASIN — EXISTING WATERMAIN
- EX. R. Y. CATCH BASIN — EXISTING STORM SEWER
- UTILITY POLE, GUY POLE, GUY WIRE — EXISTING BURIED CABLES
- LIGHT POLE — OVERHEAD LINES
- SIGN
- EXISTING GAS MAIN
- C.O., MANHOLE, HYDRANT, GATE VALVE — PR. SANITARY SEWER
- PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE

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Adams Road Paving Project
Contract #12-24(P)

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BIRMINGHAM
A WALKABLE CITY
Engineering Department
151 Martin Street
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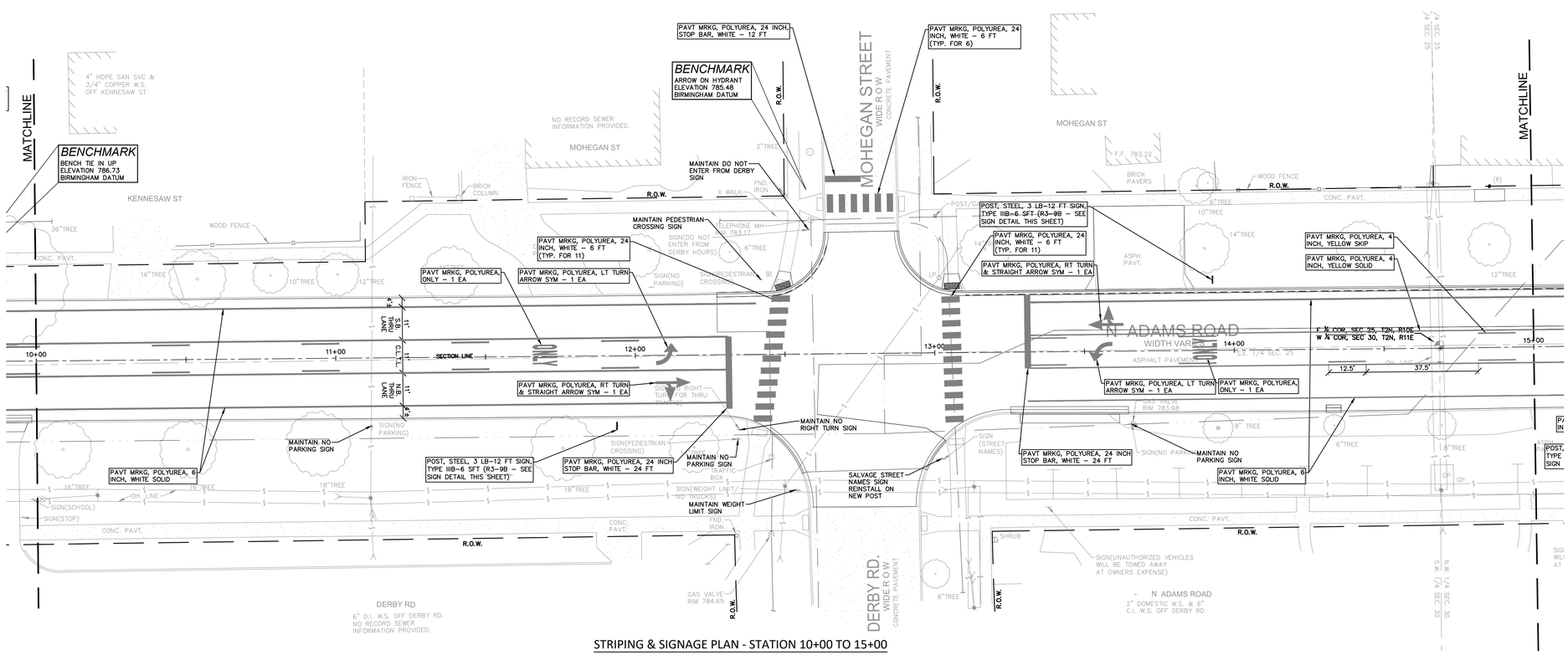
SHEET
Striping & Signage Plan- N. Adams Road Sta. P.O.B. to 10+00

811 Know what's below Call before you dig.

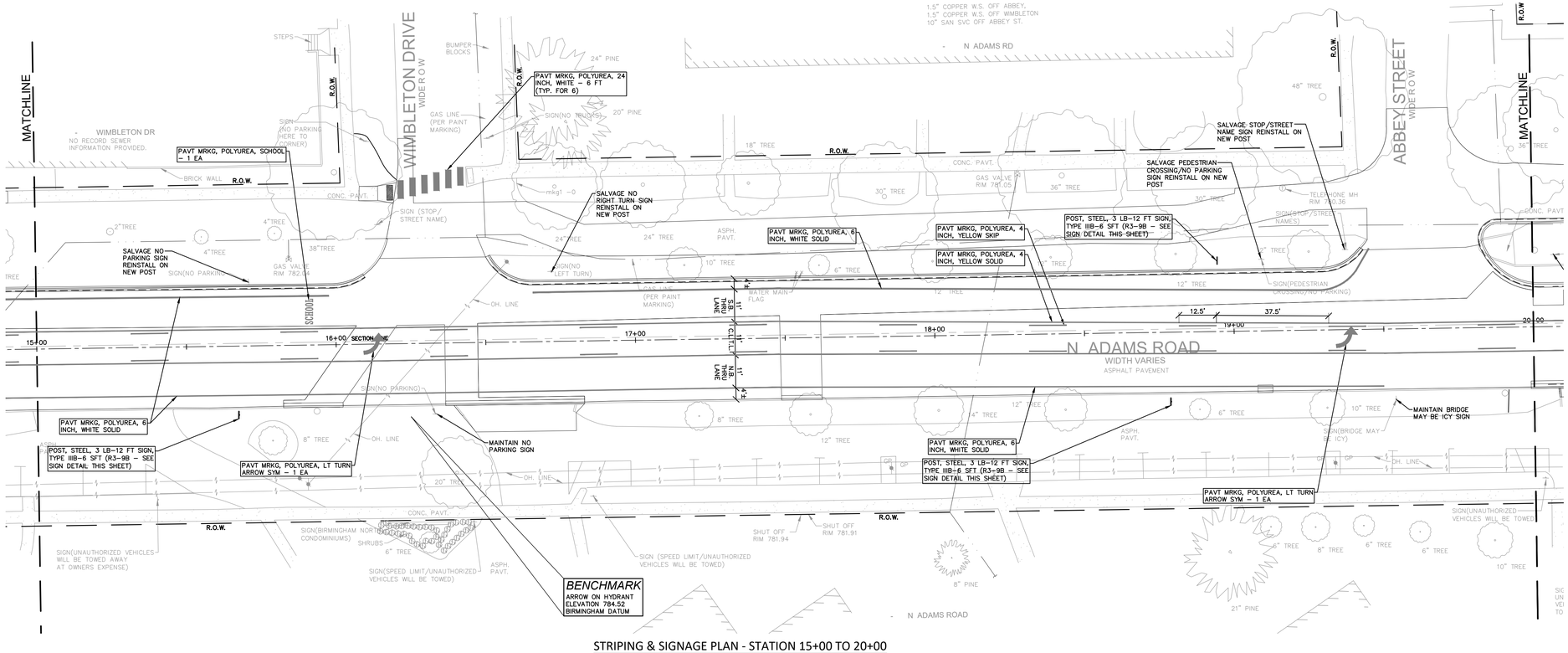
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DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: bbuchholz@nfe-engr.com
DATE: 12-20-24
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C13



STRIPING & SIGNAGE PLAN - STATION 10+00 TO 15+00



STRIPING & SIGNAGE PLAN - STATION 15+00 TO 20+00

BEGIN	R3–9cP
END	R3–9dP
CENTER LANE ONLY	R3–9B

TYPE IIIB SIGNS
24" x 36" R3–9B
BLACK LEGEND ON WHITE BACKGROUND
ALSO PROVIDE 12" x 30" R3–9cP ("BEGIN") OR R3–9dP ("END")
BLACK LEGEND ON WHITE BACKGROUND MOUNTED ABOVE 93–9B WHERE SPECIFIED

LEGEND

- EXISTING SANITARY SEWER
- SAN. CLEAN OUT
- EXISTING WATERMAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- PR. SANITARY SEWER
- PR. WATER MAIN
- PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE

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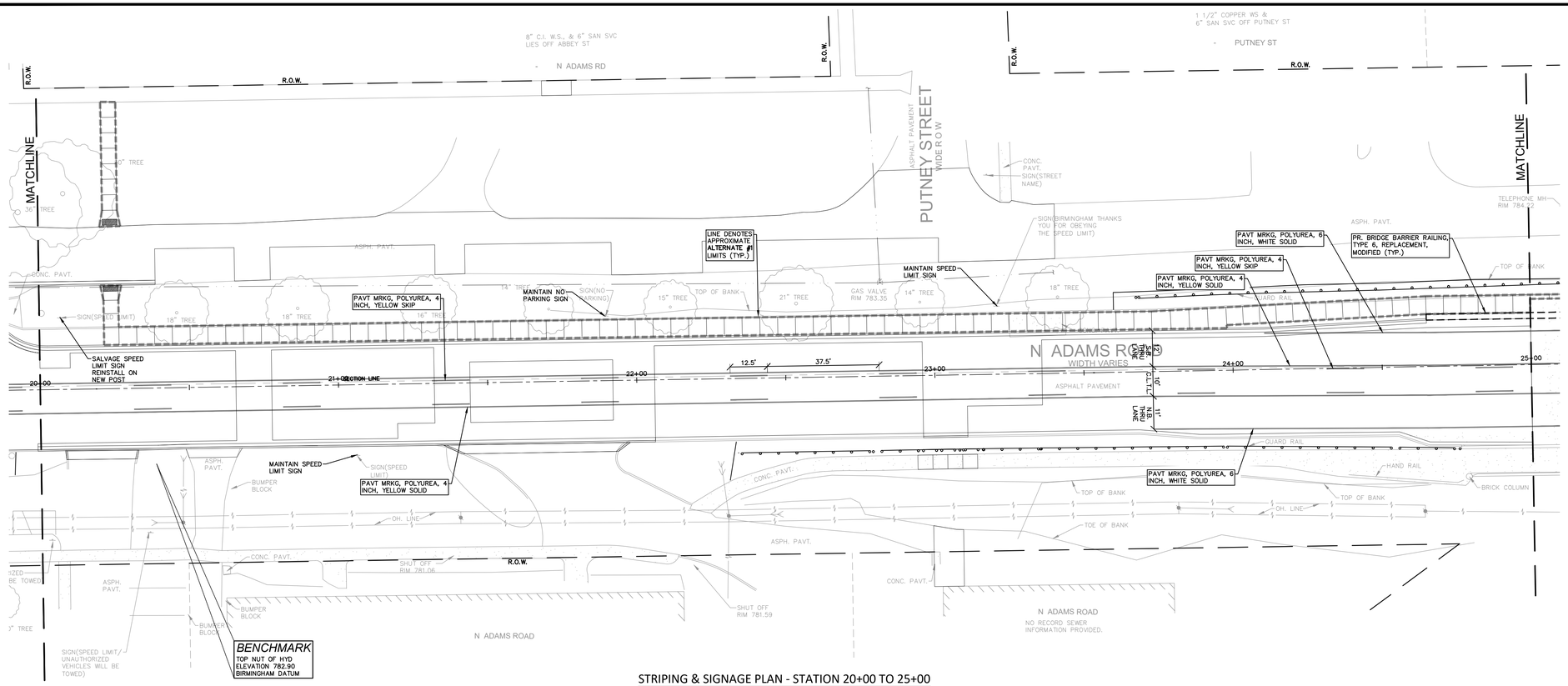
SHEET
Striping & Signage Plan-
N. Adams Road Sta.
10+00 to 20+00

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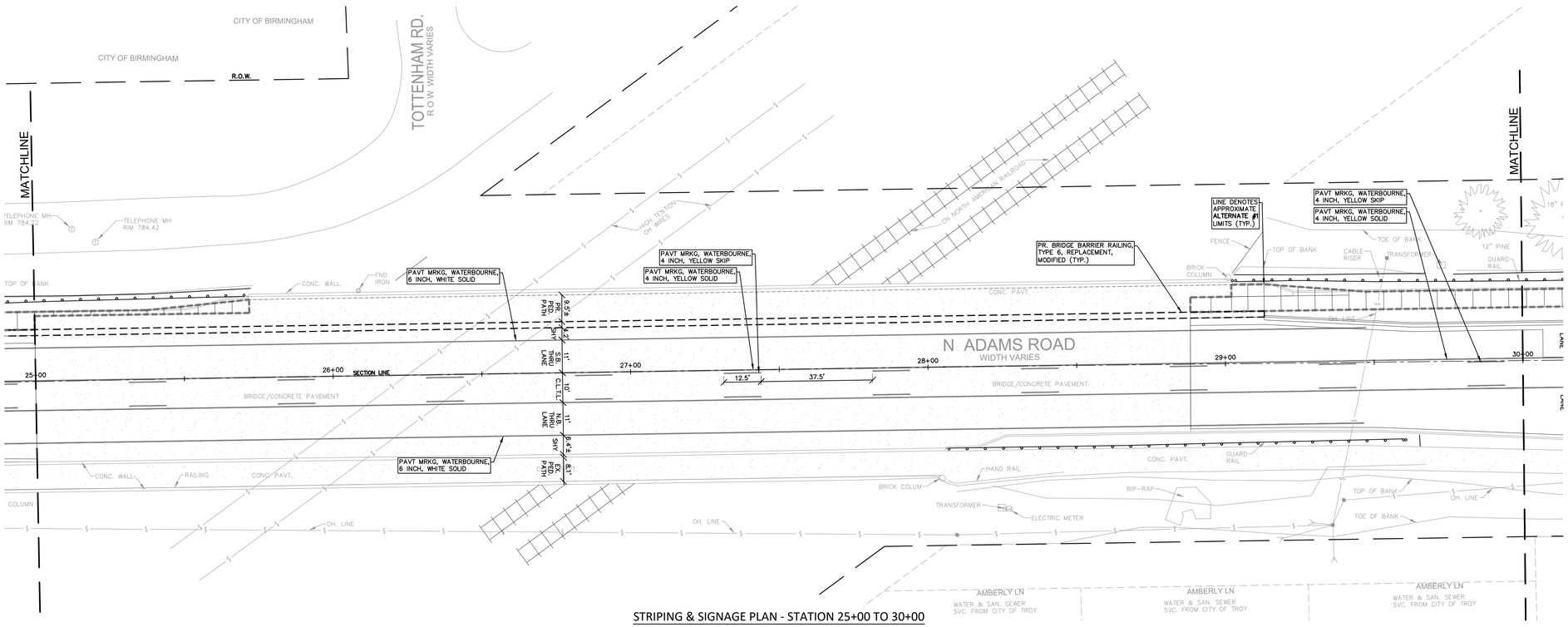
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DATE: 12-20-24
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C14



STRIPING & SIGNAGE PLAN - STATION 20+00 TO 25+00



STRIPING & SIGNAGE PLAN - STATION 25+00 TO 30+00

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
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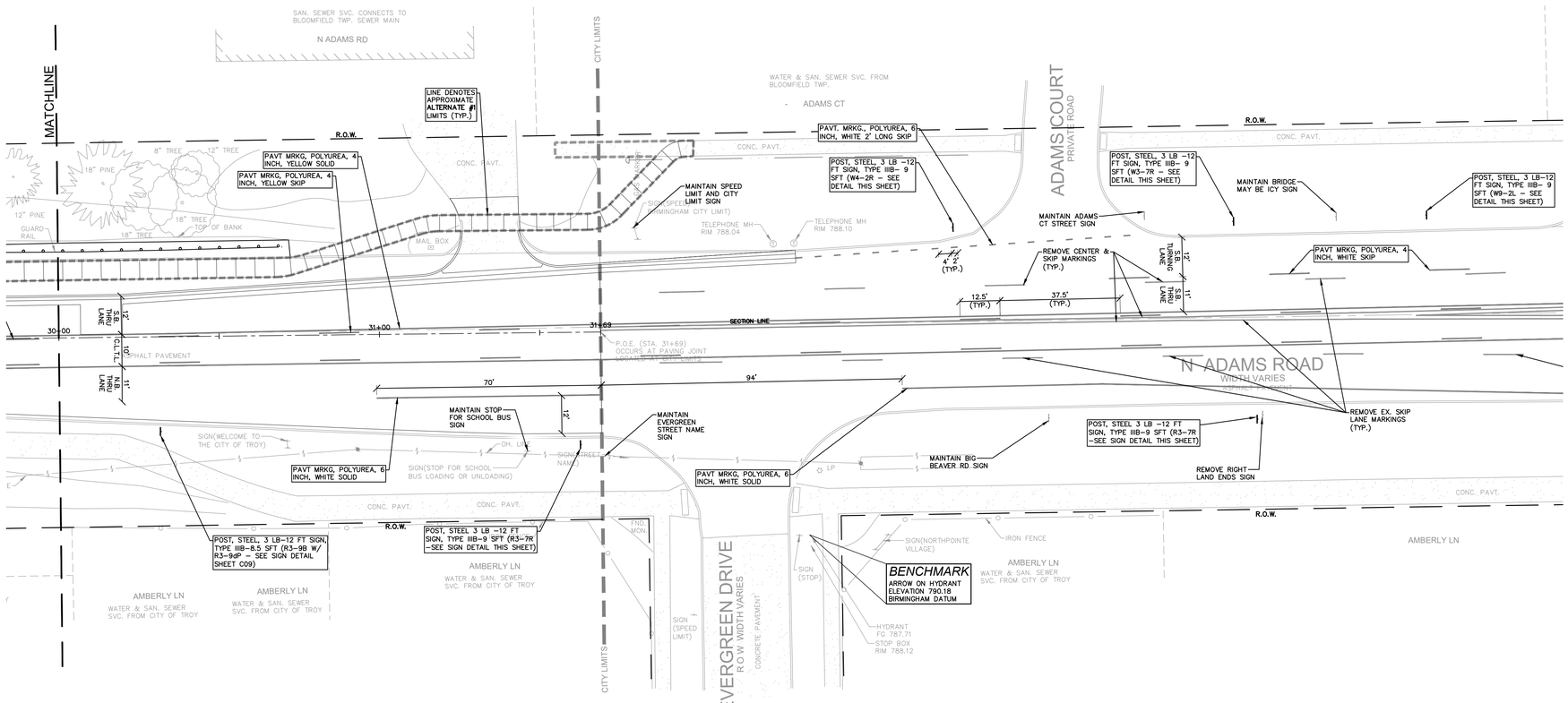
SHEET
Striping & Signage Plan- N. Adams Road Sta. 20+00 to 30+00

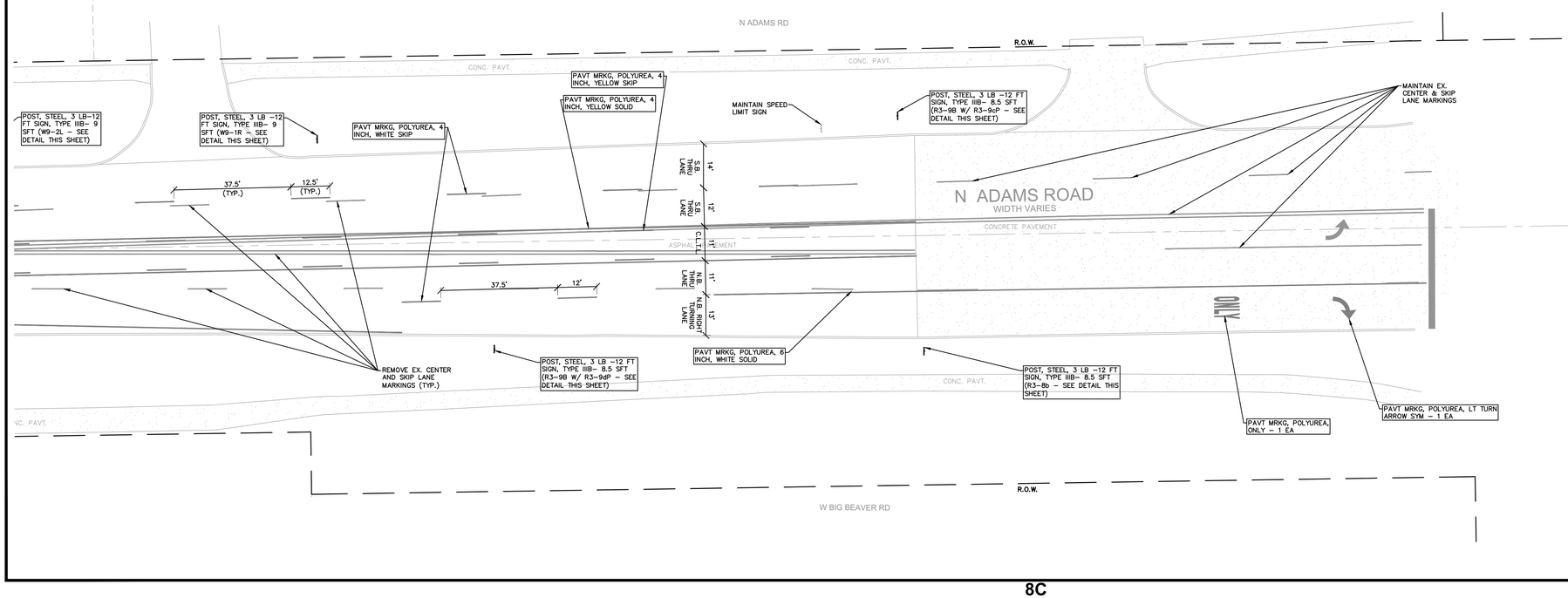
Know what's below Call before you dig.

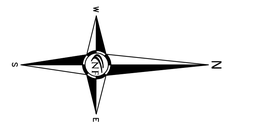
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01-28-25	ADDENDUM 1

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20 10 0 10 20 30

NFE JOB NO. N788
SHEET NO. C15









R3-7R

TYPE IIIB SIGNS
36" x 36" R3-7R
BLACK LEGEND ON WHITE BACKGROUND



W4-2R

TYPE IIIB SIGNS
36" x 36" W4-2R
BLACK LEGEND ON YELLOW BACKGROUND



R3-9cP



R3-9dP



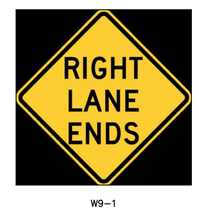
W9-2L

TYPE IIIB SIGNS
36" x 36" W9-2L
BLACK LEGEND ON YELLOW BACKGROUND



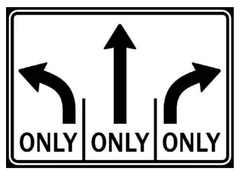
R3-9B

TYPE IIIB SIGNS
24" x 36" R3-9B
BLACK LEGEND ON WHITE BACKGROUND
ALSO PROVIDE 12" x 30" R3-9cP ("BEGIN") OR R3-9dP ("END") BLACK LEGEND ON WHITE BACKGROUND MOUNTED ABOVE 93-9B WHERE SPECIFIED



W9-1

TYPE IIIB SIGNS
36" x 36" W9-1
BLACK LEGEND ON YELLOW BACKGROUND



R3-8b

TYPE IIIB SIGNS
36" x 24" R3-8b
BLACK LEGEND ON WHITE BACKGROUND

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
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- LIGHT POLE
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- C.O., MANHOLE — PR. SANITARY SEWER
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City of Birmingham, Oakland County, Michigan

SHEET
Striping & Signage Plan-
N. Adams Road Sta.
30+00 to P.O.E

811 Know what's below Call before you dig.

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12-13-24	CITY REVIEW
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EMAIL CONTACT: bbuchholz@nfe-engr.com
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20 10 0 10 20 30
NFE JOB NO. N788
SHEET NO. C16

M D O T TYPE III BARRICADE NOTE

ALL TYPE III BARRICADES USED FOR ROAD CLOSURES ON M SHALL HAVE STRIPES ANGLED DOWN TO THE MIDDLE OF THE BARRICADE AS SHOWN BELOW AND TWO WORKING TYPE C LIGHTS ATTACHED PER M D O T DETAIL W D- E



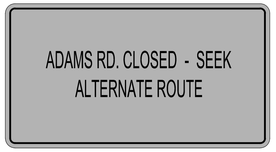
CLOSURES



ADVANCED WARNING SIGN "G"
R3-1



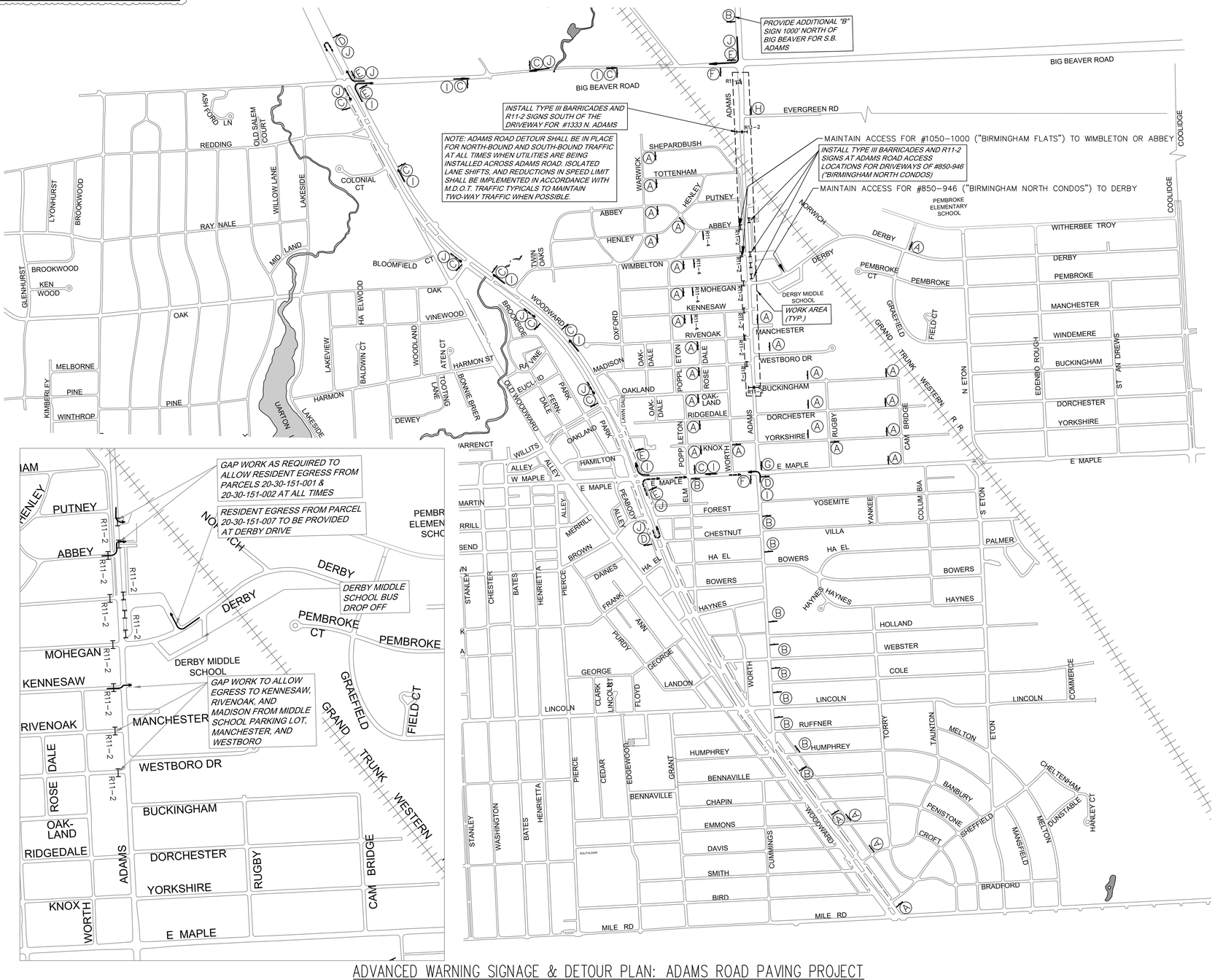
ADVANCED WARNING SIGN "H"
R3-2



36"x72" ADVANCE WARNING SIGN "A"
BLACK LEGEND ON ORANGE BACKGROUND



36"x72" ADVANCE WARNING SIGN "B"
BLACK LEGEND ON ORANGE BACKGROUND



ADVANCED WARNING SIGNAGE & DETOUR PLAN: ADAMS ROAD PAVING PROJECT

N.B. ADAMS

10" x 30"
ADVANCED WARNING SIGN "I"
BLACK LEGEND ON ORANGE BACKGROUND

S.B. ADAMS

10" x 30"
ADVANCED WARNING SIGN "J"
BLACK LEGEND ON ORANGE BACKGROUND



30" x 30"
ADVANCED WARNING SIGN "C"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "I" OR "J" WHERE INDICATED)



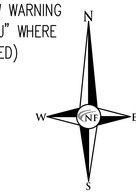
30" x 30"
ADVANCED WARNING SIGN "D"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "I" OR "J" WHERE INDICATED)



30" x 30"
ADVANCED WARNING SIGN "E"
BLACK LEGEND ON ORANGE BACKGROUND
(MOUNT BELOW WARNING SIGN "I" OR "J" WHERE INDICATED)



24" x 18"
ADVANCED WARNING SIGN "F"
BLACK LEGEND ON ORANGE BACKGROUND



SYMBOL KEY

- TYPE III BARRICADES
- ADVANCED WARNING SIGN
- DETOUR ROUTE N B ADAMS
- DETOUR ROUTE S B ADAMS
- CHANNELI ATION DEVICE

SPECIAL ADVANCED WARNING SIGN QUANTITIES

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
SIGN "A"	ADAMS ROAD CLOSED - SEEK ALTERNATE ROUTE	36"x72"	29
SIGN "B"	ADAMS CLOSED AHEAD - FOLLOW DETOUR	10"x30"	9
SIGN "C"	DETOUR W/ STRAIGHT ARROW (M.D.O.T. M4-9U)	10"x18"	11
SIGN "D"	DETOUR W/ LEFT ARROW (M.D.O.T. M4-9L)	30"x30"	3
SIGN "E"	DETOUR W/ RIGHT ARROW (M.D.O.T. M4-9R)	30"x30"	5
SIGN "F"	END DETOUR	24"x18"	2
SIGN "G"	NO RIGHT TURN (R3-1)	24"X30"	1
SIGN "H"	NO LEFT TURN (R3-2)	24"X30"	1
SIGN "I"	NORTHBOUND ADAMS AVE.	10"x30"	9
SIGN "J"	SOUTHBOUND ADAMS AVE.	10"x30"	10

OTHER ADVANCED WARNING SIGN QUANTITIES AS SHOWN

DESIGNATION	DESCRIPTION	SIZE	QUANTITY
R11-2	ROAD CLOSED	60"x30"	17
R11-4	ROAD CLOSED FOR THRU TRAFFIC	60"x30"	1

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.OT. 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.

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SHEET
Advanced Warning Signage & Detour Plan

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P. Tulikangas
DESIGNED BY:
B. Buchholz
APPROVED BY:
bbuchholz@nfe-engr.com
DATE:
12-20-24
SCALE: N.T.S.

NFE JOB NO. N788
SHEET NO. C17

UTILITIES

AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL EXPOSE AND VERIFY EXISTING UTILITIES FOR LOCATION, SIZE, DEPTH, MATERIAL AND CONFIGURATION PRIOR TO CONSTRUCTION. COSTS FOR EXPLORATORY EXCAVATION IS AN INCIDENTAL COST AND SHALL NOT BE CONSIDERED AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING UTILITIES WHICH DO NOT MATCH THE PLANS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. ANY FIELD CHANGES OF THE PROPOSED UTILITIES SHALL BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

DAMAGE TO PRIVATE PROPERTY

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AND ARE PART OF THE CONTRACT DOCUMENTS.

DEWATERING OF TRENCH AND EXCAVATIONS

IF NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION DESIGN DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF GROUND WATER DEWATERING SYSTEMS IS BEYOND THE SCOPE OF DESIGN FOR THESE DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND PROVIDING APPROPRIATE EXCAVATION DEWATERING SYSTEMS FOR USE DURING CONSTRUCTION.

THE DEWATERING METHOD SELECTED BY THE CONTRACTOR WILL NOT ADVERSELY AFFECT ADJACENT PAVEMENTS OR STRUCTURES PRIOR TO BEGINNING DEWATERING CONDITIONS. MEANS AND METHODS OF DEWATERING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE CONSIDERED INCLUDED IN THE WORK OF CONSTRUCTING THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

BY-PASS PUMPING

FROM TIME TO TIME IT MAY BE NECESSARY FOR THE CONTRACTOR TO BY-PASS PUMP TO COMPLETE THE WORK INDICATED ON THE PLANS. THE COST OF BY-PASS PUMPING, THE METHODS, EQUIPMENT AND MEANS OF PROVIDING THAT WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK WHETHER SPECIFICALLY CALLED OUT ON THE PLANS OR NOT.

MEANS AND METHODS FOR PIPE CONSTRUCTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEANS AND METHODS FOR CONSTRUCTING THE UNDERGROUND PIPE SYSTEMS PROPOSED ON THE PLANS, INCLUDING BUT NOT LIMITED TO THE NEED FOR SHORING/BRACING OF TRENCHES, DEWATERING OF TRENCHES, SCHEDULING THE WORK AT OFF PEAK HOURS, AND/OR MAINTAINING EXISTING FLOWS THAT MAY BE ENCOUNTERED VIA PUMPING, BY-PASS PIPING OR OTHER MEANS. THE CONTRACTOR SHALL NOT BE PAID ANY ADDITIONAL COMPENSATION TO IMPLEMENT ANY MEANS AND METHODS TO SATISFACTORILY COMPLETE THE CONSTRUCTION.

PAVEMENT REMOVAL

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. PAVEMENT CORE SAMPLES ARE FOR INFORMATIONAL PURPOSES ONLY AS TO THE THICKNESS OF THE PAVEMENT AT THE LOCATION OF THE SAMPLE. THE OWNER AND ENGINEER MAKE NO REPRESENTATION, WARRANTY OR GUARANTY THAT THE SAMPLES ACCURATELY REFLECT THE PAVEMENT THICKNESS ON THE PROJECT.

MAINTENANCE OF TRAFFIC

DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL ACCOMMODATE BOTH VEHICULAR AND PEDESTRIAN TRAFFIC IN THE ROAD RIGHTS OF WAY. THE CONTRACTOR'S EQUIPMENT AND OPERATIONS ON PUBLIC STREETS SHALL BE GOVERNED BY ALL APPLICABLE LOCAL, COUNTY AND STATE ORDINANCES, REGULATIONS AND LAWS. THE CONTRACTOR SHALL OBTAIN AND SATISFY ANY AND ALL PERMIT REQUIREMENTS BY THE LOCAL, COUNTY AND STATE GOVERNMENTAL AGENCIES.

IN ADDITION, WHERE THE WORK REQUIRES THE CLOSURE OF ONE OR MORE LANES OR IS WITHIN THE INFLUENCE OF THE ROAD OR PEDESTRIAN RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDOT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

COMPENSATION FOR TRAFFIC CONTROL SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC TRAFFIC CONTROL ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

IRRIGATION

THE CONTRACTOR SHALL MAINTAIN OR REPAIR ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA UNLESS THE DRAWINGS CALL FOR THE IRRIGATION SYSTEM TO BE REMOVED. THE OWNER AND NFE MAKE NO REPRESENTATIONS, WARRANTY OR GUARANTY AS TO THE LOCATION OF THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT THE IRRIGATION SYSTEM DURING CONSTRUCTION ACTIVITIES. COMPENSATION FOR MAINTAINING OR REPAIRING EXISTING IRRIGATIONS SYSTEMS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC IRRIGATION SYSTEM REPAIR ITEMS ARE INCLUDED IN THE ACCEPTED BID PROPOSAL.

SUB-SOIL CONDITIONS

ANY SOIL BORING PROVIDED BY THE OWNER AND/OR ENGINEER IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION IS NOT OFFERED AS EVIDENCE OF GROUND CONDITIONS THROUGHOUT THE PROJECT AND ONLY REFLECT THE GROUND CONDITIONS AT THE LOCATION OF THE BORING ON THE DATE THEY WERE TAKEN.

THE ACCURACY AND RELIABILITY OF THE SOIL LOGS AND REPORT ARE NOT WARRANTED OR GUARANTEED IN ANY WAY BY THE OWNER OR ENGINEER AS TO THE SUB-SOIL CONDITIONS FOUND ON THE SITE. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION AND SUB-SOIL INVESTIGATION AND SECURE OTHER SUCH INFORMATION AS THE CONTRACTOR CONSIDERS NECESSARY TO DO THE WORK PROPOSED AND IN PREPARATION OF THEIR BID.

SUBGRADE UNDERCUTTING AND PREPARTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY AND ALL SOILS WHICH DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SUBGRADE IN CONFORMANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS. THE MEANS AND METHODS USED TO ACHIEVE THE REQUIRED RESULT SHALL REST SOLELY WITH THE CONTRACTOR.

ANY AREAS OF UNDERCUTTING THAT RESULT IN ADDITIONAL OR EXTRA WORK BECAUSE THEY COULD NOT BE IDENTIFIED BY THE CONTRACTOR'S PRE-BID SITE OBSERVATION OR ARE NOT SET FORTH IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE ANY EXTRA WORK IS PERFORMED. THE CONTRACTOR SHALL MAKE A REQUEST FOR ANY ADDITIONAL COMPENSATION FOR THE UNDERCUTTING IN WRITING AND THE REQUEST SHALL CONFORM TO THE CONTRACT'S CHANGE ORDER PROVISIONS.

STRUCTURE BACKFILL

STRUCTURAL BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PROJECT PLANS, SPECIFICATIONS OR AS REQUIRED BY THE COMMUNITY, GOVERNMENT AGENCY OR UTILITY THAT HAS JURISDICTION OVER THE WORK.

TRENCH BACKFILL

TRENCH BACKFILL SHALL BE PLACED IN CONFORMANCE WITH THE PLANS AND/OR SPECIFICATIONS. TRENCH BACKFILL SHALL ALSO BE INSTALLED IN CONFORMANCE WITH THE COMMUNITY REQUIREMENTS OR AGENCY/UTILITY GOVERNING SAID TRENCH CONSTRUCTION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.

EARTH BALANCE / GRADING

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER THE SITE EARTHWORK BALANCES OR NOT. ANY EXCESS CUT MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR. IN A LIKE MANNER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT APPROVED FILL MATERIAL AND PLACE IT AS REQUIRED TO ATTAIN THE SITE GRADE AND COMPACTION REQUIREMENTS PER THE ENGINEER'S PLAN AND ALL APPLICABLE GOVERNMENTAL STANDARDS. THE ENGINEER AND OWNER MAKE NO REPRESENTATION AS TO THE QUANTITIES THAT MAY BE NEEDED TO CREATE A BALANCED EARTHWORK CONDITION OR THAT THE SITE EARTHWORK IS BALANCED.

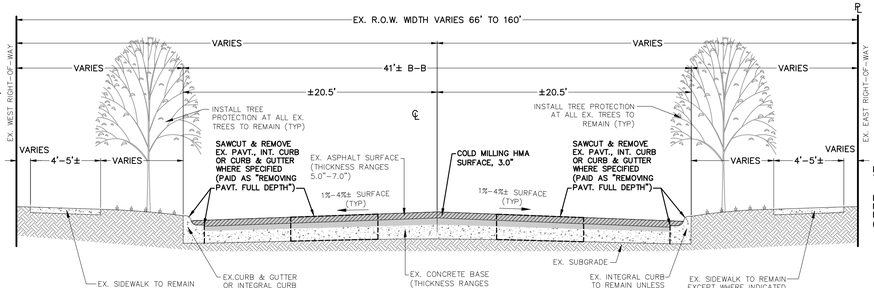
SOIL EROSION / SEDIMENTATION CONTROL

THE CONTRACTOR SHALL OBTAIN THE REQUIRED SOIL EROSION PERMIT AND SATISFY ALL REGULATORY REQUIREMENTS FOR CONTROLLING SOIL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR INSPECTION OR APPROVAL OF THE CONTRACTOR'S WORK IN CONNECTION WITH SATISFYING THE SOIL EROSION PERMIT REQUIREMENTS UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS.

ALLOWANCE PAY ITEMS & QUANTITIES

THE FOLLOWING PAY ITEMS AND/OR QUANTITIES ARE INCLUDED IN THE CONTRACT AS ALLOWANCES TO BE PROVIDED AS NEEDED UPON INSPECTION OF THE EXISTING ROAD AFTER MILLING OPERATIONS ARE COMPLETED:

- SUBGRADE UNDERCUTTTING, 21AA LIMESTONE – 250 CYD
- SUBGRADE UNDERCUTTING, 1"X3" LIMESTONE – 250 CYD
- SUYBGRADE GEOGRID FABRIC, TENSAR TRIAX TX130S – 500 SYD
- PAVT JOINT AND CRACK REPR, DETAIL 7 – 4,600 L.F.
- PAVT JOINT AND CRACK REPR, DETAIL 8 – 2,300 L.F.
- BITUMINOUS MIXTURE NO. 4EML (HANDPATCHING) – 240 TONS
- LANE TIE, EPOXY ANCHORED – 200 EACH
- REMOVING PAVEMENT FULL DEPTH – 2,000 SYD.
- AGGREGATE BASE, MDOT 21AA LIMESTONE, 8" – 2,000 SYD
- BITUMINOUS MIXTURE NO. 2EML (4.0" BASE COURSE) – 440 TONS

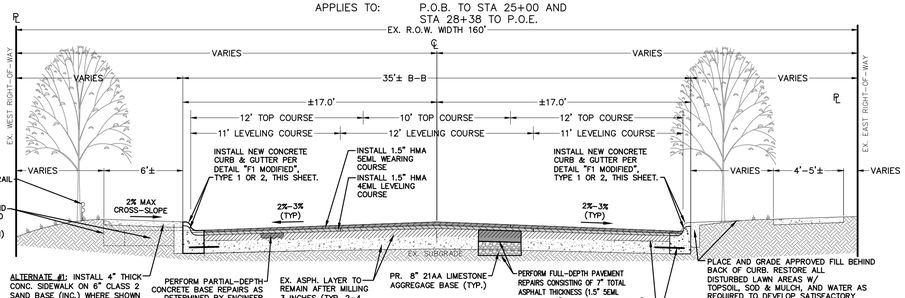


EXISTING PAVEMENT SECTION

N.T.S.

N. ADAMS ROAD

NOTES:
1. REFER TO G2 GEOTECHNICAL REPORT FOR SOIL BORING AND EXISTING PAVEMENT CONDITIONS. CROSS-SECTION SHOWN REFLECTS AN EXISTING COMPOSITE CROSS-SECTION WITH AN ASPHALT SURFACE (5.0" TO 7.0" THICKNESS) AND CONCRETE BASE (6.0" TO 7.5" THICKNESS). BORINGS #1, #2 AND #6 (LOCATED AT THE NORTH AND SOUTH ENDS OF THE PROJECT) INDICATE AN EXISTING CROSS SECTION COMPRISED OF FULL-DEPTH ASPHALT WITH MINIMUM THICKNESS OF 8".
2. ROAD WIDTH TRANSITIONS FROM 47' TO 58' AT THE END OF PAVING LIMITS.



APPLIES TO: P.O.B. TO STA 25+00 AND STA 28+38 TO P.O.E.

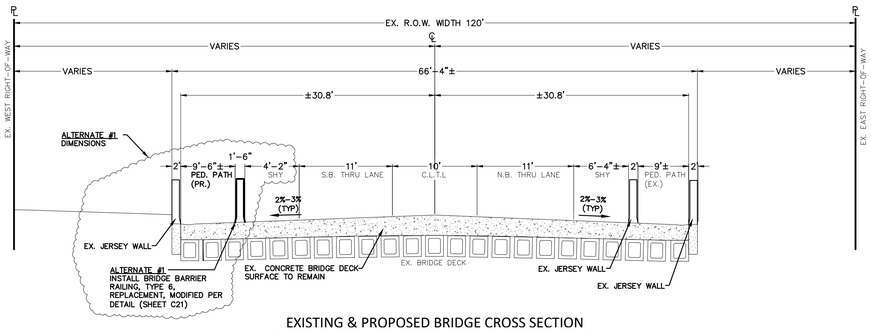
PROPOSED PAVEMENT SECTION

N.T.S.

N. ADAMS ROAD

APPLIES TO: STA 20+02 TO 25+00 AND 29+13 TO P.O.E.

NOTES:
1. PAVING JOINTS IN ASPHALT TOP COURSE SHALL BE PLACED SUCH THAT LONGITUDINAL COLD JOINTS ARE LOCATED AT LANE LINES.
2. OFFSET PAVING JOINTS BETWEEN TOP AND LEVELING COURSES, AND BETWEEN LEVELING COURSE AND EX. JOINTS IN CONC. BASE, AS SHOWN.
3. BOND COAT SS-1h SHALL BE APPLIED AT 0.05-0.15 GAL/SYD BETWEEN EACH LIFT.

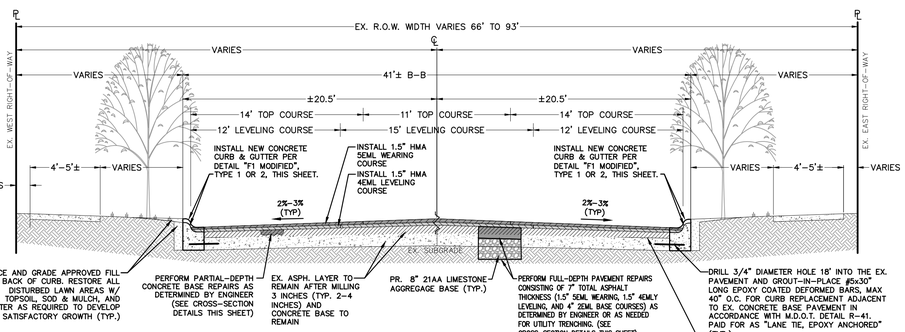


EXISTING & PROPOSED BRIDGE CROSS SECTION

N.T.S.

N. ADAMS ROAD

APPLIES TO: STA 25+00 TO 29+13

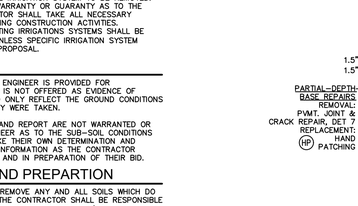


PROPOSED PAVEMENT SECTION

N.T.S.

N. ADAMS ROAD

APPLIES TO: P.O.B. TO STA 20+02



PROPOSED PAVEMENT CROSS-SECTION

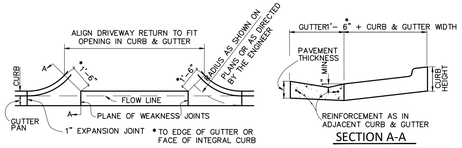
(PARTIAL & FULL-DEPTH REPAIRS ON ADAMS ROAD)

NOTE: REVIEW EX. UNDERLYING AGG. BASE AND/OR SUBGRADE SOILS W/ CITY & ON-SITE GEO-TECHNICAL ENGINEER TO CONFIRM EXCAVATION & REPLACEMENT W/ 21AA AGG. BASE IS REQUIRED AT EACH FULL-DEPTH REPAIR AREA. ANY REMOVAL/REPLACEMENT OF SUBGRADE SOILS REQUIRED BELOW BOTTOM OF 8" AGG. BASE LAYER SHALL BE PAID AS "SUBGRADE UNDERCUTTING, 21AA LIMESTONE".

HMA APPLICATION CHART

ITEM DESCRIPTION	RATE	PERFORMANCE GRADES	LOCATION/REMARKS	DESIGNATION
HMA, 5EML	165 LBS/SYD	PG 64-22	TOP/WEARING COURSE MINIMUM A.W.I. = 260	(5EML)
HMA, 4EML	165 LBS/SYD	PG 64-22	LEVELING COURSE	(4EML)
HMA, 2EML	440 LBS/SYD	PG 64-22	BASE COURSE	(2EML)
HAND PATCHING	220 LBS/SYD MAX	PG 64-22	HMA, 4EML (JOINT CRACK FILLER FOR DET 7/8 REPLACEMENT	(HP)
BOND COAT	0.05-0.15 GAL/SYD	N/A	SHALL MEET SS-1H	

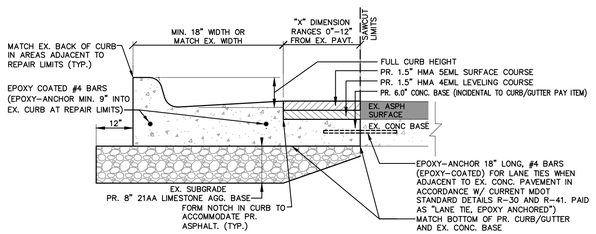
RECYCLED ASPHALT PAVEMENT (R.A.P.) IN HMA MIX NOTE:
ALL HMA WEARING MIXES USED ON THIS PROJECT SHALL MEET M.D.O.T. TIER 1 REQUIREMENTS FOR R.A.P. CONTENT.
ALL HMA LEVELING AND BASE COURSE MIXES USED ON THIS PROJECT SHALL MEET M.D.O.T. TIER 2 REQUIREMENTS FOR R.A.P. CONTENT.



SECTION A-A

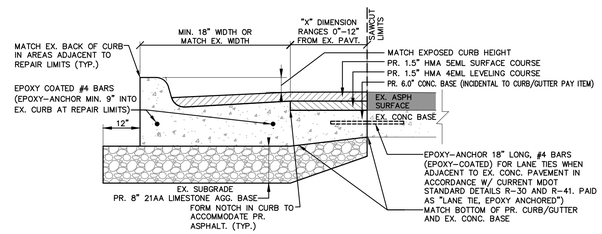
MDOT DRIVEWAY OPENING DETAIL 'M'

N.T.S.



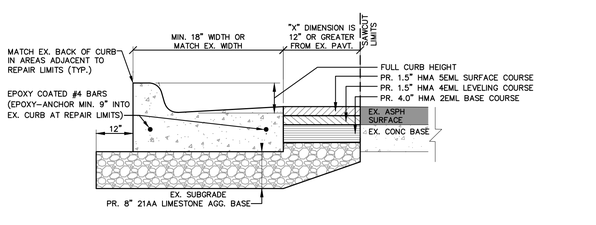
CURB AND GUTTER, CONC, DETAIL F1 MODIFIED, TYPE 1 (WHERE ADJACENT TO EX. CONC. BASE TO REMAIN)

N.T.S.



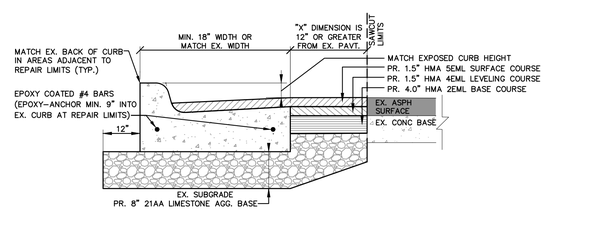
CURB AND GUTTER, CONC, DETAIL F1 MODIFIED, TYPE 2 (WHERE ADJACENT TO EX. CONC. BASE TO REMAIN)

N.T.S.



CURB AND GUTTER, CONC, DETAIL F1 MODIFIED, TYPE 1 (WHERE ADJACENT TO FULL DEPTH ASPHALT REPAIR)

N.T.S.



CURB AND GUTTER, CONC, DETAIL F1 MODIFIED, TYPE 2 (WHERE ADJACENT TO FULL DEPTH ASPHALT REPAIR)

N.T.S.

CURB & GUTTER NOTES:
1. REFER TO M.D.O.T. STANDARD PLAN R-44 FOR TYPICAL CURB AND GUTTER DIMENSIONS.
2. ALL PROPOSED CURB & GUTTER SHALL PROVIDE 6" CURB HEIGHT AS SHOWN IN THE ABOVE DETAIL, EXCEPT AT LOCATIONS WHERE CURB & GUTTER IS REQUIRED TO MATCH EXISTING AND/OR WHERE ALTERNATE CURB HEIGHT IS SPECIFIED ON THE PLANS.
3. 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 8" THICK 21AA AGGREGATE BASE TO ACHIEVE PROPOSED PLAN GRADE. ALL NECESSARY PREPARATION WORK LISTED ABOVE IS INCLUDED IN THE CURB AND GUTTER PAY ITEMS.
4. BACKFILL WITH APPROVED FILL MATERIAL AND GRADING BEHIND NEW BACK OF CURB SHALL BE INCLUDED AS INCIDENTAL TO OTHER APPLICABLE PAY ITEMS FOR "EARTH EXCAVATION", "TOPSOIL" AND VARIOUS CURB AND GUTTER PAY ITEMS.
5. REQUIRED LAWN RESTORATION SHALL BE COMPLETED USING TOPSOIL, SOD & MULCH PAY ITEMS .

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.NFE-ENGR.COM

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

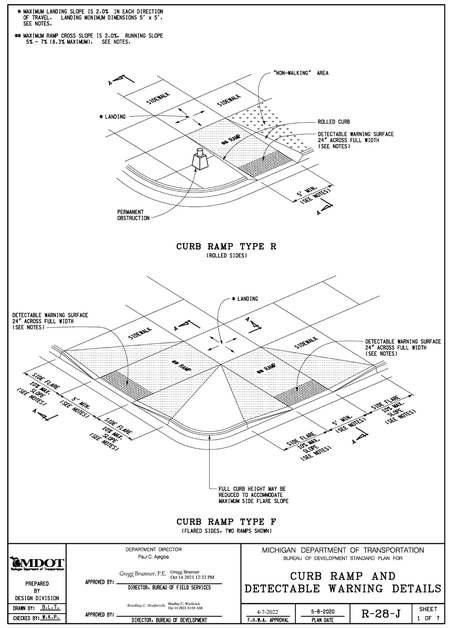
SHEET
Project Notes & Details Plan (1 of 4)

Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
01-28-25	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: N.T.S.

NFE JOB NO. N788
SHEET NO. C18



MDOT Michigan Department of Transportation

PREPARED BY DESIGN DIVISION

DRAWN BY: B.L.C.

CHECKED BY: K.T.F.

DEPARTMENT DIRECTOR
Paul C. Ajegba

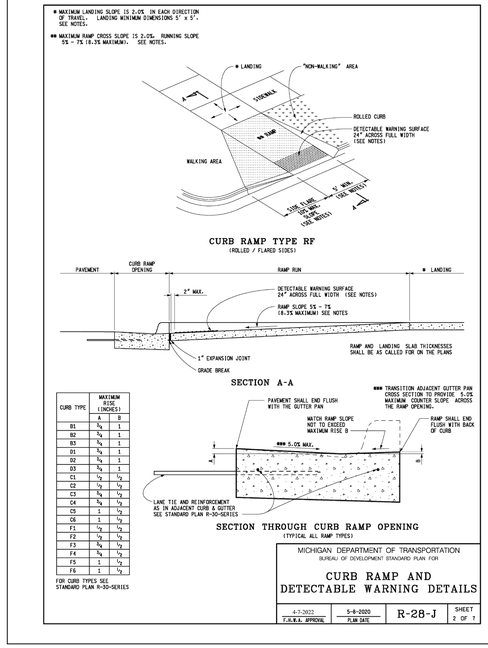
APPROVED BY: Gregg Brunner, P.E. Gregg Brunner CST 04 2023 12:53 PM
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: Bradley C. Wieferich, P.E. Bradley C. Wieferich Oct 31 2023 11:01 AM
DIRECTOR, BUREAU OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		1 OF 7



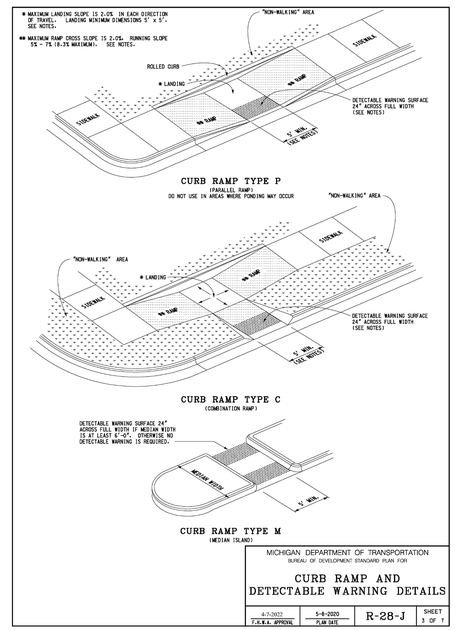
CURB TYPE	MAXIMUM RISE (INCHES) A	B
B1	3/8	1
B2	3/8	1
B3	3/4	1
D1	3/8	1
D2	3/4	1
D3	3/4	1
C1	1/2	1/2
C2	1/2	1/2
C3	3/8	1/2
C4	3/4	1/2
C5	1	1/2
C6	1	1/2
F1	1/2	1/2
F2	1/2	1/2
F3	3/8	1/2
F4	3/4	1/2
F5	1	1/2
F6	1	1/2

FOR CURB TYPES SEE STANDARD PLAN R-30-SERIES

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

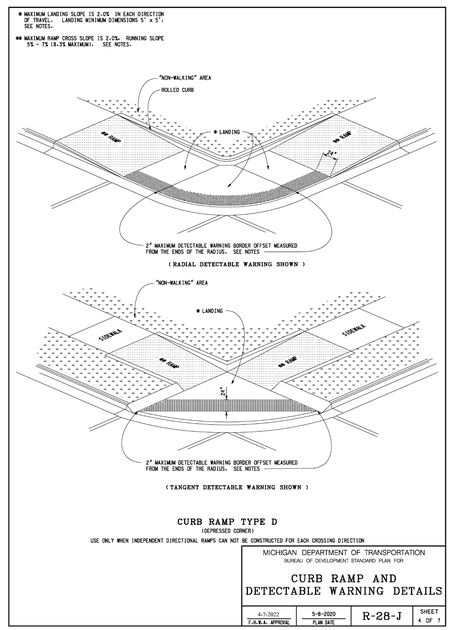
4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		2 OF 7



MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

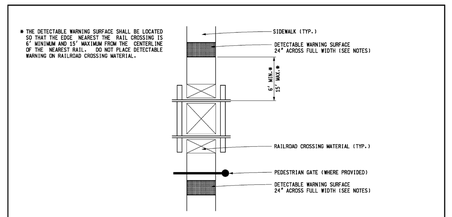
4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		3 OF 7



MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

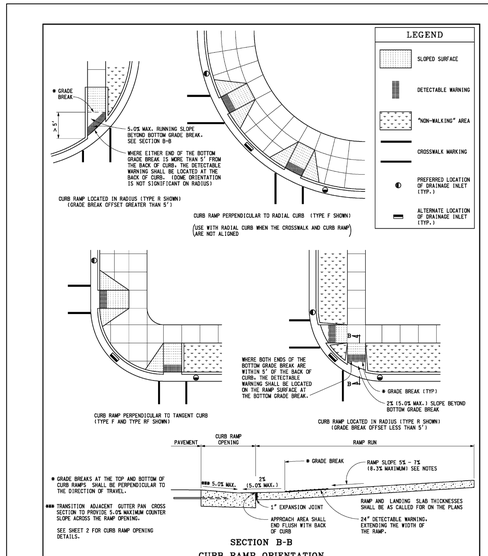
4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		4 OF 7



MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		5 OF 7



* GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

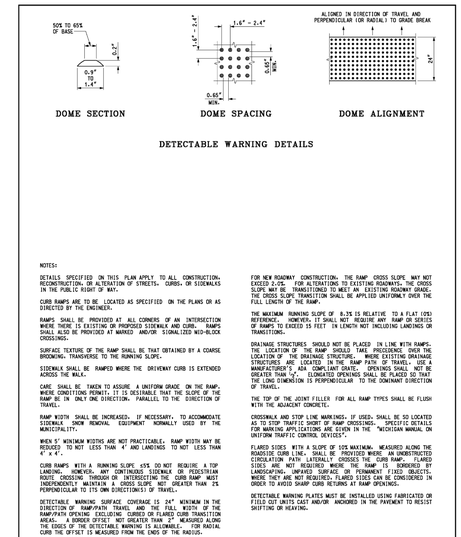
*** TRANSITION ADJACENT GUTTER PAN CROSS SECTION TO PROVIDE 5.0% MAXIMUM COUNTER SLOPE ACROSS THE RAMP OPENING.

SEE SHEET 2 FOR CURB RAMP OPENING DETAILS.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		6 OF 7



NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

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.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP. WHERE CONDITIONS PERMIT, IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE IN ONLY ONE DIRECTION. PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SNOWPLOW SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

WHEN 5' MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'.

CURB RAMPS WITH A RUNNING SLOPE ≤5% 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 2% PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

DETECTABLE WARNING SURFACE COVERAGE IS 24" MINIMUM IN THE DIRECTION OF RAMP/CROSSWALK TRAVEL AND FULL WIDTH OF THE RAMP/FLARE OPENING EXCLUSIVE OF FLARES OR PLANTING AREAS. A BORDER OFFSET NOT GREATER THAN 2" MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

FOR NEW ROADWAY CONSTRUCTION: THE RAMP CROSS SLOPE MAY NOT EXCEED 4.0%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSITIONED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.3% IS RELATIVE TO A FLAT (0%) REFERENCE. HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMPS TO EXCEED 15 FEET IN LENGTH NOT INCLUDING LANDINGS OR TRANSITIONS.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMPS. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN ½". ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO NOT INTERFERE WITH THE FREE PASSAGE OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE ROADSIDE CURB LINE, SHALL BE PROVIDED WHERE AN UNOBSTRUCTED CIRCULATION PATH LATERALLY CROSSES THE CURB RAMP. FLARED SIDES SHALL BE PROVIDED WHERE THERE ARE UNPROTECTED LANDSCAPING, IMPEDED SURFACE OR PERMANENT FIXED OBJECTS WHERE THEY ARE NOT REQUIRED, FLARED SIDES CAN BE CONSIDERED IN ORDER TO AVOID SHARP CURB RETURNS AT RAMP OPENINGS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		7 OF 7

NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

SHEET
Project Notes & Details Plan (2 of 4)

Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
01-28-25	ADDENDUM 1

DRAWN BY:
K. Withrow

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

EMAIL CONTACT:
ptulikangas@nfe-engr.com

DATE:
12-20-24

SCALE: N.T.S.

NFE JOB NO. **N788**

SHEET NO. **C19**

GENERAL NOTES

1. BRICK PAVERS SHALL BE REMOVED BY MEANS WHICH CAUSE NO DAMAGE TO THE BRICKS. BRICKS SHALL BE DELIVERED TO CITY OF BIRMINGHAM DEPARTMENT OF SERVICES AS DIRECTED BY THE ENGINEER.
2. ALL PAVEMENT TO BE REMOVED SHALL BE SAWCUT FULL DEPTH.
3. ANY GRAVEL REPLACEMENT NECESSARY FOR REGRADING DRIVEWAYS SHALL BE CONSIDERED INCLUDED IN THE COST OF CONCRETE DRIVE APPROACH.
4. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION. WHERE NECESSARY, TREE ROOTS SHALL BE CUT CLEANLY. AT NO TIME WILL RIPPING OR TEARING OF TREE ROOTS BE ACCEPTABLE.
5. ALL DRIVEWAYS (BEHIND THE SIDEWALK) SHALL BE REPAIRED WITH A CROSS SECTION WHICH MATCHES THE EXISTING IN THICKNESS, OR A MINIMUM 4.0" BITUMINOUS MIXTURE No. 13A. IF THE EXISTING DRIVEWAY IS GREATER THAN 4.0" IN DEPTH, THE THICKNESS OF THE BITUMINOUS MIXTURE No. 13A SHALL BE ADJUSTED TO MAKE UP THE DIFFERENCE.
6. UNLESS OTHERWISE SHOWN, PROPOSED GRADES IN PROFILE ARE TOP OF CURB GRADES.
7. ROCKS, OR OTHER MISC. DEBRIS WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE, UNLESS DIRECTED OTHERWISE FROM THE CITY.
8. THE PAY ITEM "ADJUST STRUCTURE COVER" APPLIES ONLY TO PRE-EXISTING STRUCTURES TO BE ADJUSTED TO PROPOSED GRADES AS PART OF CONSTRUCTION.
9. IF THE CONTRACTOR HAS MULTIPLE CREWS WORKING THAT REQUIRES MULTIPLE CITY INSPECTORS ON A GIVEN WORK DAY, THE PAY ITEM "INSPECTOR CREW DAYS" SHALL BE MULTIPLIED BY THE CORRESPONDING NUMBER OF INSPECTORS REQUIRED DURING SAID WORK DAY.

PAVING NOTES

1. PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

   CONCRETE ROAD: BASE COURSE – 21AA CRUSHED LIMESTONE AGGREGATE (8" THICK)
   MIX – PORTLAND CEMENT TYPE IA (AIR-ENTRAINED), TO COMPLY WITH MDOT 3500HP REQUIREMENTS.

   CONCRETE FLATWORK: 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 1.5 TO 3 INCHES. COMPLY WITH MDOT 3500 REQUIREMENTS.

   ALL CONCRETE PAVEMENT AND FLATWORK MIXES USED ON THIS PROJECT SHALL COMPLY WITH A MINIMUM GROUND GRANULATED BLAST-FURNACE SLAG (GGBFS) SUBSTITUTION OF TWENTY-FIVE (25) PERCENT SUBJECT TO SEASONAL LIMITATIONS PER THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION.

   ASPHALT: AGGREGATE BASE COURSE – 21AA CRUSHED LIMESTONE AGGREGATE (8" THICK)

   WEARING COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 5EML (MAX. APPLICATION RATE 165 POUNDS PER SQUARE YARD)

   LEVELING COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 4EML (MAX. APPLICATION RATE 165 POUNDS PER SQUARE YARD)

   BASE COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 2EML (MAX. APPLICATION RATE 440 POUNDS PER SQUARE YARD)

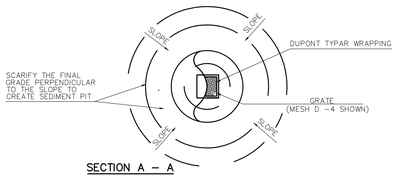
   BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD
2. PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
3. ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
4. ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.
5. 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, 2003 EDITION.
6. ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.
7. ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.
8. 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.
9. 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.
10. 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).
11. EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.
12. 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.
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.
15. R.A.P. NOT ALLOWED IN SURFACE / TOP COURSE OF ASPHALT.

WATER MAIN NOTES

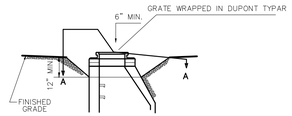
1. ALL WATER MAINS 4" AND LARGER SHALL BE DUCTILE IRON PIPE THICKNESS CLASS 52, WITH PUSH ON TYPE JOINTS PER CITY REQUIREMENTS.
2. NEW WATER MAINS SHALL BE INSTALLED WITH A MINIMUM 5.5 FEET OF COVER. EXCEPTIONS WILL BE ALLOWED WHEN NECESSARY TO CONNECT TO EXISTING MAIN OR WHEN AUTHORIZED BY THE ENGINEER.
3. KNOWN WATER SERVICES BASED ON FIELD INFORMATION OR CITY RECORDS ARE SHOWN ON THE PLANS AS FOLLOWS: "C" = COPPER, "L" = LEAD AND "W.S." = WATER SERVICE TYPE UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL EXISTING SERVICES TO THE NEW MAIN AFTER IT HAS BEEN APPROVED FOR USE.
4. COAT ALL BOLTS ON MECHANICAL FITTINGS WITH TAR.
5. HYDRANT CONNECTION TO CONSIST OF 6" DUCTILE IRON PIPE, 6" GATE VALVE AND BOX, AND HYDRANT. HYDRANT SHALL BE EJIW MODEL 5BR WITH 6" MECHANICAL JOINT INLET, TWO PUMPER INLETS, ALL OPENING LEFT, 5'-6" TRENCH, PLUGGED DRAIN AND BLOCK BOLTS.
6. INSTALL GATE VALVE AS CLOSE TO HYDRANT AS PRACTICABLE.
7. GATE VALVES 4" AND LARGER MAY BE MUELLER BRAND SPECIFIED, OR APPROVED EQUIVALENT. ALL MATERIALS RELATIVE TO WATER SERVICE CONNECTIONS SHALL BE MUELLER BRAND.
8. IN ABANDONING MAINS, THE FOLLOWING SHALL BE DONE: PLUG ALL OPEN PIPE ENDS WITH MASONRY, DISCONNECT MAINS WHICH ARE TO BE ABANDONED FROM FITTINGS AT LIVE MAINS AND PLUG AND BLOCK THOSE FITTINGS. FILL MAIN TO BE ABANDONED WITH GROUT OR HYDRAULIC CEMENT.
9. WORK INDICATED BY (A) SHALL BE PERFORMED AFTER THE NEW MAINS ARE PLACED IN SERVICE.
10. THE LOCATIONS AND TYPES OF SERVICE LEADS IS BASED ON THE BEST AVAILABLE INFORMATION. THE EXACT LOCATION OF SERVICE LEADS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
11. WHERE APPLICABLE, THE APPROPRIATE SECTIONS OF EXISTING WATERMAIN SHALL BE SHUTDOWN AND DEPRESSURIZED PRIOR TO A) CUTTING AND REMOVING, B) CUTTING AND INSTALLING PROPOSED TEE CONNECTIONS, C) PERFORMING ANY AND ALL OTHER WORK AROUND/ADJACENT TO HYDRANTS AND ALL OTHER CONNECTIONS, WHILE MEETING AND/OR EXCEEDING APPLICABLE INDUSTRY SAFETY PRECAUTIONS AND MIOSHA STANDARDS.

STORM SEWER NOTES (where applicable)

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE THE MUNICIPALITY. THE MUNICIPALITY STANDARD NOTES, DETAILS AND SPECIFICATIONS SHALL BE INCORPORATED AS PART OF THESE PLANS.
2. ALL STORM SEWER TRENCHES UNDER OR WITHIN THREE (3) FEET OF EXISTING OR PROPOSED PAVEMENT SHALL BE BACK FILLED WITH MDOT CLASS II MATERIAL (SAND) AND BE MACHINE COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S MAXIMUM DENSITY. PAVEMENT SHALL INCLUDE PARKING LOTS, DRIVE APPROACHES, 95 CURB & GUTTER AND ADJACENT WALKS.
3. ALL STORM SEWER PIPE SHALL BE INSTALLED ON CLASS "B" BEDDING OR BETTER UNLESS OTHERWISE INCLUDED ON THE PLANS.
4. STORM SEWER SHALL BE OF THE TYPE, SIZE & CLASS DESIGNATION INDICATED ON THE PLANS AND LIKEWISE BE INSTALLED AT THE PROPOSED LINE & GRADE INDICATED.
5. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM SPECIFICATION C-76 CL IV.
6. ALL MAN HOLE, CATCH BASIN, INLET, REAR YARD DRAINAGE STRUCTURES AND COVERS SHALL BE AS INDICATED ON THE PLANS AND CONSTRUCTED IN ACCORDANCE WITH MUNICIPALITY STANDARDS.
7. INSTALL TRAPS ON THE FIRST CATCH BASIN (TYPICALLY A 4' DIAMETER STRUCTURE WITH 2' SUMP) THAT IS UPSTREAM OF ITS CONNECTION TO A MAINLINE STORM OR SEWER MANHOLE, TO CAPTURE FLOATABLES AND TO MINIMIZE ESCAPE OF ODOR.
8. THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
9. EXACT GRADES AND INVERTS OF PROPOSED STORM SEWER ARE TO BE CHECKED WITH THE FIELD ENGINEER PRIOR AND DURING INSTALLATION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY PLAN INCONSISTENCY AND/OR UTILITY CONFLICTS.
10. ALL STORM SEWER PIPE JOINTS SHALL BE "PREMIUM JOINT" MODIFIED GROOVED TONGUE (M.G.T.) WITH SYNTHETIC RUBBER GASKETS CONFORMING TO ASTM SPECIFICATION C-443 & C-361, UNLESS OTHERWISE INDICATED ON THE PLANS.
11. FACILITY MANUFACTURED PRECAST TEE SECTIONS SHALL BE FOR ROOF DRAINS AND/OR SUMP PUMP LEADS AND LATERALS WHERE INDICATED ON THE PLANS. BLIND TOP CONNECTIONS INTO STORM SEWER WILL NOT BE PERMITTED BY BREAKING PIPE WALL.
12. THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL SITE INSPECTIONS.

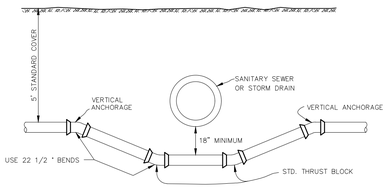


SECTION A – A



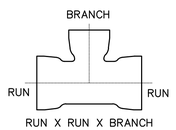
LOW POINT INLET FILTER & SEDIMENT PIT DETAIL

N.T.S.



STANDARD SEWER OR STORM CROSSING

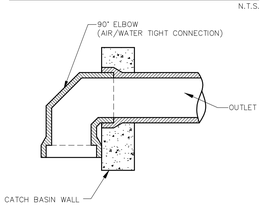
N.T.S.



RUN X RUN X BRANCH

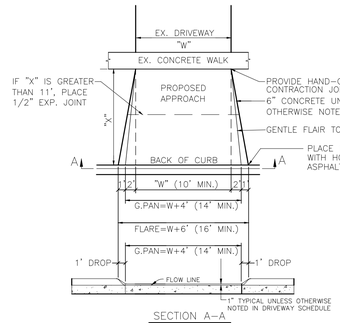
WATER MAIN TEE FITTING SIZE DESIGNATION SCHEMATIC

N.T.S.



SEWER TRAP

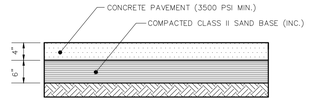
N.T.S.



SECTION A-A

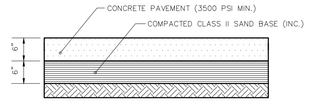
CONCRETE DRIVE APPROACH – DETAIL 'L'

N.T.S.



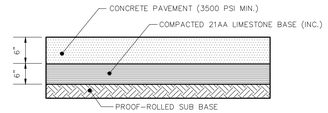
4" CONCRETE SIDEWALK SECTION

STANDARD SIDEWALK REPLACEMENTS/INSTALLATIONS N.T.S.



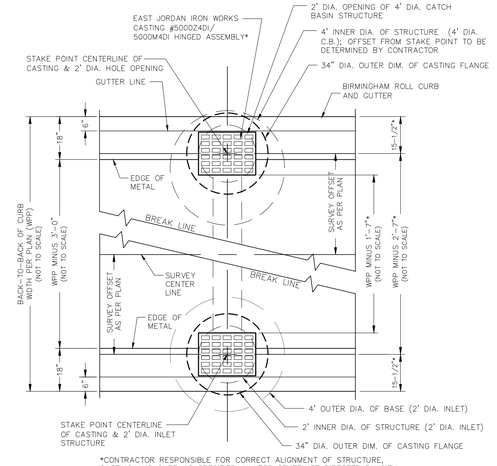
6" CONCRETE SIDEWALK SECTION

TO MATCH SPECIFIED PAVEMENT THICKNESS THROUGH DRIVE APPROACH N.T.S.



TYPICAL CONCRETE SECTION FOR RESIDENTIAL APPROACH

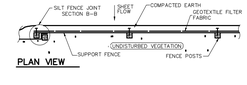
N.T.S.



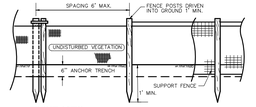
*CONTRACTOR RESPONSIBLE FOR CORRECT ALIGNMENT OF STRUCTURE, CASTING AND CURB AS SPECIFIED, UNLESS OTHERWISE DIRECTED BY CITY.

CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

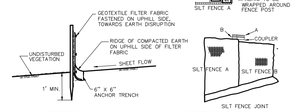
SCALE: 1" = 2'



PLAN VIEW



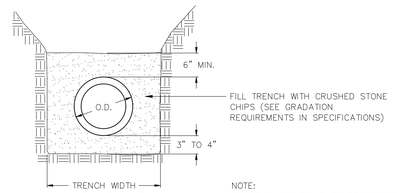
FRONT VIEW



SECTION A-A SECTION B-B

SILT FENCE DETAIL

N.T.S.

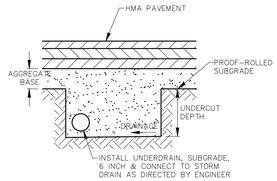


MAX. 30" O.D. + 12" O.D. + 24"
4" – 12" I.D.
15" – 36" I.D.
42" I.D. AND LARGER

NOTE: APPROVAL MAY BE GIVEN TO ALTERNATE MATERIALS AND METHODS TO ACHIEVE CLASS B BEDDING.

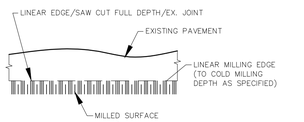
STANDARD PIPE BEDDING

N.T.S.



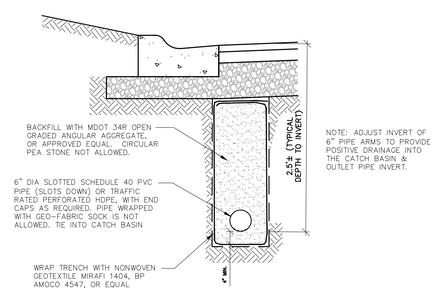
UNDERCUT DETAIL

N.T.S.



LINEAR MILLING/SAWCUT EDGE DETAIL

PLAN VIEW N.T.S.



6" PERFORATED PIPE UNDERDRAIN DETAIL

N.T.S.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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PONTIAC, MI 48342-5032
TEL. (248) 332-7931
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WWW.NFE-ENGR.COM

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

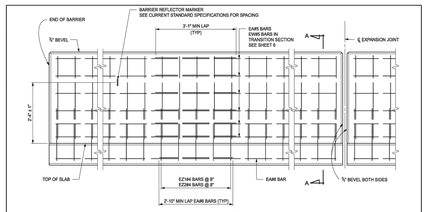
SHEET
Project Notes & Details Plan (3 of 4)

811 Know what's below Call before you dig.

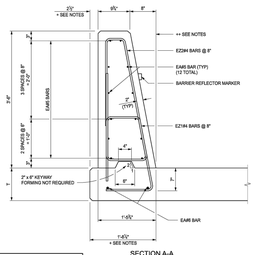
DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
01-28-25	ADDENDUM 1

DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
EMAIL CONTACT: ptulikangas@nfe-engr.com
DATE: 12-20-24
SCALE: N.T.S.

NFE JOB NO. N788
SHEET NO. C20



BRIDGE BARRIER RAILING, TYPE 6 OUTSIDE ELEVATION

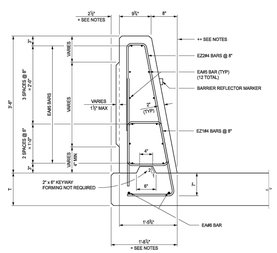


SECTION A-A
NO AESTHETIC TREATMENT

APPROVED BY: DIRECTOR, BUREAU OF BRIDGES AND STRUCTURES
APPROVED BY: DIRECTOR, BUREAU OF FIELD SERVICES
APPROVED BY: DIRECTOR, BUREAU OF DEVELOPMENT

MDOT — STANDARD PLAN FOR: BRIDGE BARRIER RAILING, TYPE 6

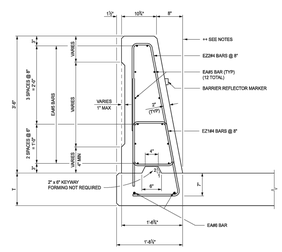
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE	(SPECIAL DETAIL) FHWA APPROVAL	09/12/2024 PLAN DATE	B-29-A	SHEET 1 OF 8



SECTION A-A
BRIDGE BARRIER RAILING, AESTHETIC, TYPE 6, DET 1
(THE TYPE AND LIMITS OF THE AESTHETIC TREATMENT, IF APPLICABLE, ARE AS DETAILED ON THE PLANS.)

MDOT — STANDARD PLAN FOR: BRIDGE BARRIER RAILING, TYPE 6

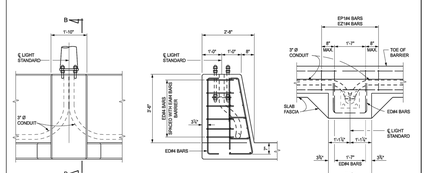
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE	(SPECIAL DETAIL) FHWA APPROVAL	09/12/2024 PLAN DATE	B-29-A	SHEET 2 OF 8



SECTION A-A
BRIDGE BARRIER RAILING, AESTHETIC, TYPE 6, DET 2
(THE TYPE AND LIMITS OF THE AESTHETIC TREATMENT, IF APPLICABLE, ARE AS DETAILED ON THE PLANS.)

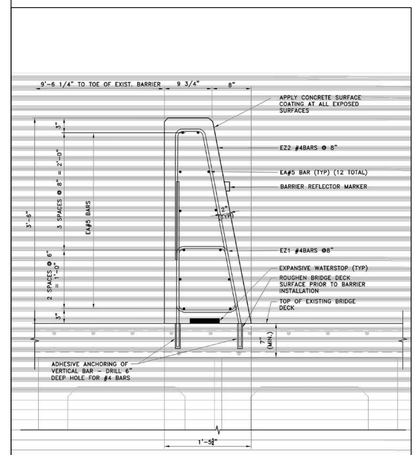
MDOT — STANDARD PLAN FOR: BRIDGE BARRIER RAILING, TYPE 6

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE	(SPECIAL DETAIL) FHWA APPROVAL	09/12/2024 PLAN DATE	B-29-A	SHEET 3 OF 8



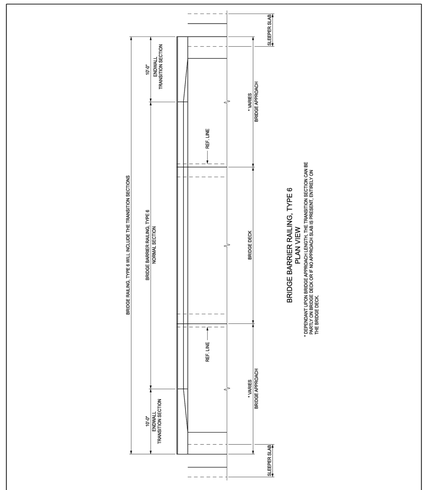
MDOT — STANDARD PLAN FOR: BRIDGE BARRIER RAILING, TYPE 6

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE	(SPECIAL DETAIL) FHWA APPROVAL	09/12/2024 PLAN DATE	B-29-A	SHEET 4 OF 8



BRIDGE BARRIER RAILING TYPE 6, REPLACEMENT, MODIFIED DETAIL

SCALE: N.T.S.


10'-0" SYMMETRICAL TRANSITION
BRIDGE RAIL TYPE 6 WILL INCLUDE THE TRANSITION SECTIONS
BRIDGE BARRIER RAILING, TYPE 6 NORMAL SECTION
℄ EXPANSION JOINT
℄ EXPANSION JOINT
℄ EXPANSION JOINT
10'-0" SYMMETRICAL TRANSITION
℄ EXPANSION JOINT
℄ EXPANSION JOINT
℄ EXPANSION JOINT

BIRMINGHAM CONTRACT #12-24(P) - ADAMS RD PAVING PROJECT PAY ITEMS

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C1 Utility Plan	SHEET C2 Utility Plan	SHEET C03 Utility Plan	SHEET C04 Utility Plan	SHEET C5 Utility Plan	SHEET C06 Utility Plan	SHEET C07 Utility Plan	SHEET C09 Paving Plan	SHEET C10 Paving Plan	SHEET C11 Paving Plan	SHEET C12 Paving Plan	SHEET C13 Striping Plan	SHEET C14 Striping Plan	SHEET C15 Striping Plan	SHEET C16 Striping Plan	QUANTITY
	SEWER PAY ITEMS																	
1	10" Storm Sewer, PVC SDR 26, Trench A	LF			69	45	155											269
2	12" Storm Sewer, CI76, CL-IV, Trench A	LF			36		58		7									101
3	15" Storm Sewer, CI76, CL-IV, Trench A	LF			249	119												368
4	18" Storm Sewer, CI76, CL-IV, Trench A	LF				350												350
5	Sewer Point Repair, 12" Diameter, PVC SDR 26, Trench A	LF					20											20
6	Sewer Service, 8" PVC SDR 26	LF					71											71
7	Sewer Service, 6" PVC SDR 23.5	LF																60
8	New 2'-0" Diameter Storm Inlet	EA					4											4
9	New 4'-0" Diameter Storm Catch Basin w/ 2' Sump	EA			1		2		1									4
10	New 4'-0" Diameter Storm Manhole	EA			3													3
11	New 4'-0" Diameter Storm Manhole, Construct Online	EA				1												1
12	New 4'-0" Diameter Storm Manhole w/ 2' Sump & Gas Trap	EA				1												1
13	New 5'-0" Diameter Storm Manhole, Construct Online	EA					1											1
14	6" Perforated Pipe Underdrain (No sock)	LF			215	375	530											1,120
15	Sewer Service Connection, 8"	EA					1											1
16	Sewer Service Connection, 6"	EA																2
17	Sewer Tap, 6", Underdrain	EA			2	3	1											6
18	Sewer Tap, 10"	EA			2		2											4
19	Sewer Tap, 12"	EA							1									1
20	Reconstruct Manhole (if and where needed)	VF																25
21	Remove Ex. Drainage Structure	EA			2		4		1									7
22	Remove Ex. 10" Storm Sewer	LF			94													94
23	Remove Ex. 12" Storm Sewer	LF			22	64			17									103
24	Remove & Replace Structure Cover (as directed by City)	LB																2,000
25	Abandon Ex. 10" Storm Sewer	LF					40											40
26	Abandon Ex. 12" Storm Sewer	LF				63												63
27	Abandon Ex. 12" Combined Sewer	LF					40											40
28	Abandon Ex. Sewer Manhole	EA					1											1
29	Bulkhead Structure, 12" or Less	EA			1	3	3		1									8
30	Bulkhead Pipe, Larger than 8"	EA																4
	SUBTOTAL SEWER PAY ITEMS																	
	WATER MAIN PAY ITEMS																	
31	Remove Hydrant	EA				1	1											2
32	Abandon Gate Valve Well	EA		1		4	4											9
33	12" Gate Valve & Well	EA			1	2	1											4
34	8" Gate Valve & Well	EA				2	1											3
35	Fire Hydrant Assembly, Complete	EA				1	1											2
36	12" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF			313	503	342											1,158
37	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF			15	45	10											70
38	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF				93	82											175
39	4" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF					5											5
40	12" Water Main Connection to Ex. 12" Water Main	EA			2		1											3
41	8" Water Main Connection to Ex. 8" Water Main	EA			1													1
42	6" Water Main Connection to Ex. 6" Water Main	EA				2												2
43	4" Water Main Connection to Ex. 4" Water Main	EA					1											1
44	New Water Service, 2", Trench A, Copper	LF				188	58											246
45	New Water Service, 1.5", Trench A, Copper	LF			12		9											21
46	New Water Service, 1", Trench A, Copper	LF					111											111
47	New Water Service", 1.5", Private Property (Bored), PEX	LF			8													8
48	Water Service Connection, 2"	EA				2	2											4
49	Water Service Connection, 1.5"	EA			1		1											2
50	Water Service Connection, 1"	EA					1											1
51	Water Service Connection, 1.5", Connection at Meter, 1078-1050 Wimbleton	EA			1													1
52	Install Curb Stop & Box	EA			1	2	2											5
53	Hydra-Stop, Insta-Valve 250, 12"	EA																1
54	Hydra-Stop, Line-Stop, 12"	EA																2
55	Hydra-Stop, Line-Stop, 8"	EA																2
56	Hydra-Stop, Line-Stop, 6"	EA																2
57	Abandon Existing Water Mains, Entire Project	LS																1
	SUBTOTAL WATER MAIN PAY ITEMS																	
	PAVING PAY ITEMS																	
58	Earth Excavation	CY								50	260	300	60					670
59	Subgrade Undercutting, 21AA Limestone	CY																250
60	Subgrade Undercutting, 1"x3" Limestone	CY																250
61	Subgrade Geogrid Fabric, Tensar Triax TX130S	SY																500
62	Removing Asphalt Drive Approach	SY								13	153	41						207
63	Removing Concrete Drive Approach	SY											42					42
64	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY								47	20	17	19					103
65	Removing Pavement Full Depth (Curb & Gutter included)	SY								3690	3220	1900	790					9,390
66	Cold Milling HMA Surface, 3.0"	SY								3690	3220	1900	790					9,600
67	Aggregate Base, MDOT 21AA Limestone, 8"	SY								181	2387	1204	116					5,888
68	Pavt Joint and Crack Repr, Detail 7	LF																4,600
69	Pavt Joint and Crack Repr, Detail 8	LF																2,300
70	Bituminous Mixture No. 4EML (Handpatching)	TON																240
71	Bituminous Mixture No. 5EML (1.5" Wearing Course)	TON								325	470	250	75					1,120
72	Bituminous Mixture No. 4EML (1.5" Leveling Course)	TON								325	470	250	75					1,120
73	Bituminous Mixture No. 2EML (4.0" Base Course)	TON								13	320	88	12					873
74	Concrete Curb & Gutter (18" Wide, "MDOT F2 Modified, Type 1")	LF								351	825	773	188					2,137
75	Concrete Curb & Gutter (18" Wide, "MDOT F2 Modified, Type 2")	LF								35	71							106
76	Concrete Curb & Gutter (18" Wide, Detail "M" Approach Opening)	LF								74			43					117
77	Lane Tie, Epoxy Anchored	EA																200
78	Concrete Pavement, Non-reinforced, 8", incl. integral Detail F2 Curb & Gutter	SY								40								40
79	Concrete Drive Approach, 6"	SY								15	98		64					175
80	**<See Alternate #1 and Alternate #2 Below>**																	
81	**<See Alternate #1 and Alternate #2 Below>**																	
82	Remove and Replace Guardrail	LF										20						20
83	**<See Alternate #1 and Alternate #2 Below>**																	
84	Adjust Structure Cover (Cored)	EA	3	4	2	3	2	1										15
85	Adjust Structure Cover	EA	3	3	2	3	1											12
86	Adjust Structure Cover & Install New EJIW 5000-M3 (Restricted Cover)	EA					1											1
87	Maintenance Aggregate for Entire Project	LS																1
88	**<See Alternate #1 and Alternate #2 Below>**																	
	SUBTOTAL PAVING PAY ITEMS																	
	GENERAL PAY ITEMS																	
89	Mobilization (Max. 5% of Bid)	LS																1
90	Traffic Maintenance & Control	LS																1
91	Inspector Crew Days	DAYS																-
92	Water and Sewer Allowance	LS																1
93	Pavement Marking, Polyurea, 24 inch Stop Bar, White	LF												64	61			125
94	Pavement Marking, Polyurea, 24 inch Crosshatching, White	LF												216	204			420
95	Pavement Marking, Polyurea, 6" inch, 2' Skip Lane Marking, White	LF															36	36
96	Pavement Marking, Polyurea, 4" inch Skip Lane Marking, White	LF															125	125
97	Pavement Marking, Polyurea, 4" inch Skip Lane Marking, Yellow	LF												400	450	500	350	1,700
98	Pavement Marking, Polyurea, 4" inch, Solid Lane Marking, Yellow	LF												1573	1804	2004	1456	6,837
99	Pavement Marking, Polyurea, 6" inch, Solid Lane Marking, White	LF												1270	1644	1110	598	4,622
100	Pavement Marking, Polyurea, Lt Turn Arrow, White	EA												5	4			9
101	Pavement Marking, Polyurea, Rt Turn Arrow, White	EA															1	1
102	Pavement Marking, Polyurea, Right & Straight Arrow, White	EA													2			2
103	Pavement Marking, Polyurea, Only, White	EA													2		1	3
104	Pavement Marking, Polyurea, School, White	EA												1	1			2
105	Recessing Pavt Mkrg, Longit	LF												3243	3898	3614	2565	13,320
106	Recessing Pavt Mkrg, Transv	SF												783	894		85	1,762
107	Remove Ex. Pavt. Markings, up to 6 inch wide	LF												110			1750	1,860
108	Remove Ex. Pavt. Markings, 6 inch to 12 inch wide	LF												25				25
109	Salvage Existing Signs	LS																1
110	New Signs	SF												43	30		85	158
111	Sign Post, U-Channel	LF												60	108		108	168
112	Tree Protection, 3" Dia. Or Greater	EA																65
113	Mulch, 3"	SY																200
114	**<See Alternate #1 and Alternate #2 Below>**																	
115	**<See Alternate #1 and Alternate #2 Below>**																	
116	Inlet Filter	EA	4	2	3	4	7		2									28
	SUBTOTAL GENERAL PAY ITEMS																	
	ALTERNATE #1 - "Includes Pedestrian Barrier and Sidewalks"																	
	ALTERNATE #1 - PAVING PAY ITEMS																	
80	Concrete Sidewalk, 6"	SF								107	100	63						270
81	Concrete Sidwalk, 4"	SF								316	70	4000	965					5,351
83	Handicap Ramp Truncated Domes	SF								30	30	20						80
88	Bridge Barrier Railing, Type 6, Replacement, Modified	LF										450						450
	ALTERNATE #1 - GENERAL PAY ITEMS																	
114	Topsoil, 3"	SY																4,000
115	Sod, Class A	SY																4,000
	SUBTOTAL ALTERNATE #1 PAVING & GENERAL PAY ITEMS																	
	ALTERNATE #2 - "No Pedestrian Barrier or Associated Sidewalks"																	
	ALTERNATE #2 - PAVING PAY ITEMS																	
80	Concrete Sidewalk, 6"	SF								107	100							207
81	Concrete Sidwalk, 4"	SF								316	70							386
83	Handicap Ramp Truncated Domes	SF								30	30							60
88	Bridge Barrier Railing, Type 6, Replacement, Modified	LF																0
	ALTERNATE #2 - GENERAL PAY ITEMS																	
114	Topsoil, 3"	SY																4,560
115	Sod, Class A	SY																4,560
	SUBTOTAL ALTERNATE #2 PAVING & GENERAL PAY ITEMS																	

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.NFE-ENGR.COM

SEAL

PROJECT
City of Birmingham
Adams Road Paving Project
Contract #12-24(P)

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

PROJECT LOCATION
Part of the East 1/2 of Section 25, T.2N, R10E and the West 1/2 of Section 30, T.2N, R.11E
City of Birmingham, Oakland County, Michigan

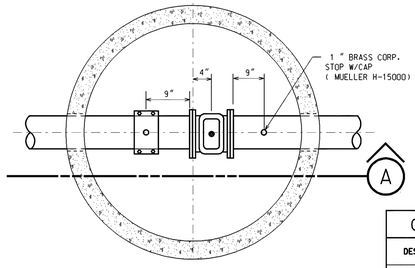
SHEET
Quantities

Know what's below Call before you dig.

DATE	ISSUED/REVISED
12-13-24	CITY REVIEW
01-09-25	BIDS
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DRAWN BY: K. Withrow
DESIGNED BY: P. Tulikangas
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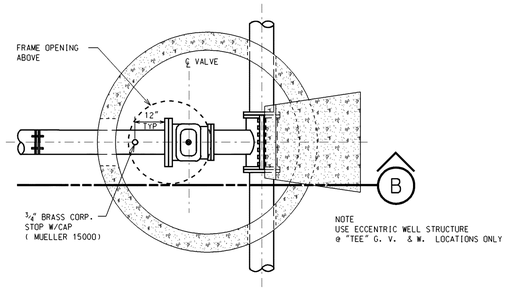
NFE JOB NO. **N788**
SHEET NO. **Q1**



GATE WELL PLAN

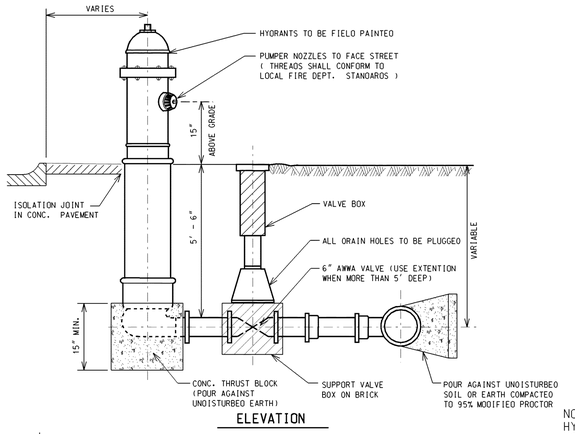
NO SCALE

GATE WELL SCHEDULE				
DESCRIPTION	DIM.	PIPE DIA. INCHES 6" & 8"	12"	16"
INSIDE DIA.	A	60"	72"	72"
WALL THICK.	B	5"	7"	7"
VALVE BLOCK THICK.	C	4"	4"	4"

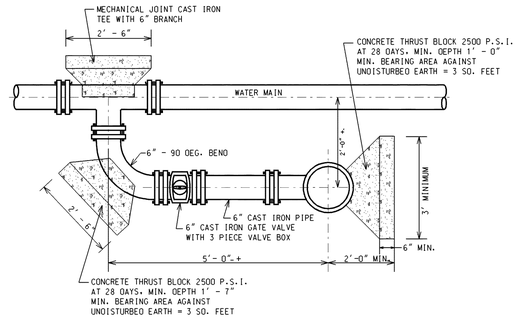


TAPPING SLEEVE, VALVE & WELL PLAN

NO SCALE



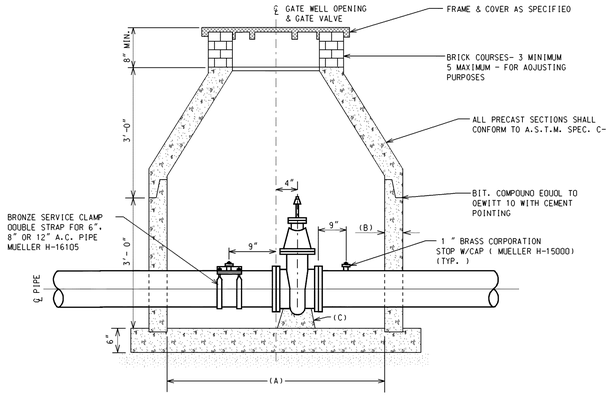
ELEVATION



"L" HYDRANT CONNECTION

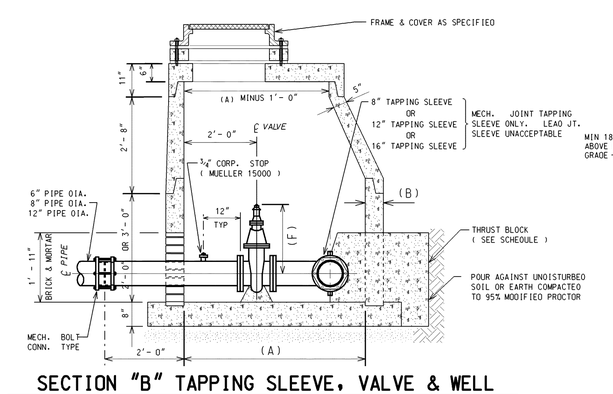
NO SCALE
W-9

NOTE: FOR CONSTRUCTION OF NEW FIRE HYDRANT TO EXISTING "LIVE" WATERMAIN, USE 6" TAPPING SLEEVE VALVE & BOX TO MAKE CONNECTION, AND DELETE "6" CAST IRON GATE VALVE WITH 3 PIECE VALVE " AS SHOWN ON DETAIL .



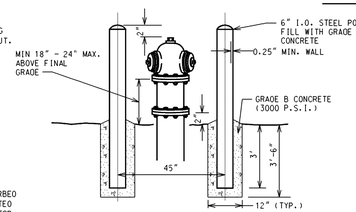
SECTION "A" GATE WELL

NO SCALE
W-1 & W-3

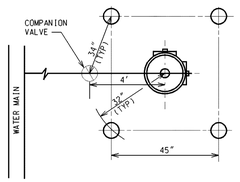


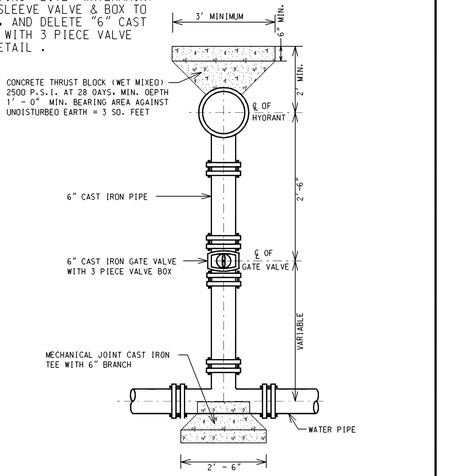
SECTION "B" TAPPING SLEEVE, VALVE & WELL

NO SCALE
W-4



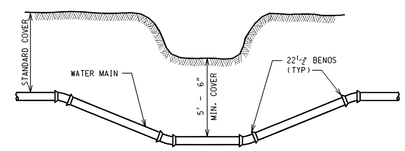
FIRE HYDRANT GUARD POSTS DETAIL





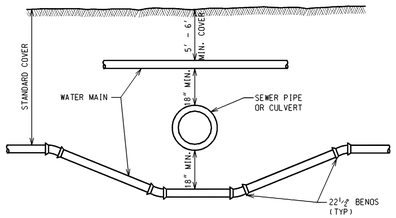
STRAIGHT HYDRANT CONNECTION

NO SCALE
W-10



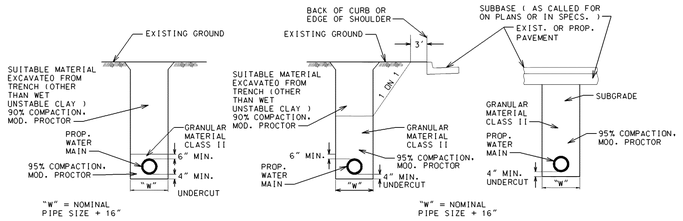
DITCH AND STREAM CROSSING

NO SCALE



SEWER OR CULVERT CROSSING

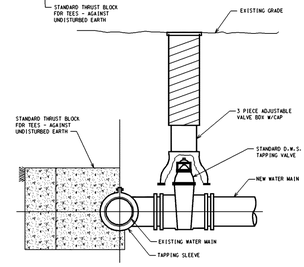
NO SCALE



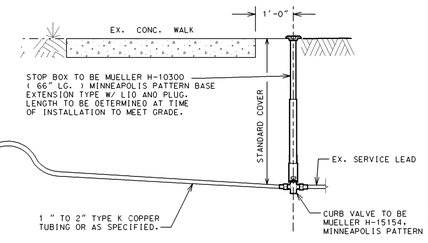
PROP. WATER MAINS NOT UNDER PAVED SURFACE

PROP. WATER MAINS UNDER PAVED SURFACE OR WITHIN INFLUENCE OF PAVED SURFACE

BEDDING DETAILS

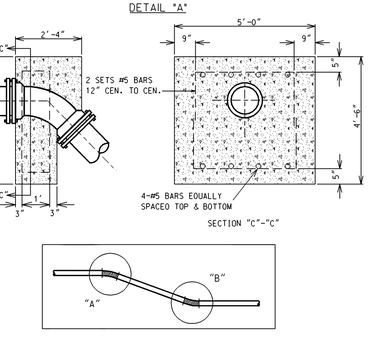


TAPPING SLEEVE & VALVE W/VALVE BOX

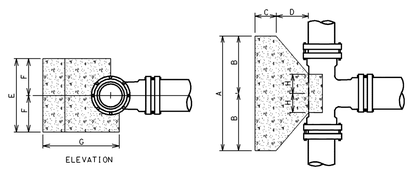


WATER SERVICE CONNECTION (TYP)

NO SCALE



VERTICAL BEND THRUST BLOCKS FOR 8"-12" MAINS



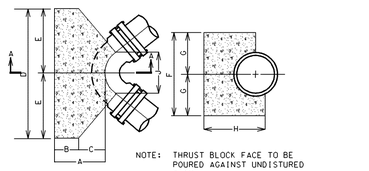
THRUST BLOCK FACE SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SCHEDULE OF THRUST BLOCK DIMENSIONS				
CODE	TEE SIZE 8"x8" 12"x8" 16"x8" 24"x8"	12"x12" 16"x12" 24"x12"	16"x16" 24"x16"	
A	3'-0"	4'-0"	5'-0"	
B	1'-6"	2'-0"	2'-6"	
C	0'-9"	0'-9"	1'-0"	
D	1'-0"	1'-4"	1'-8"	
E	2'-0"	3'-0"	4'-0"	
F	1'-0"	1'-6"	2'-0"	
G	8"	2'-2"		
	12"	2'-6"	2'-10"	
	16"	2'-10"	3'-1"	3'-8"
	24"	3'-3	3'-7"	4'-2"
H	8"	0'-6"		
	12"	0'-6"	0'-10"	
	16"	0'-6"	0'-10"	1'-0"
	24"	0'-6"	0'-10"	1'-0"

CONCRETE THRUST BLOCK FOR TEES

N.T.S.



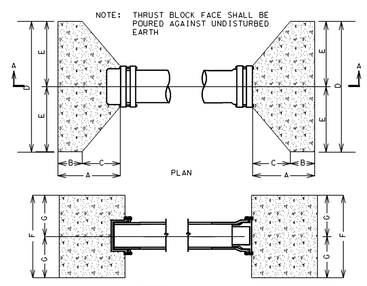
NOTE: THRUST BLOCK FACE TO BE POURED AGAINST UNDISTURED EARTH

CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SIZE	ANGLE	A MIN.	B MIN.	C	O	E	F	G	H MIN.	J
6"	45°	1'-6"	0'-9"	0'-9"	1'-6"	0'-9"	1'-6"	0'-9"	1'-8"	0'-10"
6"	90°	1'-6"	0'-9"	0'-9"	2'-0"	1'-0"	2'-0"	1'-0"	1'-8"	0'-10"
8"	45°	1'-9"	0'-9"	1'-0"	2'-4"	1'-2"	2'-0"	1'-0"	1'-11"	1'-4"
8"	90°	1'-9"	0'-9"	1'-0"	3'-4"	1'-8"	2'-6"	1'-3"	1'-11"	1'-2"
12"	22-1/2°	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	2'-0"	1'-0"	2'-0"	1'-4"
12"	45°	2'-1"	0'-9"	1'-4"	3'-6"	1'-9"	2'-6"	1'-3"	2'-4"	1'-4"
12"	90°	2'-1"	0'-9"	1'-4"	5'-6"	2'-9"	3'-0"	1'-6"	2'-4"	1'-8"
16"	22-1/2°	2'-8"	1'-0"	1'-8"	3'-4"	1'-8"	2'-6"	1'-3"	3'-0"	1'-2"
16"	45°	2'-8"	1'-0"	1'-8"	5'-4"	2'-8"	3'-0"	1'-6"	3'-0"	1'-6"
16"	90°	2'-8"	1'-0"	1'-8"	6'-0"	3'-0"	5'-0"	2'-6"	3'-0"	1'-8"
24"	90°	4'-7"	1'-0"	3'-7"	10'-0"	5'-0"	7'-0"	3'-6"	5'-4"	2'-4"

CONCRETE THRUST BLOCK FOR BENDS

N.T.S.



SECTION A - A

SIZE	A MIN.	B MIN.	C	O	E	F	G
8"	1'-11"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"
12"	2'-1"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"
16"	2'-8"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"

CONC. THRUST BLOCKS FOR PLUGS & CAPS

City of Birmingham
A Walkable Community

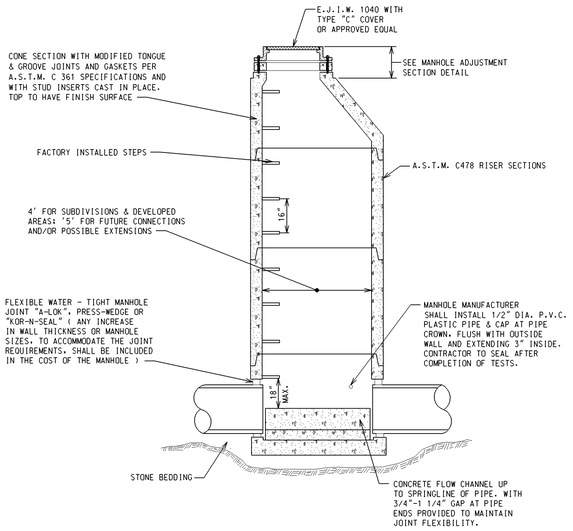
151 MARTIN STREET BIRMINGHAM, MICHIGAN 48102

WATER MAIN STANDARD DETAILS

DATE	ADDITION AND/OR REVISION

DRAWN	
DESIGNED	
APPROVED	

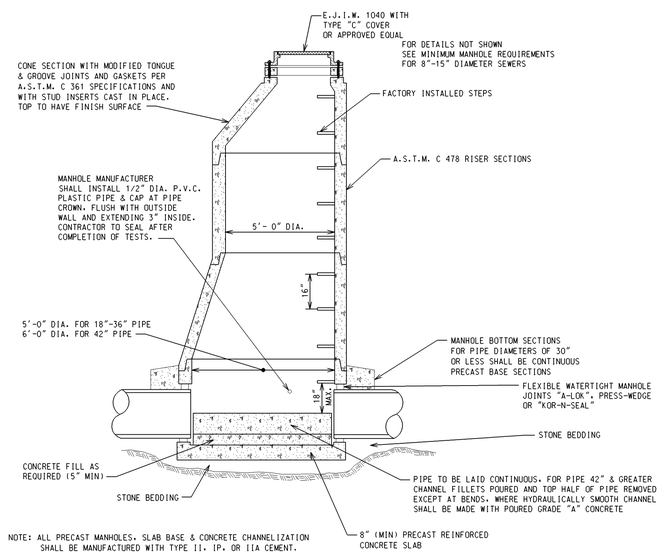
PROJECT NO.	SHEET NO.
DATE APRIL 2005	WM-1
SCALE	



NOTE: ALL PRECAST MANHOLES, SLAB BASE & CONCRETE CHANNELIZATION SHALL BE MANUFACTURED WITH TYPE II, IP, OR IIA CEMENT.

SEWER MANHOLE

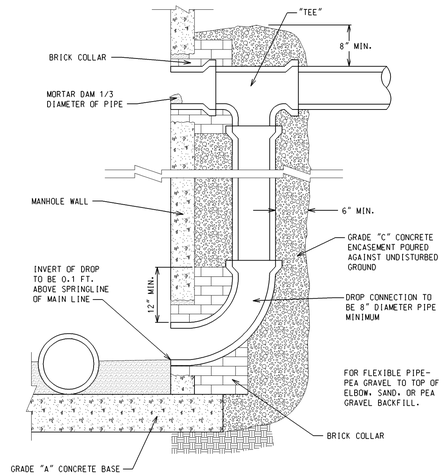
(8" THRU 15" DIA. SEWERS)



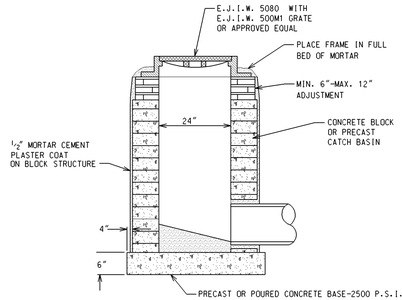
NOTE: ALL PRECAST MANHOLES, SLAB BASE & CONCRETE CHANNELIZATION SHALL BE MANUFACTURED WITH TYPE II, IP, OR IIA CEMENT.

SEWER MANHOLE

(18" THRU 42" DIA. SEWERS)

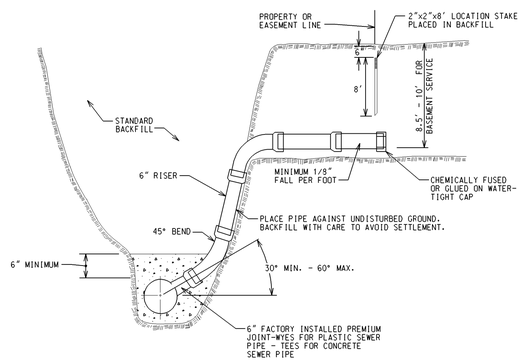


EXTERNAL DROP CONNECTION



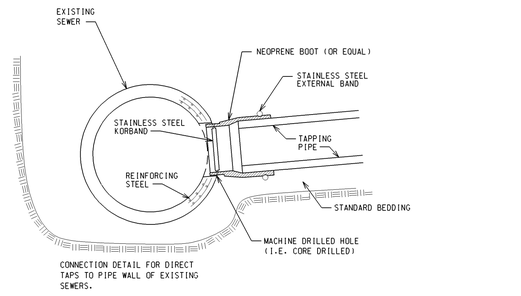
2 FT. DIAMETER INLET

NOTE:
FOR CATCH BASINS OR INLETS WITHIN YARD AREAS USE E.J.I.W. 1040 WITH TYPE "N" COVER OR APPROVED EQUAL



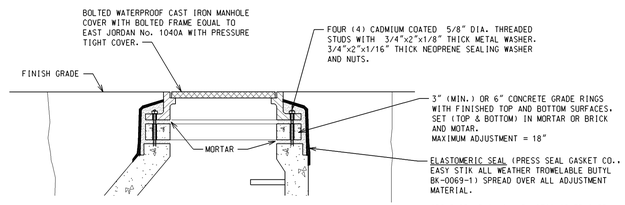
BUILDING LEAD DETAIL

0' - 15' COVER

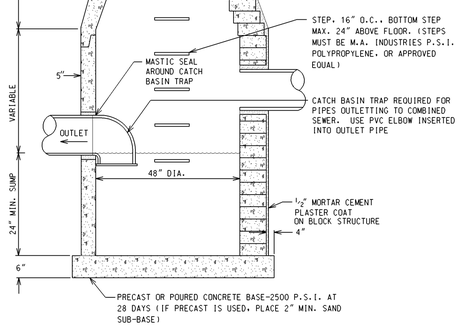


KOR-N-TEE TAP FOR CONCRETE

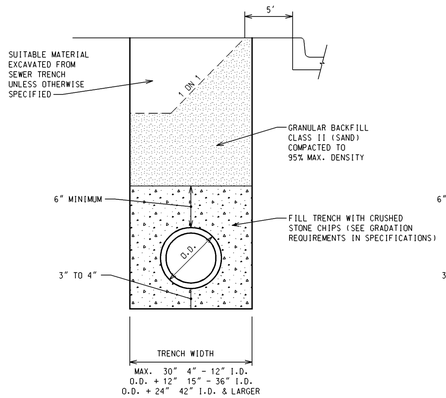
NO SCALE



SANITARY MANHOLE ADJUSTMENT SECTION DETAIL



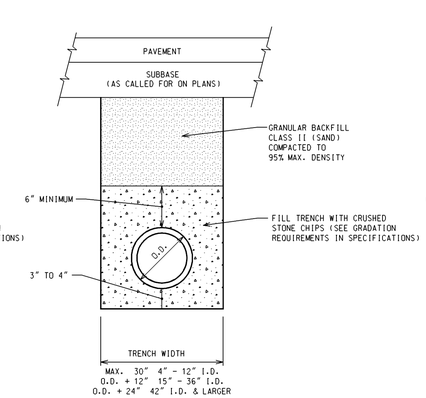
4 FT. DIAMETER CATCH BASIN

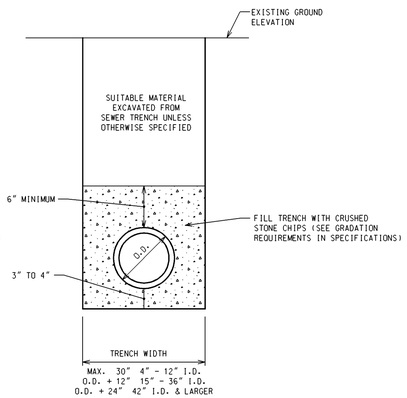


TRENCH DETAIL "A"

SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED

NOT TO SCALE

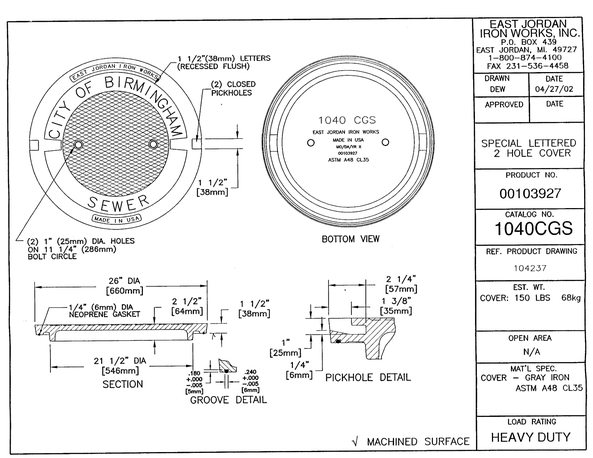




TRENCH DETAIL "B"

SEWER NOT UNDER ROAD BED

NOT TO SCALE



EAST JORDAN IRON WORKS, INC.
P.O. BOX 439
EAST JORDAN, MI. 49727
1-800-874-4100
FAX 231-536-4458

DRAWN DEW	DATE 04/27/02
APPROVED	DATE

SPECIAL LETTERED 2 HOLE COVER

PRODUCT NO. 00103927

CATALOG NO. 1040CGS

REF. PRODUCT DRAWING 104237

EST. WT. COVER: 150 LBS 68kg

OPEN AREA N/A

MAT'L SPEC. COVER - GRAY IRON ASTM A48 CL35

LOAD RATING HEAVY DUTY

City of Birmingham
A Walkable Community
151 MARTIN STREET BIRMINGHAM, MICHIGAN 48102

SEWER STANDARD DETAILS

DATE	ADDITION AND/OR REVISION

DRAWN	
DESIGNED	
APPROVED	

PROJECT NO.	SHEET NO.
DATE JANUARY 2007	
SCALE	

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Planning Department

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Leah Blizinski, City Planner

SUBJECT: Shirley & Arlington Speed Mitigation Study

INTRODUCTION:
The Multimodal Transportation Board (MMTB) has studied speed mitigation and pedestrian safety options for Shirley and Arlington and has recommended that narrowing of the vehicle travel lanes be implemented via painted striping.

BACKGROUND:
Shirley and Arlington were scheduled for sewer and water main repairs in the Capital Improvements Plan for 2024 as the underground infrastructure was approaching 100 years old. The two roads are 33' wide with no sidewalk on either side and connect between W. Maple and Lincoln. The MMTB considered road designs for Shirley and Arlington at their monthly meetings from September through December of 2023.

On December 5, 2023 (Agenda – Video), the MMTB approved a motion that recommended the City standard residential street width of 26' with 5' sidewalks on each side of the road to the City Commission.

On February 5, 2024 (Agenda – Video), the City Commission voted to leave Shirley and Arlington's right-of-way as-is. The Commission cited the uniqueness of Shirley and Arlington and the existing street trees as qualifying conditions for a deviation from the City's residential street standard.

On August 26, 2024 (Agenda – Video), the City Commission approved a motion to direct the Multi-Modal Transportation Board (MMTB) *"to review speed mitigation options for Arlington and Shirley, including but not limited to speed humps, speed boards, bump-outs, islands, and signage."* The motion was included with commentary that the new 33' wide improved road will likely result in more traffic in the neighborhood, and that an improved road surface could increase speeds. The Commissioners commented that implementing speed mitigation in the area is a health and safety issue and the City should explore NACTO recommendations for speed mitigation.

Construction on Shirley and Arlington began August 2024 and the road surface was completed at the end of November 2024. The City's Police Department began enforcement of speeding and cut-through traffic once the road was complete. Please see the attached letter from the Police Department regarding a summary of their observations. The Police Department also collected speed and vehicular count data after construction which is included in the review and presentation.

85th Percentile Speeds - Before & After 2024 Construction (mph)

	November 2023	December 2023	January 2025
Shirley	30	27	29
Arlington	32	29	28

Vehicle Counts - Before & After 2024 Construction

	November 2023	December 2023	January 2025
Shirley	4,518	3,819	2,182
Arlington	3,885	3,582	2,107

February 24, 2025 (Agenda – Video), the City Commission provided clarification on the direction given regarding Shirley and Arlington speed mitigation study. The Commission noted at that time that pedestrian safety was also a priority.

On February 6, 2025 (Agenda – Video) the MMTB moved to continue investigation on options two (narrower lanes), three (traffic calming islands), four (1-way bike lanes), and six (non-motorized curbed 2-way pathway) as presented at that meeting. They also requested city staff reach out to Beverly Hills for more information on options seven (speed humps) and eight (speed cushions).

On March 6, 2025 (Agenda – Video), after a thorough discussion regarding the feasibility of each option on Shirley and Arlington, the MMTB voted to recommend to the City Commission 'Option 2,' narrowing the vehicle travel lanes using striping.

LEGAL REVIEW:
The City Attorney has reviewed the resolution and has no objection to form or substance.

FISCAL IMPACT:
The recommended option is the lowest cost improvement of the options considered. Fiscal impact is expected to be between $13,000.00 and $18,000.00.

SUSTAINABILITY:
Speed mitigation via narrowing lane width with paint is one of the most sustainable options in this instance. Retrofitting the road design with the addition of paint is a low-cost, low-maintenance improvement that will help lower average vehicle speeds without impacting the newly constructed road infrastructure or harming the neighborhood environment.

DESIGN CONSIDERATIONS:
Consideration was given to many different design options as well as the current condition of the road. It was determined that narrowing the travel lanes via white painted striping would have the least negative impact on the surrounding neighborhood.

PUBLIC COMMUNICATIONS:
The Shirley and Arlington Speed Mitigation Study was discussed at the Multi Modal Transportation Board on February 6, 2025 and March 6, 2025. These agendas were posted online and noticed on the City Hall notice boards. The meetings were broadcast via Zoom and the City's livestreaming website. The issue of speed mitigation and pedestrian safety on Shirley and Arlington has been discussed at multiple City Commission meetings where members of the public have attended to comment and the commission has received written comments on the topic.

SUMMARY:
The Multimodal Transportation Board approved the following motion to recommend to the City Commission: "If we are evaluating Shirley and Arlington on the basis of speed mitigation, we recommend taking no action at this time, because based on the data, we do not see a problem to be addressed. However, if we are evaluating the situation post-construction of the new road for ways to enhance pedestrian experience and safety, then we would recommend implementing option number two. In the scenario of option two, we recommend that this is fully vetted with the residents for their input before a final decision." 'Option 2' is to narrow the vehicle travel lanes on Shirley and Arlington with painted striping.

ATTACHMENTS:
- Arlington and Shirley Speed Mitigation Study presentation – April 7, 2025
- Multi-Modal Transportation Board Report – March 6, 2025
- Letter to MMTB from Capt. Kearney – January 30, 2025
- Arlington and Shirley Speed Mitigation Study presentation – March 6, 2025
- Birmingham Police Department Speed Data Analysis – November 14, 2023 – January 17, 2025

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to implement "Option 2", narrowing of lanes via painted striping for safety and speed mitigation on Shirley and Arlington.

BIRMINGHAM
A WALKABLE CITY



Arlington and Shirley

Speed Mitigation Study

City Staff

Date: April 7, 2025

8D

Overview

- Historical Information/Timeline
- Options
- Narrowing of Options
- Recommendation by Multi-Modal Transportation Board to City Commission



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Historical Information/Timeline

- September 2023-December 2023: Road width design options discussed at Multi-Modal Transportation Board (MMTB), and recommendation at the December 5, 2023 meeting for 26’ street width with 5’ sidewalk on each side

- February 5, 2024: City Commission approved motion to design road to keep road width the same, 33’ wide

- August 26, 2024: City Commission assigned the MMTB to review speed mitigation options for Arlington and Shirley, “including but not limited to speed humps, speed boards, bump-outs, islands, and signage"

- Week of January 13th, 2025: Police Department collected speed data

Historical Information/Timeline

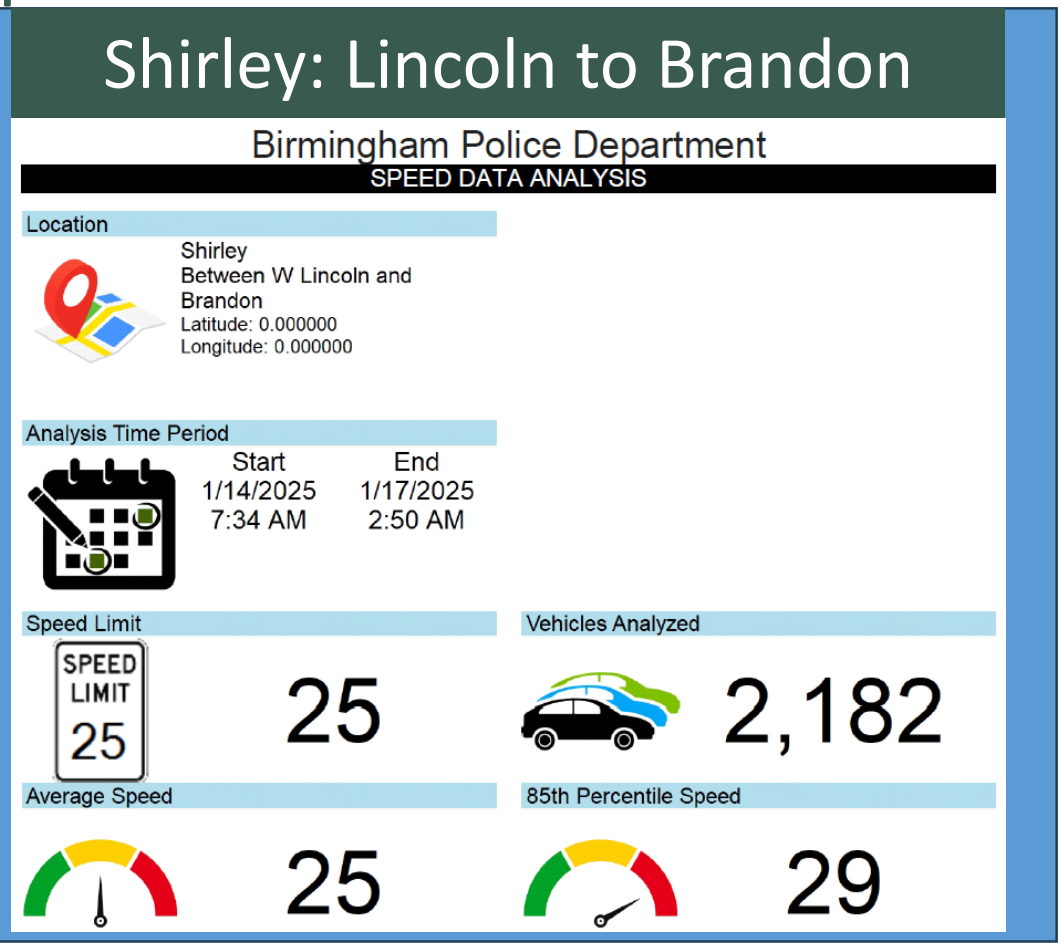
- February 6, 2025: MMTB held initial discussion of speed mitigation of Arlington and Shirley and asked that certain options be reviewed further for next meeting

- February 24, 2025: City Commission provided clarification on direction given regarding Shirley and Arlington speed mitigation study and stated that pedestrian safety was also a priority.

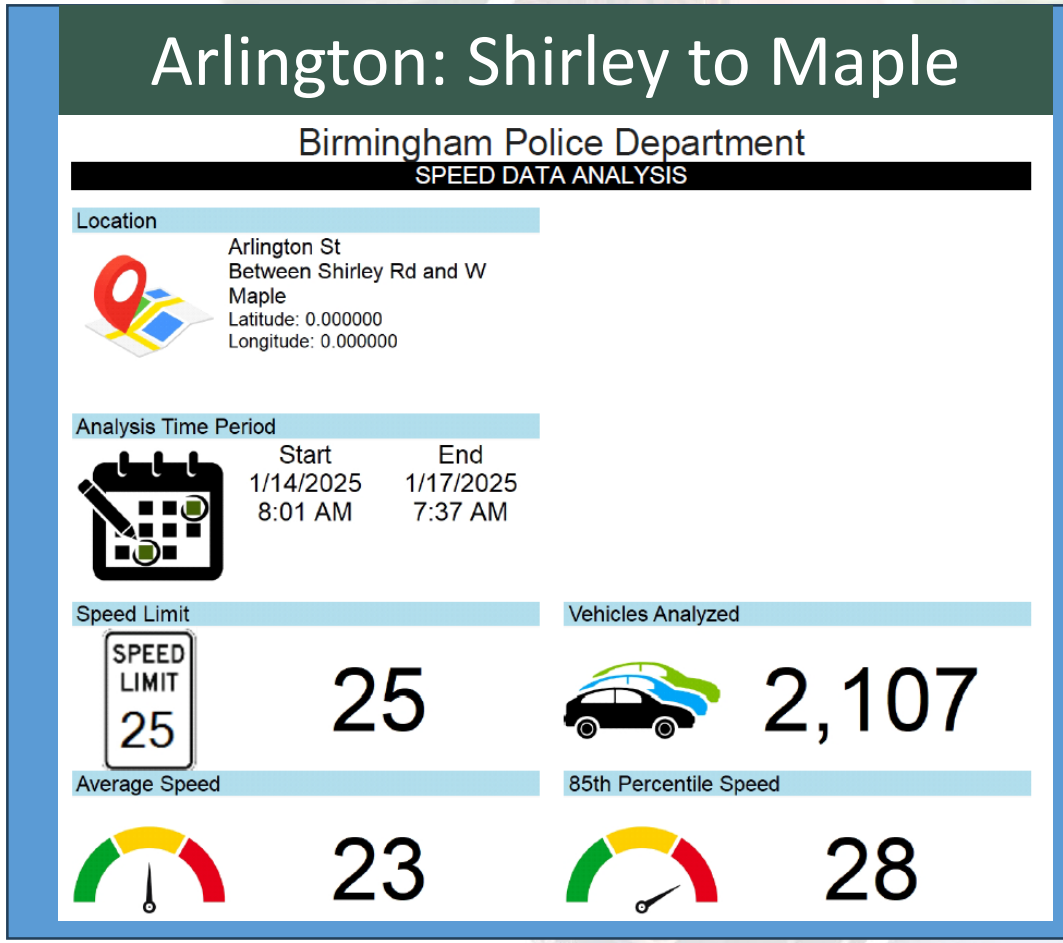
- March 6, 2025: MMTB provided a recommendation to City Commission on speed mitigation for Arlington and Shirley.

Options
Speed Data Collection

Shirley: Lincoln to Brandon



Arlington: Shirley to Maple



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The 85th percentile speed is the speed at or below which 85 percent of the drivers travel on a road segment

Options
Traffic Calming Measures

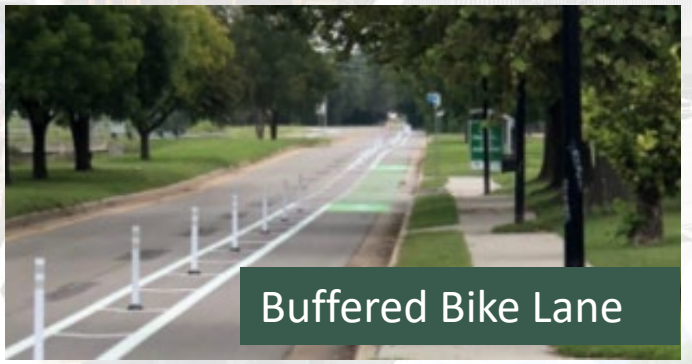
Speeds are usually influenced by the width of the street, its design, on-street parking, and the context (street trees, setbacks, sight distance)

- Signs and speed indicators
- Traffic calming islands
- Vertical Deflection (Speed humps, speed tables, raised intersections, cushions)
- Reduced street width – may slow speeds
- Added bike lanes, parking, etc. to reduce width for driving
- Chicanes or chokers
- Pedestrian crossings – midblock or raised

Note: Certain cross slopes of the Arlington and Shirley roadway exceed the 2% allowable maximum (per ADA), thus the outside portion of the lane can not be converted to sidewalk/walk path

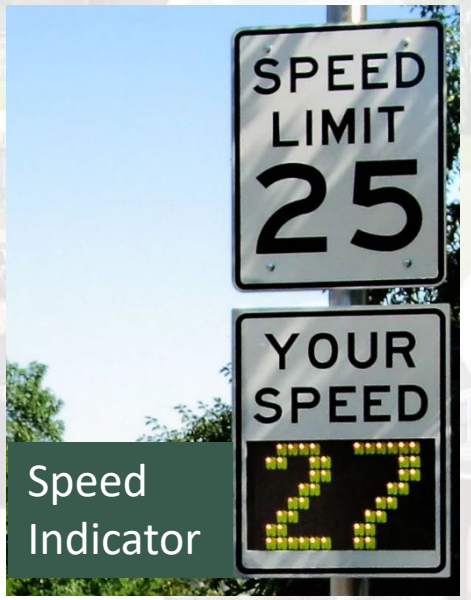

Calming Island


Speed Table


Buffered Bike Lane


Bump Outs


Choker

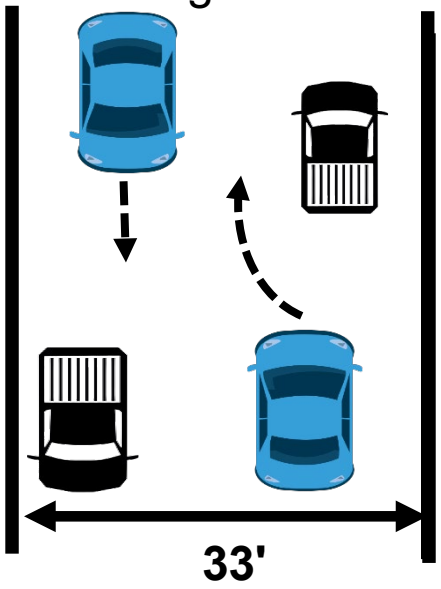


Speed Indicator

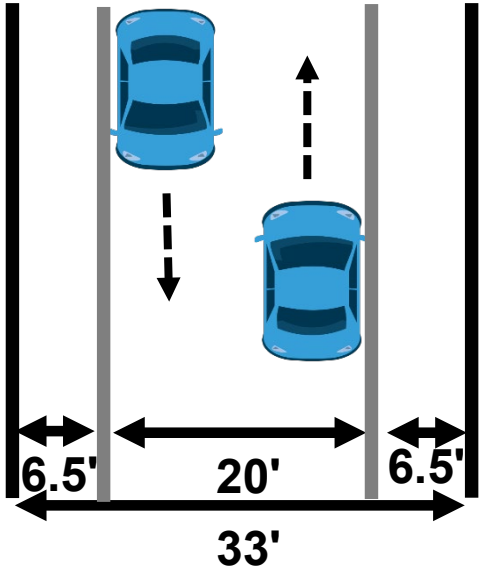
BIRMINGHAM
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Options – February 6th MMTB

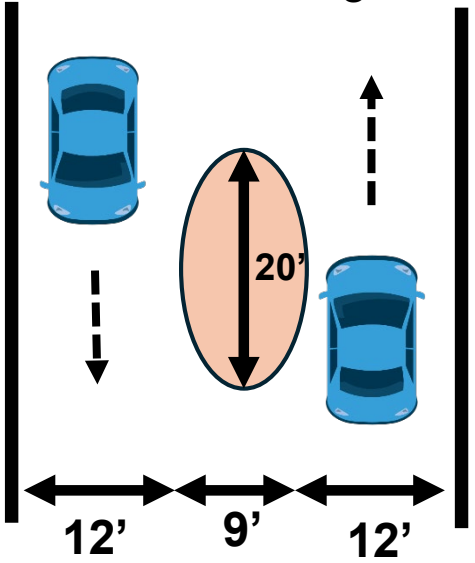
1 Existing Conditions



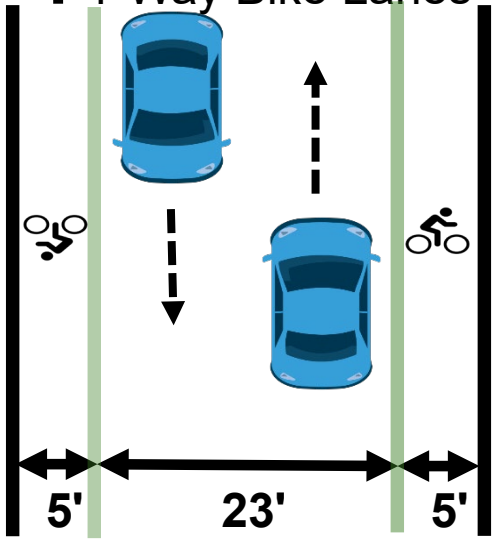
2 Narrower Lanes



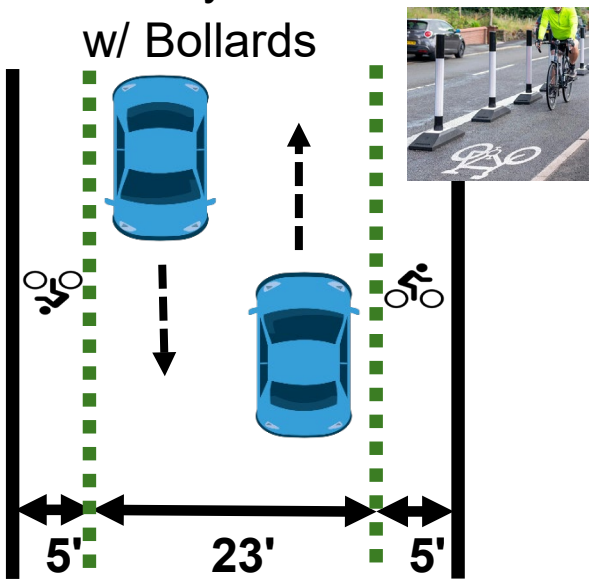
3 Traffic Calming Island



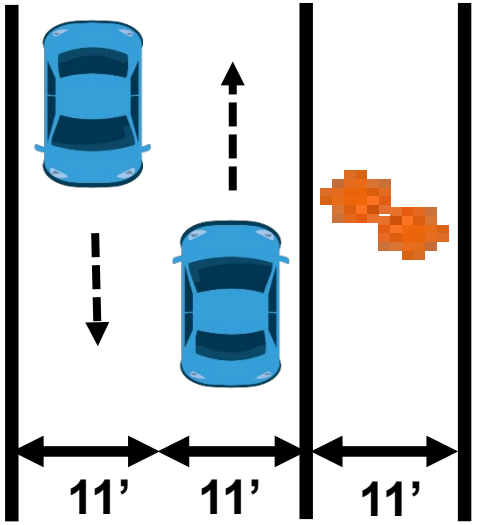
4 1-Way Bike Lanes



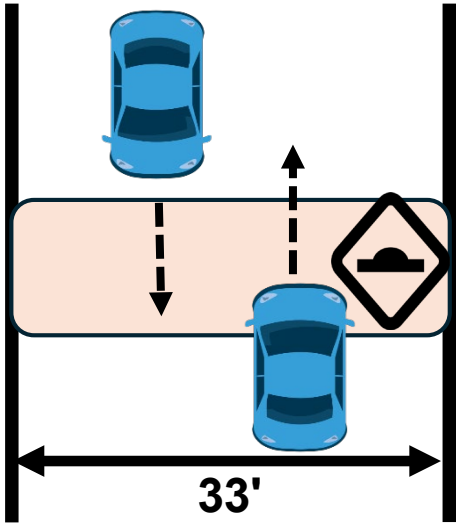
5 1-Way Bike Lanes w/ Bollards



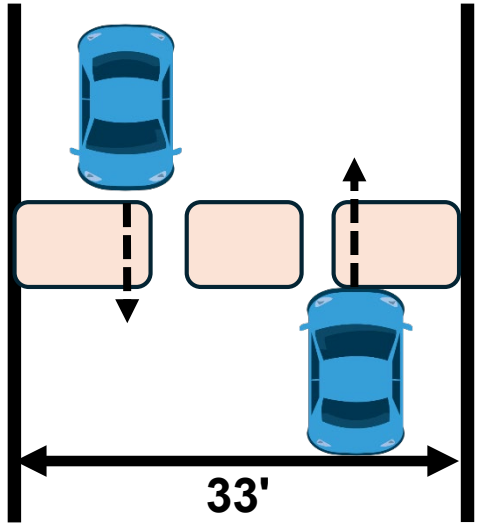
6 Nonmotorized Curbed 2-Way Pathway



7 Speed Humps*



8 Speed Cushions*



8D

Options

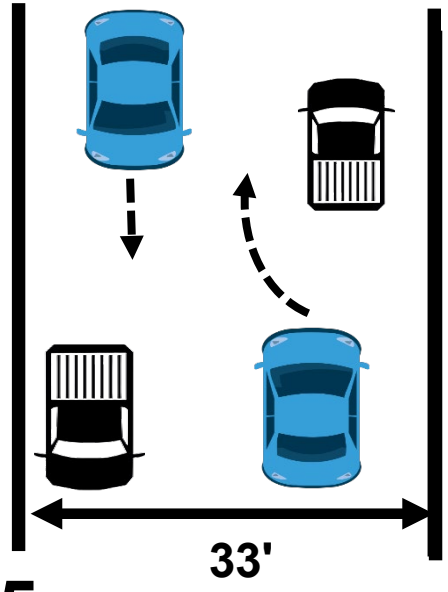
At the February 6, 2025 MMTB Meeting, the MMTB narrowed the options to the following and requested City staff provide additional information at the March 2025 meeting:

- Option 2: Narrow lanes to 20 feet by installing pavement markings
- Option 3: Install traffic calming islands
- Option 4: Install one way bike lanes
- Option 6: Install nonmotorized curbed 2-way pathway
- Follow up with the Village of Beverly Hills on their implementation of Option 7: Speed Bumps re: winter maintenance, and follow up with Fire Department and Department of Public Service for their input on Option 7: Speed Bumps and Option 8: Speed Cushions

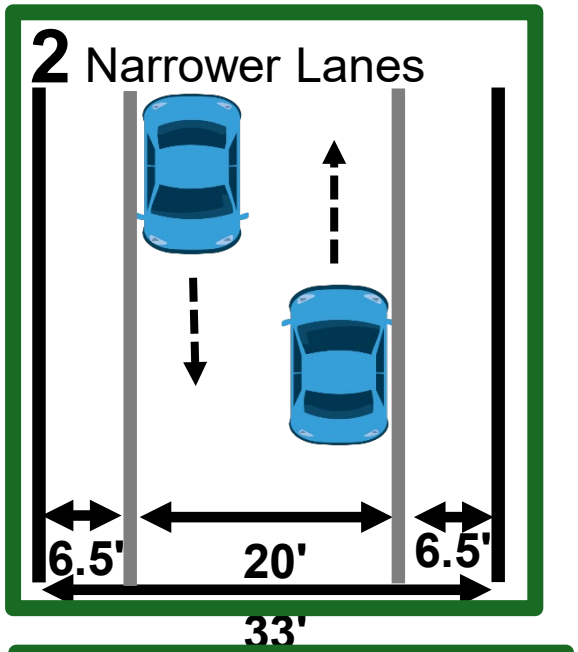
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Options – March 6th MMTB

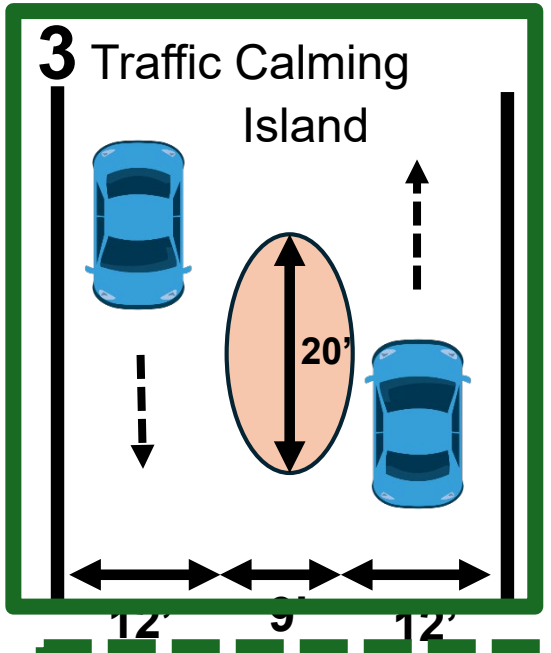
1 Existing Conditions



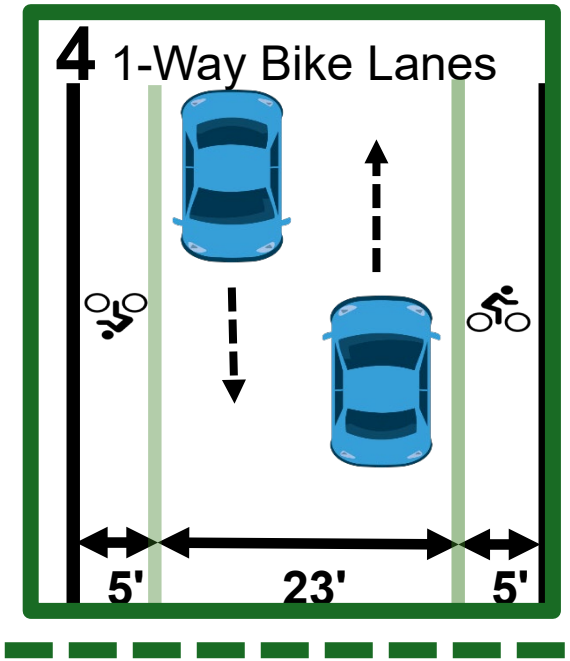
2 Narrower Lanes



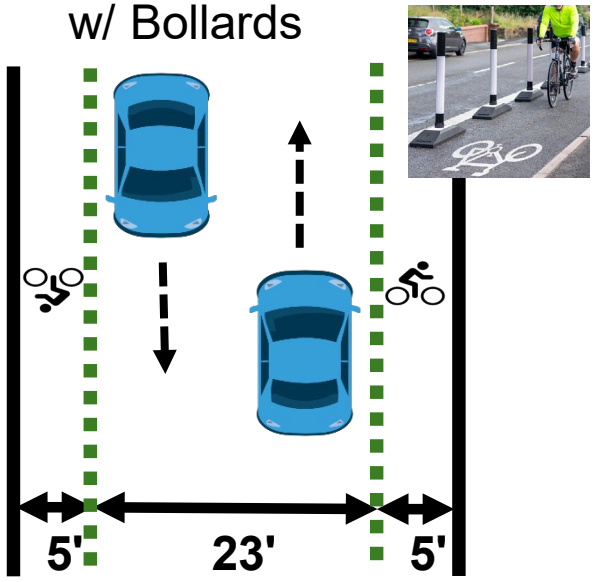
3 Traffic Calming Island



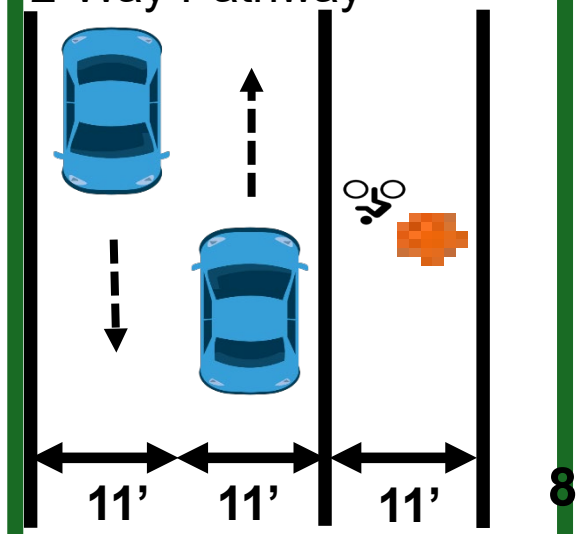
4 1-Way Bike Lanes



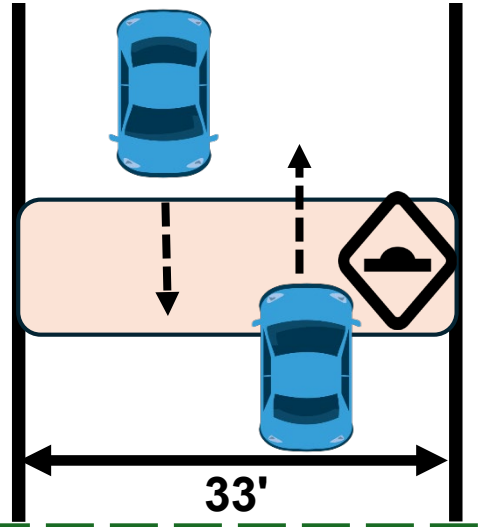
5 1-Way Bike Lanes w/ Bollards



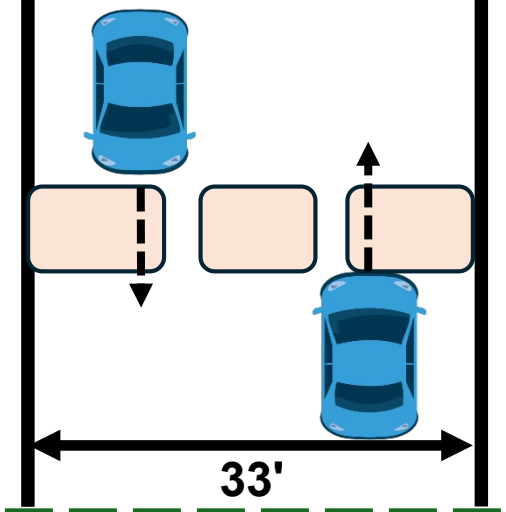
6 Nonmotorized Curbed 2-Way Pathway



7 Speed Humps*



8 Speed Cushions*



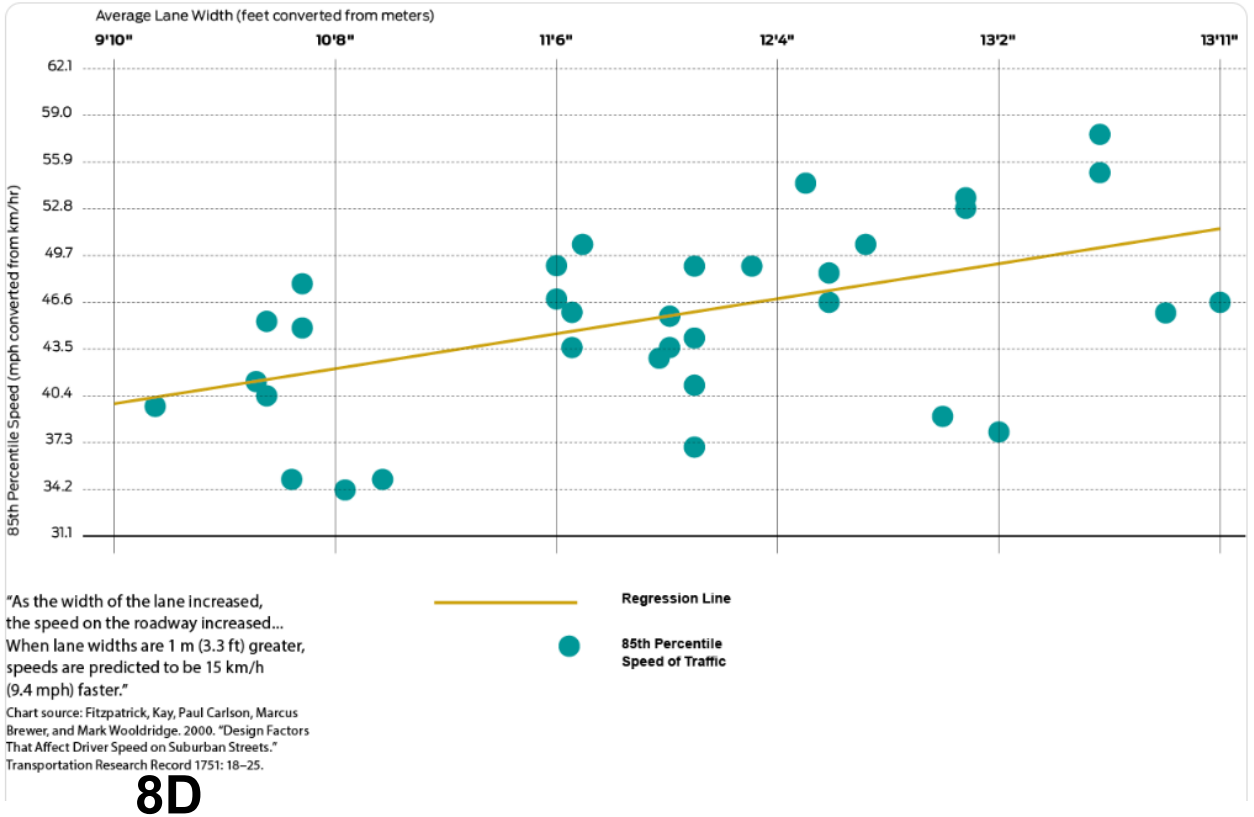
8D

Option #2 Narrow Lanes with Striping Only

- A reduction of 1-3 mph per foot of lane narrowing is considered typical
- 2-way streets with low or medium volumes of traffic may benefit from the use of a dashed center line with narrow lane widths or no center line at all.
- In such instances, a city may be able to allocate additional right-of-way to bicyclists or pedestrians, while permitting motorists to cross the center of the roadway when passing.



Wider travel lanes are correlated with higher vehicle speeds.



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Option #3 Traffic Calming Islands

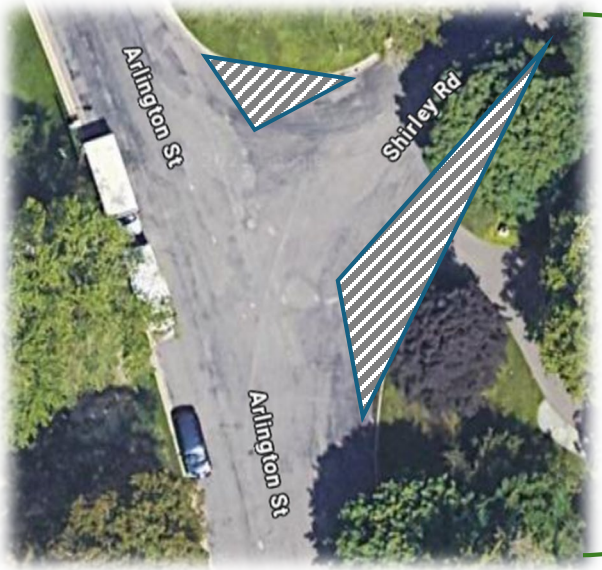
- FHWA field studies measured reductions between 1 and 8 mph for 85th percentile speeds
- Appropriate for an arterial, collector, or local street – whether in an urban or suburban setting.
- Can be appropriate for any common urban speed limit
- Can be placed at a midblock location or on the approach to an intersection
- When placed on a curve, can be effective in reducing or retaining low vehicle speeds .
- May be effective when placed immediately downstream of an intersection; island forces motorist to turn in accordance with curb radius (i.e., and not swing wide at a higher speed)





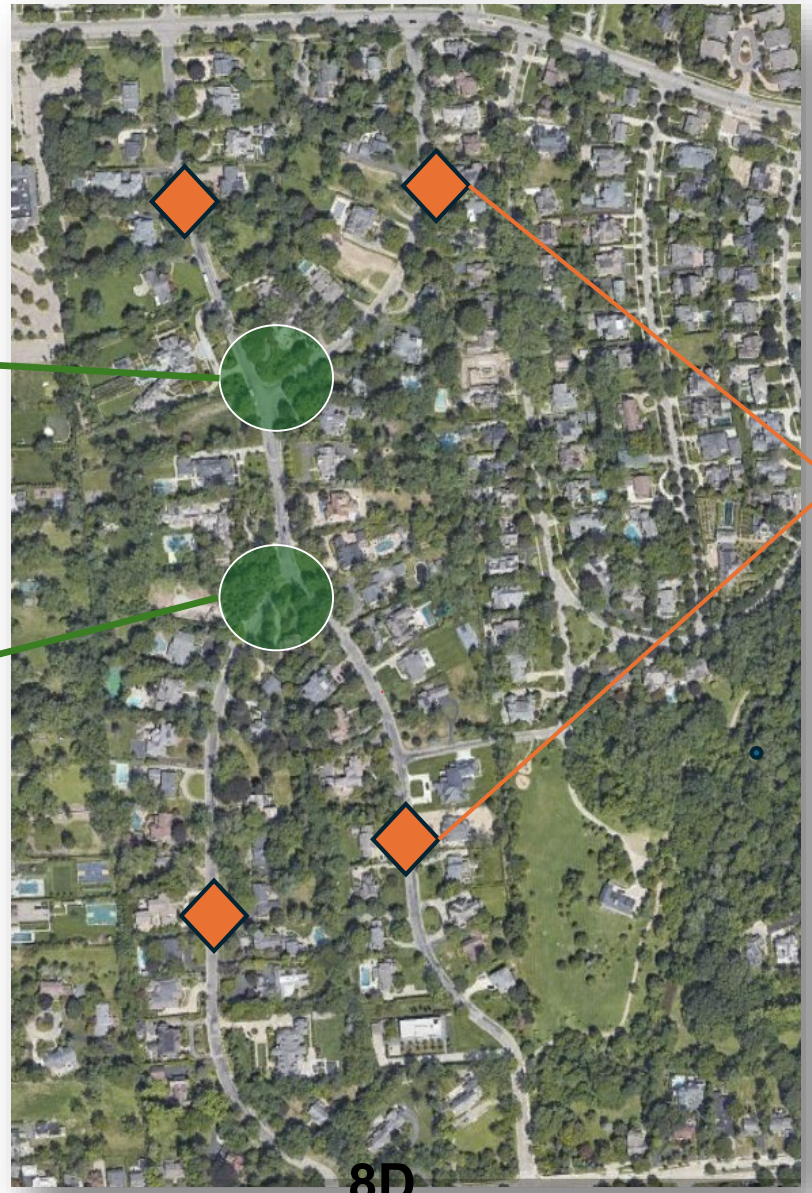
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Intersection Redesign plus Traffic Calming Islands



Painted Bump Outs





8D

Calming Islands





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Option #4 Bike Lanes/ Cycle Track

- Bike Lanes are most effective on roadways with greater than 3,000 vpd and have speeds of 25-35mphs
- The impact on vehicle speeds is would be similar to the lane narrowing option.
- Bicycles would have protected lanes
- On-Street parking would be eliminated to accommodate bike lanes.
- Potential for vehicles to park in bike lanes, reducing effectiveness and increasing the potential for vehicle/bicycle conflicts
- Cycle track would require barrier to allow for contra-flow bike travel





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Option #7/8: Speed Humps or Speed Cushions

Speed hump:

- Has parabolic top
- Space not more than 500 feet apart to achieve 25-30 MPH
- Can cause some noise





Speed cushion:

- Same as Speed Hump, with cut-outs for large vehicles (fire trucks/buses)



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Scenario Comparison

Scenario #	Traffic Calming Measure	Cost	Speed Impact	Notes
1 (Existing Conditions)	None, including no sidewalks	N/A	N/A	
2	Narrowing Traffic Lanes	$	• Potential reduction of 1-3 mph	• Accomplished with paint • Cost to install and maintain
3	Traffic Calming Island	$$	• Potential reduction of 1-8 mph at location of island.	• Parking would be impacted • Potential impact to driveway access
4/6	One-Way Bike Lanes Two-Way Cycle Track	$-$$	• Potential reduction of 1-3 mph	• Does not allow parking or curbside vehicles
7/8	Speed Humps or Speed Cushions	$$	• Speeds reduced to 15-20 mph at location of device.	• No City policy to allow traffic calming devices • Must be in series (every 300-600 ft) for effective speed management • Adds noise • May be difficult to locate with driveway density

Recommendation

Recommendation to City Commission from Multi-Modal Transportation Board:

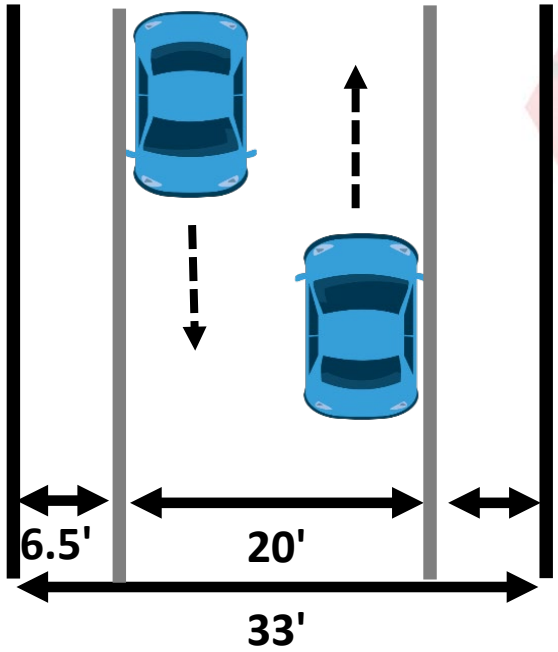
“If we are evaluating Shirley and Arlington on the basis of speed mitigation, we recommend taking no action at this time, because based on the data, we do not see a problem to be addressed. However, if we are evaluating the situation post-construction of the new road for ways to enhance pedestrian experience and safety, then we would recommend implementing option number two. In the scenario of option two, we recommend that this is fully vetted with the residents for their input before a final decision.”

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Recommendation

Option No. 2: Narrow lanes to 20 feet by install pavement markings

2 Narrower Lanes



Cost: $13,000.00 to $18,000.00 for installation, plus future maintenance

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MEMORANDUM

Planning Division

DATE: March 6, 2025

TO: Multi-Modal Transportation Board

FROM: Leah Blizinski, City Planner
Ryan Kearney, Police Lieutenant
Melissa Coatta, Engineering Department
With assistance from:
Brad Strader, C2G
Julie Kroll, Fleis & Vandenbrink

SUBJECT: Shirley & Arlington Speed Mitigation Study

INTRODUCTION

On August 26, 2024, the City Commission approved a motion to direct the Multi-Modal Transportation Board (MMTB) *"to review speed mitigation options for Arlington and Shirley, including but not limited to speed humps, speed boards, bump-outs, islands, and signage."* The motion was included with commentary that the new 33' wide improved road will likely result in more traffic in the neighborhood, and how an improved road surface could increase speeds. The Commissioners commented that implementing speed mitigation in the area is a health and safety issue and the City should explore NACTO recommendations for speed mitigation.

On February 6, 2025 (Agenda – Video), the Multi Modal Transportation board approved a motion to continue investigation on options two, three, four, and six as presented at that meeting and also to reach out to Beverly Hills for more information on options seven and eight. The board indicated that it would be helpful to see the genesis of the speed mitigation requests from City Commission and residents. The information included in this packet reflects additional information as requested. The below table includes key dates for action and discussion on the topic at the City Commission level as well as links to the video clips of the action for reference.

Action	Links
City Commission discusses the assignment of speed mitigation options for Arlington and Shirley.	August 12, 2024 (Agenda – Video)

City Commission passes a formal motion to assign the Multi-Modal Board to review speed mitigation options for Arlington and Shirley, including but not limited to speed humps, speed boards, bump outs, islands, and signage.	August 26, 2024 (Agenda – Video)
City Commission receives in agenda packet an email communication signed by several residents asking for speed mitigation measures	December 9, 2024 (Agenda)
City Commission comments regarding Shirley & Arlington relating to a communication they received from a resident:	December 16, 2025 (Agenda – Video)
City Commission received public comment relating to the reduction of speeds and increased traffic:	January 13, 2025 (Agenda – Video)
City Commission provided clarification on direction given regarding Shirley & Arlington speed mitigation study:	February 24, 2025 (Agenda – Video)

BACKGROUND

Shirley & Arlington was scheduled for sewer and water main repairs in the Capital Improvements Plan for 2024 as the underground infrastructure was approaching 100 years old. The two roads are 33' wide with no sidewalk on either side and connect between W. Maple and Lincoln. The MMTB considered road designs for Shirley and Arlington at their monthly meetings from September through December of 2023. The concepts considered were narrowed down to four options which included leave the right-of-way as-is, implement the City standard of a 26' wide road and new sidewalks, or a sidewalk on one side of the street for the third and fourth options.

On December 5, 2023, the Multi-Modal Transportation Board held a public hearing on the street width of Shirley & Arlington to make a recommendation to the City Commission. City staff recommended that the City implement the City standard of a 26' wide road, a new curb lawn with 250-300 new trees, and a 5' sidewalks on each side of the street. Narrowing the road would help reduce vehicular speed and cut through traffic while creating a safe space designated for pedestrians, strollers, children, wheelchairs, and people with different abilities on each side of the street. After the staff presentation and public comment, the Multi-Modal Transportation Board approved a motion that recommended the City standard residential street width of 26' with 5' sidewalks on each side of the road to the City Commission.

On January 8, 2024, staff presented on the infrastructure and road width recommendations for the scheduled infrastructure project. A decision was postponed and a walking tour of Shirley and Arlington was held on January 30, 2024.

On February 6, 2024, the City Commission determined to leave Shirley & Arlington's right-of-way as-is and not implement the City's residential street standard. After replacement of the sewer and water main, Shirley & Arlington's road would be put back as a 33' wide improved street. The City Commission cited the uniqueness of Shirley & Arlington and the existing street trees as qualifying conditions for a deviation from the City's residential street standard.

Construction on Shirley & Arlington began August of 2024 and the road surface was completed in the end of November 2024. The City's Police Department began enforcement of speeding and cut-through traffic once the road was complete. Please see the attached letter from the Police Depart regarding a summary of observations. The Police Department also collected speed and vehicular count data after construction which is included in the review and presentation.

The following is a continuation of the review of potential ways the City could pursue designs for Shirley and Arlington to mitigate vehicular speed to promote health and safety, as directed by the City Commission. Staff has provided various suggestions to help reduce speeds in a residential area for the MMTB to consider. Staff recommends that the MMTB consider the suggestions during this review and continue to develop preferences to examine further at future meetings. Given the variety of methods for speed calming, staff also recommends sorting preferences in immediate, temporary, and long term solutions.

Beginning with recorded speeds and vehicle counts, staff evaluated before and after data from the Shirley & Arlington road construction from November and December of 2023 and post construction data from January of 2025. Upon review of the before and after data, the City has yet to see a drastic increase in speeds. It is also of note that the vehicle counts from January 2025 are much lower than the pre-construction data points. The City's traffic consultants have commented that lower traffic volumes January-March is not uncommon.

85th Percentile Speeds - Before & After 2024 Construction (mph)

	November 2023	December 2023	January 2025
Shirley	30	27	29
Arlington	32	29	28

Vehicle Counts - Before & After 2024 Construction

	November 2023	December 2023	January 2025
Shirley	4,518	3,819	2,182
Arlington	3,885	3,582	2,107

It is of note that the MMTB reviewed a potential policy for vertical deflection variations in October 2022 and November 2022 and recommended not to pursue such a policy due to the lack of roads in Birmingham meeting typical criteria used for best practices by other cities. The MMTB approved a motion *"to recommend to the City Commission that the City consider alternative traffic calming mitigations other than speed humps to reduce speeds in areas where speed limits are commonly exceeded."* This recommendation was summarized by the Police Department in the City Manager's report February 2023 (pg. 730).

RECOMMENDATION
Discuss options and indicate speed mitigation preferences for staff to review more in-depth at the following meeting.

SAMPLE MOTION LANGUAGE

Motion to recommend to the City Commission that option _____ be implemented for safety and speed mitigation on Shirley and Arlington.

OR

Motion to table this item to _____ to allow for springtime data collection and further evaluation by the Multimodal Transportation Board.

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January 30, 2025

Multi-Modal Transportation Board,

In December 2024, the Police Department conducted 66 radar enforcement setups on Arlington and Shirley during rush hours, each lasting approx. 30 - 45 minutes. Typical setups resulted in the highest speeds of approx. 1 - 2 vehicles traveling between 28 - 32 MPH. Overall, officers conducted eight traffic stops on Shirley, resulting in two tickets, one written warning, and five verbal warnings, with a top speed of 35 MPH (1 vehicle). Seven traffic stops were made on Arlington, resulting in four tickets, two written warnings, and one verbal warning, with a top speed of 34 MPH (1 vehicle).

Below are examples of vehicle speeds from five radar enforcement setups on each street. The highest speeds recorded are listed in red.

Shirley—44 minutes: 19, 27, 20, 19, 19, 26, 20, 26, 25, 29, 13, 14, 24, 18, 18, 18, 23.

Shirley—36 minutes: 17, 18, 26, 27, 27, 25, 24, 22, 28, 25, 26, 14, 25, 14, 17, 20, 21, 18, 20, 26, 26, 22, 30, 24, 30, 24, 24, 21, 24, 22, 26.

Shirley—22 minutes: 27, 21, 26, 24, 27, 16, 15, 24, 27, 26, 22, 30, 19, 28, 28.

Shirley—30 minutes: 28, 15, 23, 22, 24, 22, 18, 23, 25, 21, 27, 22, 25, 28, 20, 26, 23, 23, 27, 25, 20, 22, 24, 27.

Shirley—47 minutes: 24, 27, 31, 24, 27, 19, 19, 19, 18, 22, 27, 20, 18, 20, 26, 28, 20, 20, 31.

Arlington—30 minutes: 22, 23, 26, 22, 23, 27, 28, 26, 23, 29, 24, 22, 22, 25, 18, 32.

Arlington—30 minutes: 30, 33, 22, 29, 24, 19.

Arlington—36 minutes: 29, 12, 22, 26, 17, 30, 21, 29, 26.

Arlington—41 minutes: 23, 34, 26.

Arlington—38 minutes: 14, 26, 22, 21, 29, 20, 28, 27, 19

Ryan Kearney
Police Captain

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Arlington & Shirley

Speed Mitigation Study

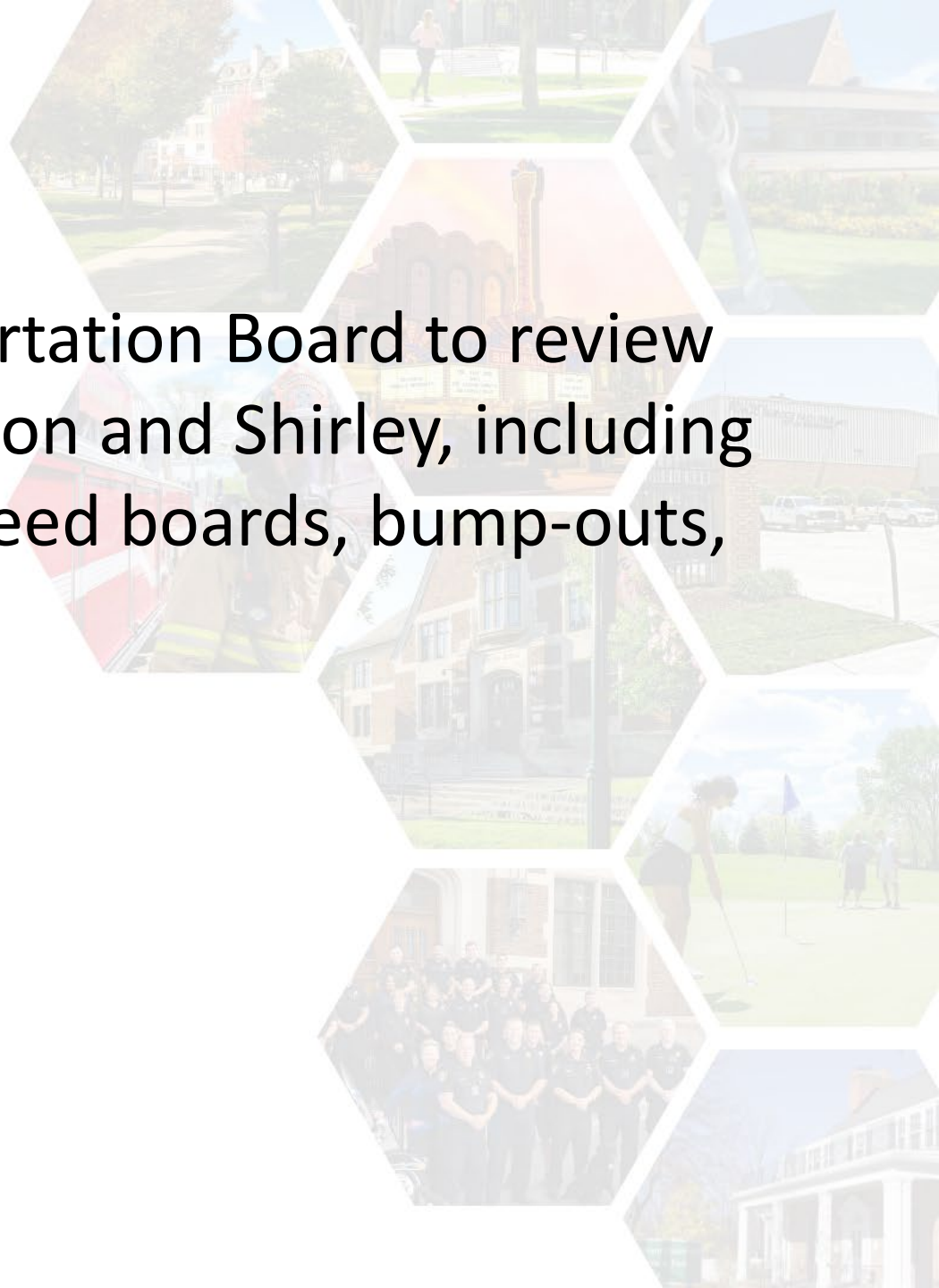
Multi-Modal Transportation Board

Presented by: City Staff

Date: 3.6.2025

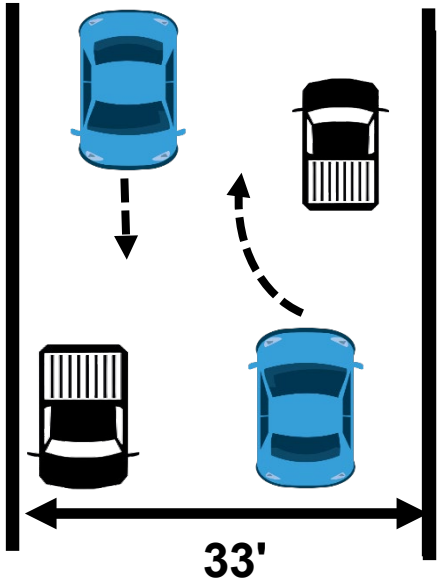
8D

City Commission motion …
"to assign the Multi-Modal Transportation Board to review speed mitigation options for Arlington and Shirley, including but not limited to speed humps, speed boards, bump-outs, islands, and signage."
– August 26, 2024

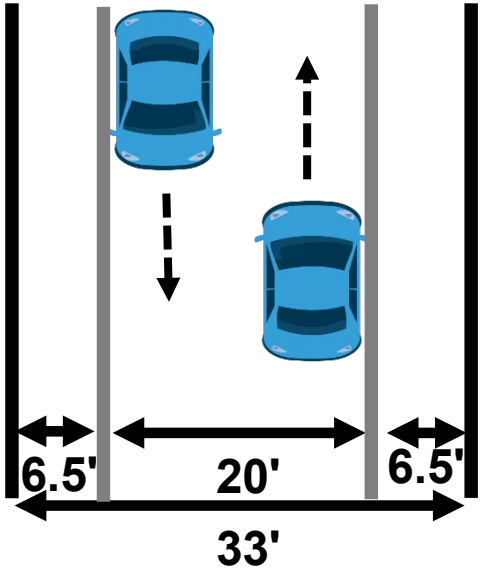


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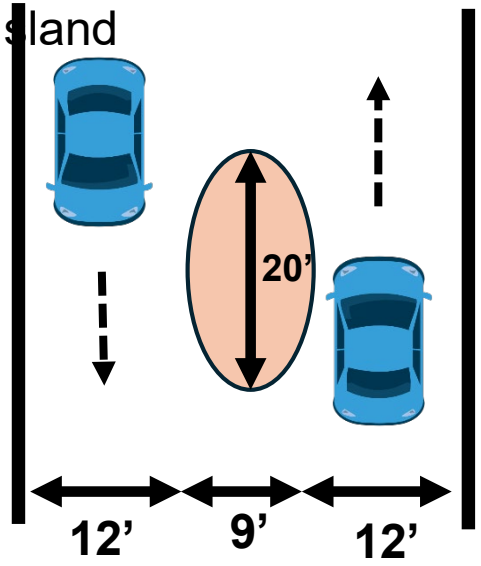
1 Existing Conditions



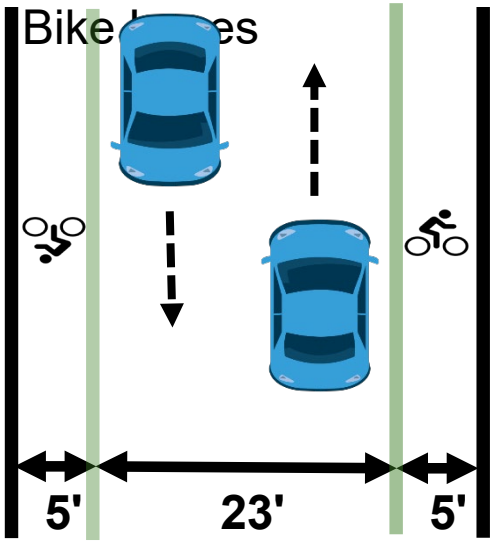
2 Narrower Lanes



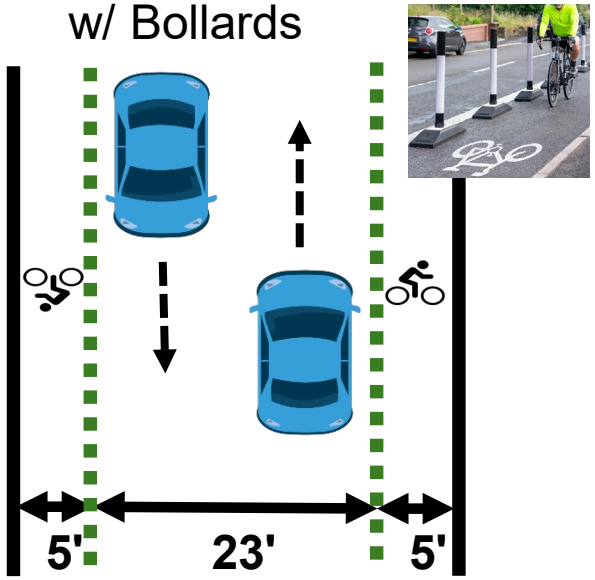
3 Traffic Calming Island



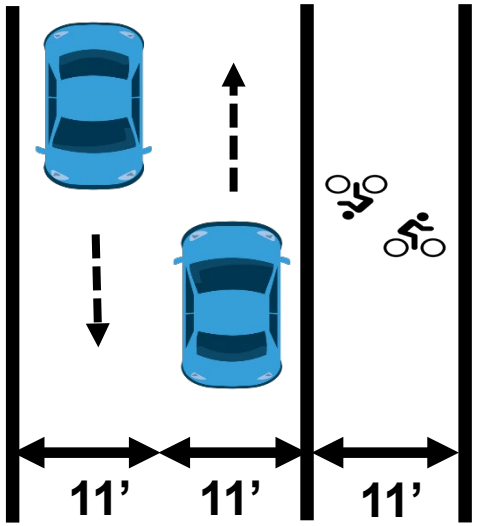
4 1-Way Bike Lanes



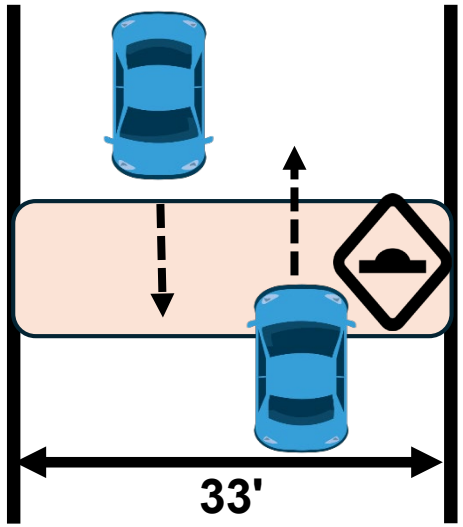
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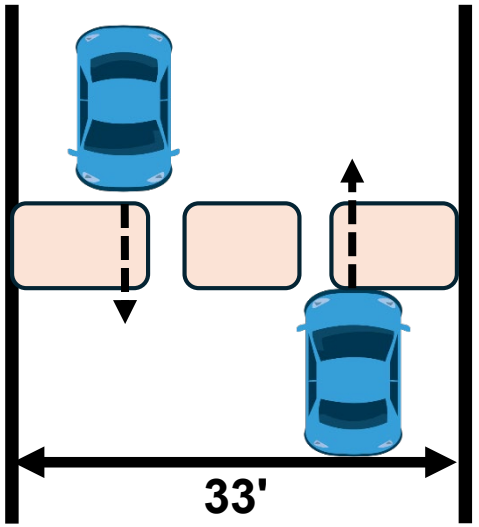
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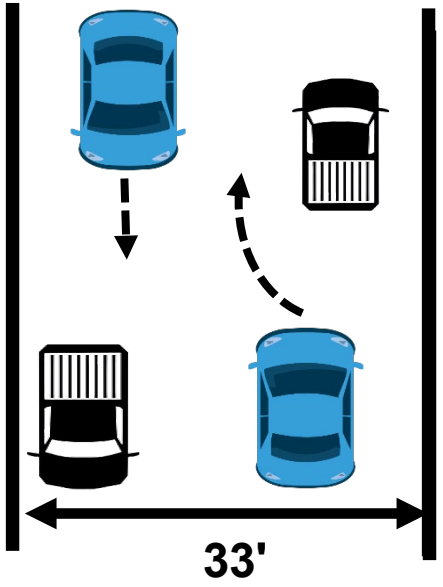
7 Speed Humps*



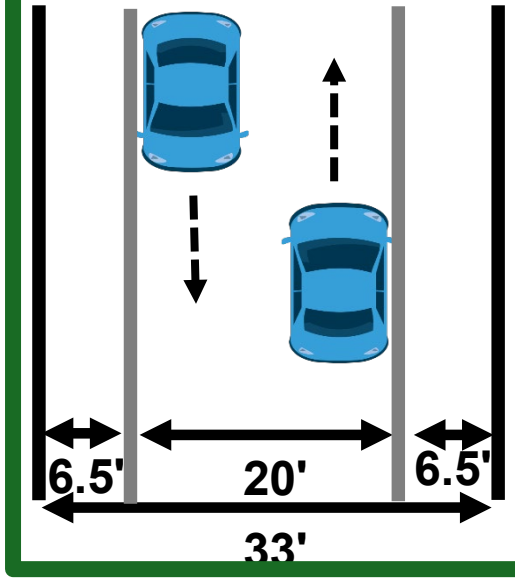
8 Speed Cushions*



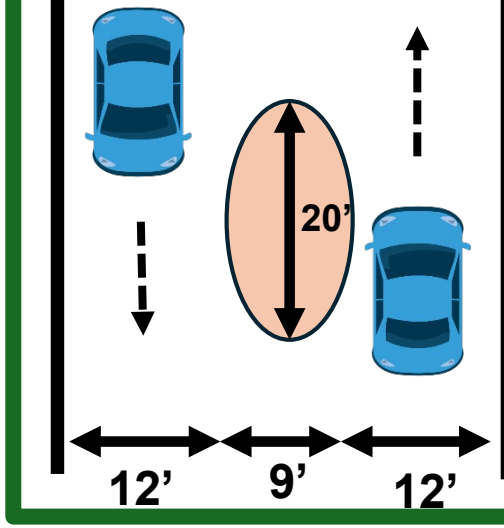
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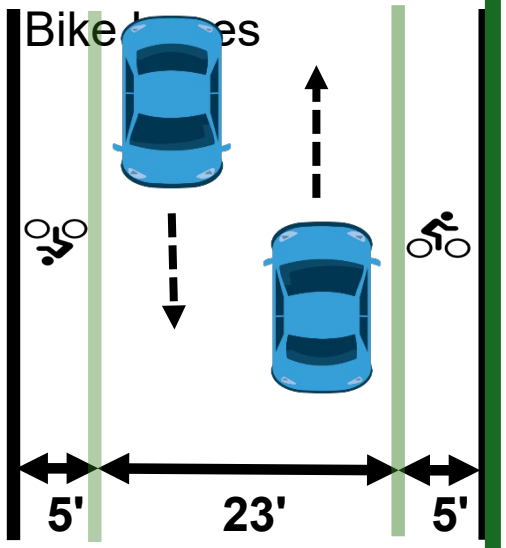
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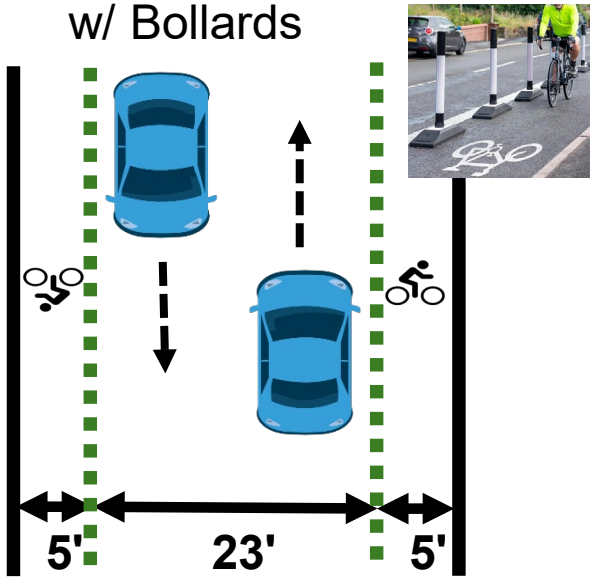
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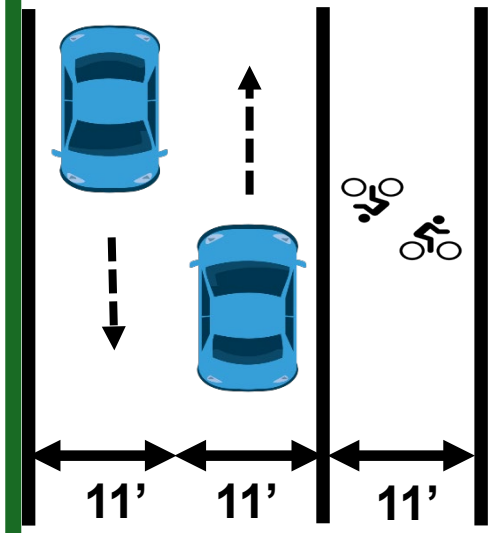
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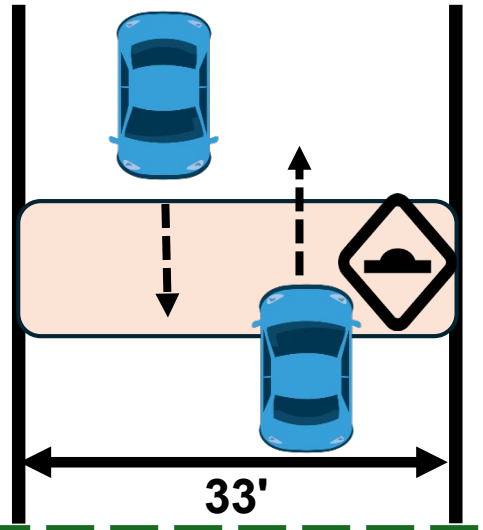
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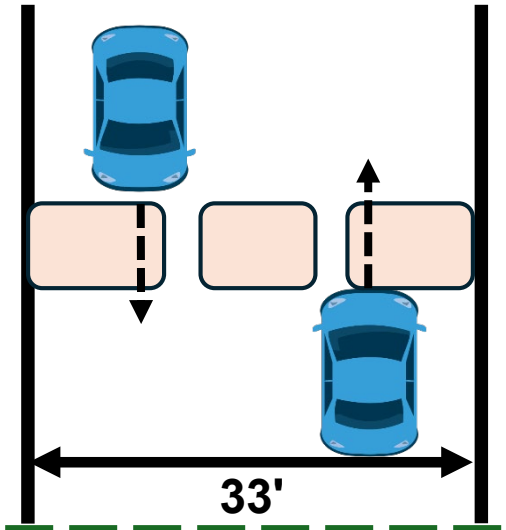
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7 Speed Humps*



8 Speed Cushions*



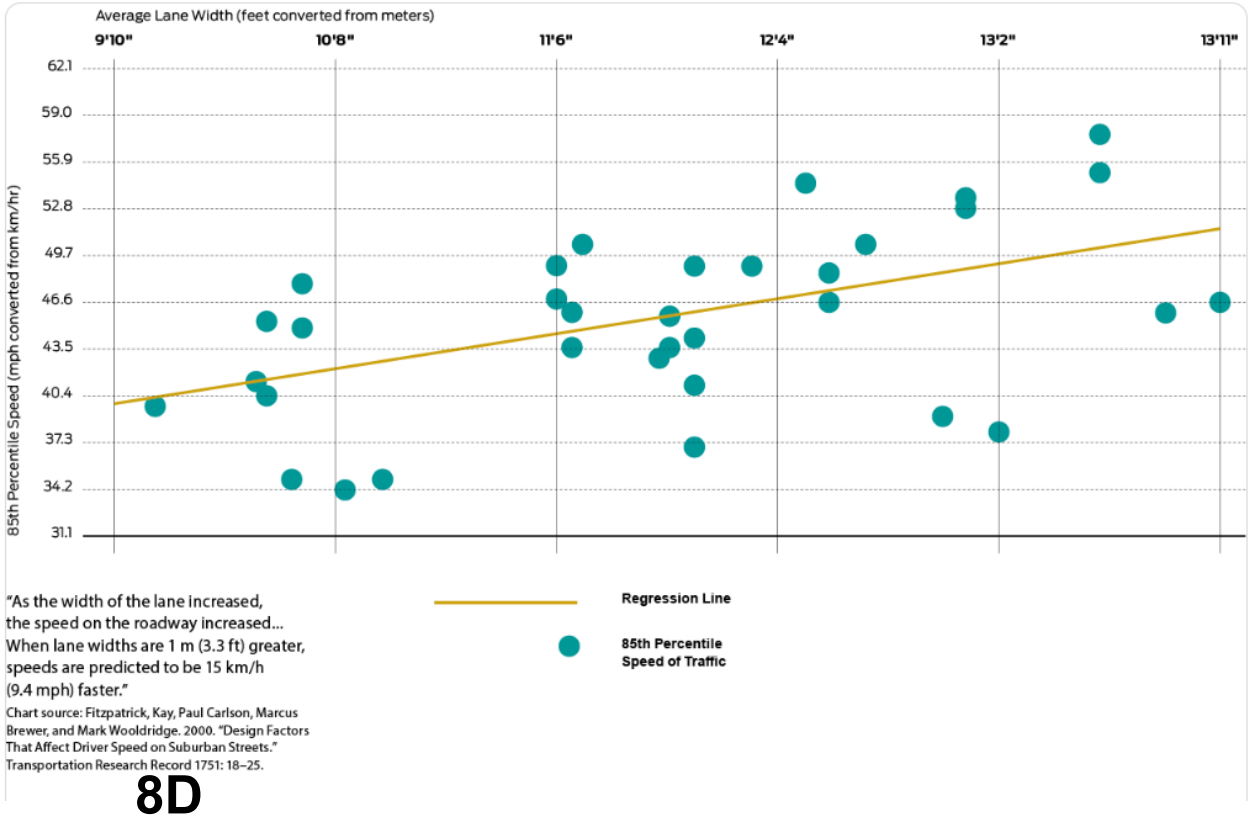
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Option #2 Narrow Lanes with Striping Only

- A reduction of 1-3 mph per foot of lane narrowing is considered typical
- 2-way streets with low or medium volumes of traffic may benefit from the use of a dashed center line with narrow lane widths or no center line at all.
- In such instances, a city may be able to allocate additional right-of-way to bicyclists or pedestrians, while permitting motorists to cross the center of the roadway when passing.



Wider travel lanes are correlated with higher vehicle speeds.



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Option #3 Traffic Calming Islands

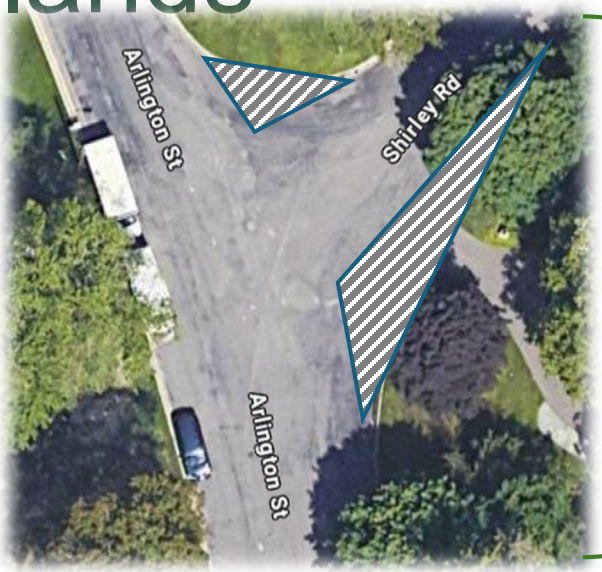
- FHWA field studies measured reductions between 1 and 8 mph for 85th percentile speeds
- Appropriate for an arterial, collector, or local street – whether in an urban or suburban setting.
- Can be appropriate for any common urban speed limit
- Can be placed at a midblock location or on the approach to an intersection
- When placed on a curve, can be effective in reducing or retaining low vehicle speeds .
- May be effective when placed immediately downstream of an intersection; island forces motorist to turn in accordance with curb radius (i.e., and not swing wide at a higher speed)





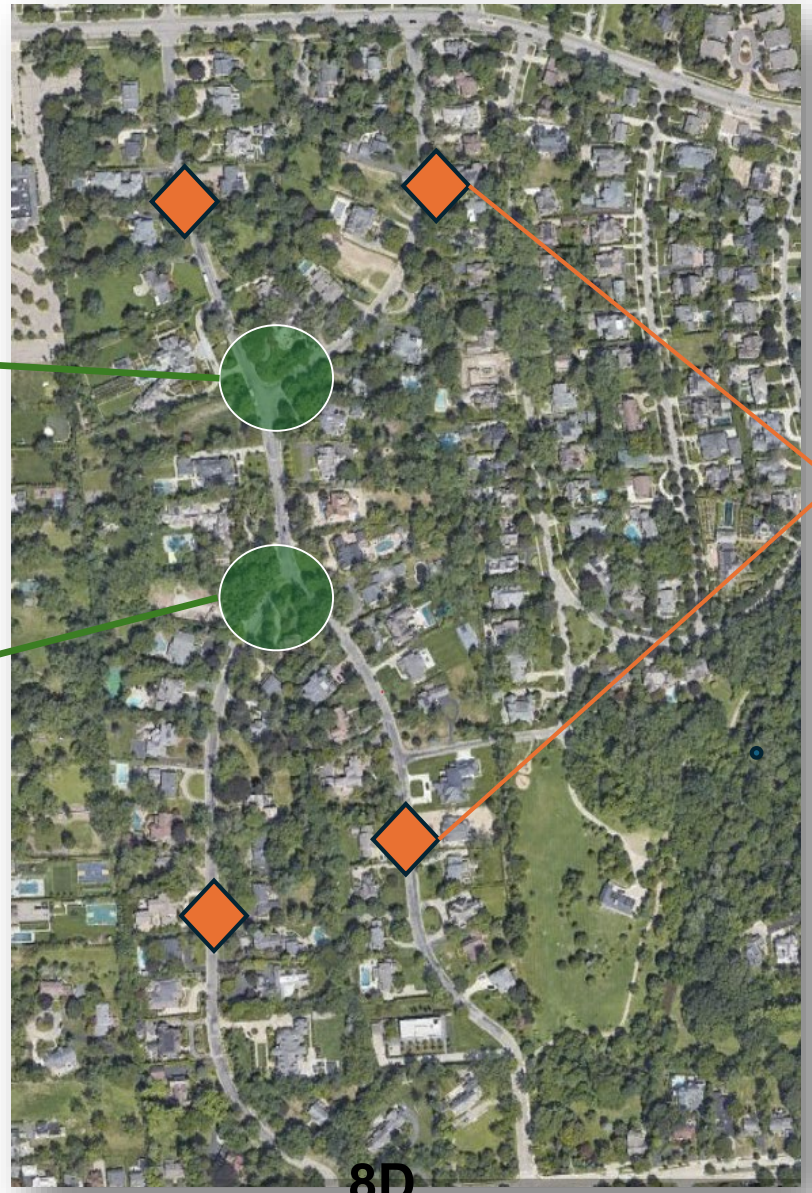
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Intersection Redesign plus Traffic Calming Islands



Painted Bump Outs





8D

Calming Islands





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Option #4 Bike Lanes/ Cycle Track

- Bike Lanes are most effective on roadways with greater than 3,000 vpd and have speeds of 25-35mphs
- The impact on vehicle speeds is would be similar to the lane narrowing option.
- Bicycles would have protected lanes
- On-Street parking would be eliminated to accommodate bike lanes.
- Potential for vehicles to park in bike lanes, reducing effectiveness and increasing the potential for vehicle/bicycle conflicts
- Cycle track would require barrier to allow for contra-flow bike travel





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Option #7/8: Speed Humps or Speed Cushions

Speed hump:

- Has parabolic top
- Space not more than 500 feet apart to achieve 25-30 MPH
- Can cause some noise





Speed cushion:

- Same as Speed Hump, with cut-outs for large vehicles (fire trucks/buses)



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Birmingham's Speed Hump Criteria

1. The street must be paved.
2. Classified as a residential street.
3. 15+% of traffic is over the posted speed limit (speed study).
4. Traffic volumes greater than 200, less than 1,200 vehicles / day.
5. Not a fire or snow emergency route.
6. Not along a major school bus or transit route.
7. Room for speed humps to be 300-600 feet apart.
8. Room for speed humps to avoid driveways.
9. 50% of residents must petition for the installation.
10. 100% written concurrence by owners within 200 feet of hump.
11. Funding: By residents or approved by the City Commission.



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Scenario Comparison

Scenario #	Traffic Calming Measure	Cost	Speed Impact	Notes
1 (Existing Conditions)	None, including no sidewalks	N/A	N/A	
2	Narrowing Traffic Lanes	$	• Potential reduction of 1-3 mph	• Accomplished with paint • Cost to install and maintain
3	Traffic Calming Island	$$	• Potential reduction of 1-8 mph at location of island.	• Parking would be impacted • Potential impact to driveway access
4/6	One-Way Bike Lanes Two-Way Cycle Track	$-$$	• Potential reduction of 1-3 mph	• Does not allow parking or curbside vehicles
7/8	Speed Humps or Speed Cushions	$$	• Speeds reduced to 15-20 mph at location of device.	• No City policy to allow traffic calming devices • Must be in series (every 300-600 ft) for effective speed management • Adds noise • May be difficult to locate with driveway density

Next Steps

- Recommendation to City Commission

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SPEED DATA ANALYSIS

Location



Arlington
Between Maple & Shirley
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
11/14/2023	11/17/2023
10:45 AM	9:27 AM

Speed Limit



25

Vehicles Analyzed



3,885

Average Speed



25

85th Percentile Speed



32

Peak Time of Violations



11/16/2023
8:45 AM

Br P D r

SPEED DATA ANALYSIS

Location



Shirley
Between Lincoln & Brandon
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
11/14/2023	11/17/2023
10:21 AM	9:22 AM

Speed Limit



25

Vehicles Analyzed



4,518

Average Speed



25

85th Percentile Speed



30

Peak Time of Violations



11/16/2023
8:21 AM

SPEED DATA ANALYSIS

Location



Arlington St Btwn Maple Rd and Shirley Rd
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
12/19/2023 12:00 PM	12/22/2023 11:59 AM

Speed Limit



25

Vehicles Analyzed



3,582

Average Speed



24

85th Percentile Speed



29

Peak Time of Violations



12/19/2023
5:54 PM

SPEED DATA ANALYSIS

Location



Shirley Rd Btwn Brandon St and Lincoln St
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
12/19/2023 12:00 PM	12/22/2023 12:00 PM

Speed Limit



25

Vehicles Analyzed



3,819

Average Speed



23

85th Percentile Speed



27

Peak Time of Violations



12/20/2023
3:28 PM

Br P D r

SPEED DATA ANALYSIS

Location



Arlington St
Between Shirley Rd and W Maple
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
1/14/2025 8:01 AM	1/17/2025 7:37 AM

Speed Limit



25

Vehicles Analyzed



2,107

Average Speed



23

85th Percentile Speed



28

Peak Time of Violations



1/15/2025
3:01 PM

Br P D r

SPEED DATA ANALYSIS

Location



Shirley
Between W Lincoln and Brandon
Latitude: 0.000000
Longitude: 0.000000

Analysis Time Period



Start	End
1/14/2025 7:34 AM	1/17/2025 2:50 AM

Speed Limit



25

Vehicles Analyzed



2,182

Average Speed



25

85th Percentile Speed



29

Peak Time of Violations



1/14/2025
3:34 PM

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MEMORANDUM

City Manager's Office

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Mark H. Clemence, Assistant City Manager

SUBJECT: Aging in Place Citywide Action Plan

INTRODUCTION:

The City of Birmingham, like the rest of the country, is watching its population age. By 2040, approximately one in five Americans will be age 65 or older, up from approximately one in eight in 2000. In Birmingham, the Aging in Place Community Survey showed that 72% of residents stated that it was important for them to stay in their current residence as they aged. The residents of the City of Birmingham share the same desire as the majority of most Americans. Now, the complex part of the aging in place question is, how do we as a community assist our older adults to age in their homes in a safe manner that allows them to continue to be physically active, socially connected and mentally engaged? In other words, how do we assist our fellow residents who are older to continue to be valued members of our community and live meaningful and productive lives?

The Ad Hoc Aging in Place Committee (AIPC) was created by the City Commission on April 24, 2023 (Resolution # 04-093-23) and seated on June 26, 2023 (Agenda – Minutes). The scope of work of the AIPC included the following:

1. A detailed demographic study of trends and patterns in our population;
2. A review of existing senior services and identification of unmet needs;
3. Development of a citywide aging in place action plan outlining the vision and goals to encourage senior residents to age comfortably in Birmingham.

The AIPC was commissioned for 18 months to complete these tasks. City staff was directed to facilitate the requested studies and research needed to develop an action plan to improve the health, safety and welfare of senior citizens in Birmingham.

At this time, the AIPC has completed the above tasks and is now seeking adoption of the Citywide Aging in Place Action Plan by the City Commission.

BACKGROUND:

The City Commission adopted strategic goals in November 2022, which included supporting an engaged and connected community by offering City services and amenities that enrich the lives of residents of all ages as a main goal. This strategic goal includes a recommendation to "create a task force to facilitate an aging in place plan, develop a plan for a permanent senior/community center to house NEXT senior services and to offer space for multigenerational programs, engage with youth in the community with a teen board or committee." Based on one of the goals identified in the Strategic Plan, the City Commission at their meeting on April 3, 2023, unanimously passed a motion to direct the formation of an ad hoc committee. The ad hoc committee studied demographics and trends in our population and conducted a comprehensive community survey to determine the services needed to support our aging population.

Although there has been some past senior services committees that included representatives from Beverly Hills, Bingham Farms and Franklin, they were primarily focused on how the communities could work together to fund a joint senior center. The AIPC was created to specifically focus on creating an aging in place action plan that could assist seniors to age comfortably in Birmingham.

From July 2023 through January 2025, the AIPC held monthly meetings and sometimes met more than once a month to accomplish its scope of work. All AIPC meetings were open to the public and were also available via Zoom. All agendas, minutes and speakers were coordinated and completed by City staff at the direction of the AIPC. The following is a brief synopsis of the process followed by the AIPC:

1. Reviewed and discussed senior services in Oakland County, MI (guest speaker).
2. Analyzed City and regional demographic data (U.S. Census Bureau and SEMCOG data).
3. Reviewed and analyzed Next operations and services (guest speaker).
4. Reviewed City Building codes and zoning ordinances with the City's Building and Planning Departments (two guest speakers).
5. Discussed and reviewed the AARP "8 Domains of Livability" (the domains are criteria used as measures to gauge where a community is at in terms of aging in place, identifying unmet needs and improving the ability of older adults to age in place).
6. Discussed and developed the Aging in Place Community Survey (key document to comprehensively design, market and analyze community sentiments).
7. Held a public engagement meeting at the Baldwin Public Library.
8. Issued the Aging in Place Community Survey to the public: online (Engage Birmingham); deliver hard copies to each City resident through City water bills; distribute hard copies at various locations in the City (City Hall, Next, Baldwin Public Library, Birmingham Museum, Birmingham Ice Arena, Baldwin House; and distributed at the City's Winter Market event).
9. Held a public engagement meeting at Next.
10. Analyzed the Community Survey results.
11. Completed Aging in Place Community Survey Analysis Report.
12. Discussed, developed and completed the Aging in Place Action Plan.

The Aging in Place Action Plan was developed as a full scale plan with emphasis placed on the information obtained from the Community Survey, public engagement meetings and the examination and analysis of other private, local, county, state and federal programs. Aging in

place plans have been conducted and produced by all levels of government and private organizations. The AIPC wanted the Citywide Aging in Place Plan to be specifically tailored to Birmingham and our surrounding communities. The AIPC did not want to produce a generic aging in place plan, but one that listened to residents, analyzed their feedback, looked at existing services, examined unmet needs, considered options and produce a plan that has the potential to really improve the health, welfare, safety and quality of life for older adults.

The Community Survey produced by the AIPC was the largest and most successful survey to date conducted by the City (almost 700 submissions). The AIPC believed that a well written, comprehensive and easy to understand aging in place survey would be the key in trying to accomplish the scope of work requested by the City Commission. The Community Survey was limited to two pages (front and back), was clear, easy to complete and convenient to return with a resident's water bill, the U.S. Postal Service or a drop off location.

The AIPC decided that the framework of the Aging in Place Citywide Action Plan would be a modified version of the AARP's 8 Domains of Livability. The AIPC used a modified five domains and broke down each of the five domains into a series of nineteen (19) goals with sixty-four (64) accompanying action steps to achieve the goals. Each goal and accompanying action steps were further categorized into three different time frames: short (six months or less), medium (one to two years), or long-term (two to five years). The action plan was also color coordinated and delineated in spreadsheet format. Finally, the last piece of the Aging in Place Citywide Action Plan was an implementation plan that determined what organizations, groups, City departments or persons would be the best resources to undertake accomplishing the tasks that would lead to the completion of the stated goals.

After months of drafting, editing, revisions, public feedback and City staff feedback, the AIPC has provided the finished Aging in Place Citywide Action Plan Report to the City Commission with the recommendation that the City Commission adopt the Aging in Place Citywide Action Plan and commit to improving the health, safety, welfare and quality of life for older adults in the City of Birmingham.

While not for consideration at this time, the AIPC would like the City Commission to consider establishing a permanent Aging in Place Committee whose purpose would be:

1. To make ongoing recommendations to the City Commission on matters related to aging in place.
2. To work in concert with designated member(s) of City staff, Next and other stakeholders to implement the Aging in Place Citywide Action Plan.

Members of this permanent committee would ideally represent the various interests of aging in place issues in Birmingham and all regular meetings would be open to the public.

LEGAL REVIEW

The City Attorney has reviewed the Aging in Place Citywide Action Plan and has no concerns as to form and content.

FISCAL IMPACT

The adoption of the Aging in Place Citywide Action Plan does not have any direct or immediate fiscal impacts. In addition, the plan was completely developed, written and produced by the AIPC with the assistance of City staff. No outside consultant fees were associated with the plan. The Community Survey was written and produced by the AIPC and hard copies distributed by the City to every resident in their water bills as well as other distribution methods.

SUSTAINABILITY

In general, master plans are most successful when they represent a vision that brings together the concerns of different interest groups in mind. In this case, the AIPC felt that many of the areas addressed in the Aging in Place Citywide Action Plan were connected not only to the City's Birmingham 2040 Master Plan, but also to the City's Five-Year Parks and Recreation Master Plan, the Multi-Modal Transportation Plan, The Birmingham Green: Healthy Climate Plan and the City's Unimproved Roads Plan. As each of these plans are implemented, connections to the City's Aging in Place Citywide Action Plan can be considered.

DESIGN CONSIDERATIONS:

There are no design considerations to be had at this time for this agenda item. However, as listed in the Birmingham & Your Needs (Community & Health) section of the Aging in Place Citywide Action Plan, a key goal is to provide a facility for Next and the community that promotes social interactions, community connections as well as health, fitness and recreational programs for all. If this facility is constructed, it should be the strong desire of the City and the community to have the building built to a LEED Silver certification level (Leadership in Energy and Environmental Design).

PUBLIC COMMUNICATIONS:

There are no additional required public communications for this agenda item. As indicated earlier, all of the AIPC meetings were open to the public, progress reports presented monthly in the City Manager's Report, City Communication tools (Around Town e-newsletters, Constant Contact e-blasts, Birmingham Beat print newsletter, Engage Birmingham survey) sent out, announcements of AIPC work in City Commission agendas, two formal public engagement meetings and an extensive community survey distribution and analysis.

SUMMARY:

The Ad Hoc Aging in Place Committee requests that the City Commission consider adopting the Aging in Place Action Plan in its entirety and through this plan, commit to improving the health, safety, welfare and quality of life for older adults in the City of Birmingham.

ATTACMENTS:

Please see the attached document for review:

1. Aging in Place Citywide Action Plan

SUGGESTED COMMISSION ACTION:

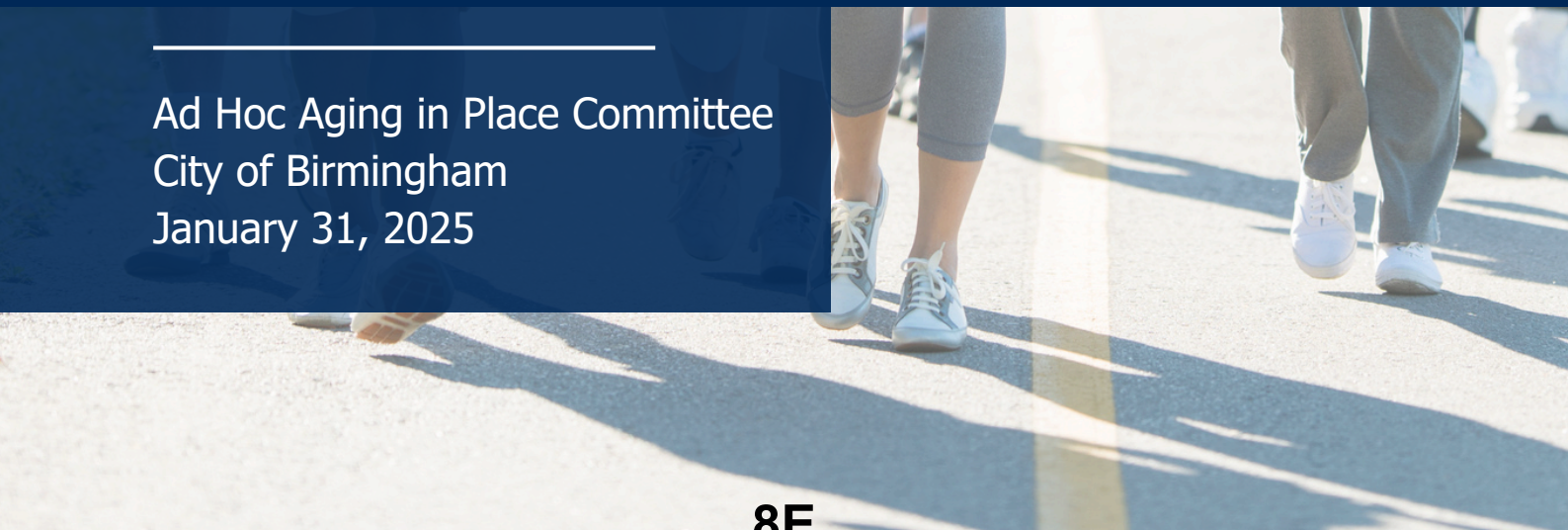
Make a motion adopting a resolution to adopt the Aging in Place Citywide Action Plan in its entirety and through this plan, commit to improving the health, safety, welfare and quality of life for older adults in the City of Birmingham.

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Aging in Place Citywide Action Plan

Report & Recommendations



Ad Hoc Aging in Place Committee
City of Birmingham
January 31, 2025

8E



ACKNOWLEDGEMENTS

The work of the Ad Hoc Aging in Place Committee would not have been possible without the direction and guidance of the City Commission, assistance from City staff and an engaged public that truly cares about the City's older adult population.

BIRMINGHAM CITY COMMISSION

Therese Longe	Mayor
Clinton Baller	Mayor Pro-Tem
Katie Schafer	Commissioner
Andrew Haig	Commissioner
Brad Host	Commissioner
Anthony Long	Commissioner
Jason Emerine	Commissioner

AD HOC AGING IN PLACE COMMITTEE

Rackeline Hoff	Chair and Senior Resident
Cris Braun	Vice-Chair, Representative of Next and Senior Resident
Pam DeWeese	Representative and Senior Resident
Rosemary O'Malley	Representative of Adult Education and Senior Resident
Melissa Mark	Representative of Baldwin Library and Senior Resident
Jay Reynolds	Alternate Representative and Senior Resident
Rebekah Craft	City Staff Representative (Director - Baldwin Library)
Leslie Pielack	City Staff Representative (Director - Birmingham Museum)

CITY STAFF

Jana Ecker	City Manager
Melissa Fairbairn	Assistant City Manager
Mark Clemence	Assistant City Manager (City Staff Liaison to AIPC)
Marianne Gamboa	Communications Director



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INTRODUCTION

The City of Birmingham, like the rest of the country, is watching its population age. By 2040, approximately one in five Americans will be age 65 or older, increasing from approximately one in eight in 2000. Research is needed to determine the specific demographic trends and forecast to occur within the City and to determine the type of services needed to support these demographic changes.

In November 2022, the City Commission adopted strategic goals that included supporting an engaged and connected community by offering City services and amenities that enrich the lives of residents of all ages as one of their three priorities. This strategic goal included a recommendation to "create a task force to facilitate an aging in place plan, develop a plan for a community and senior center to house Next senior services and to offer space for multigenerational programs, engage with youth in the community with a teen board or committee."

In April 2023, based on the above-mentioned goal identified in the Strategic Plan, one of those priorities the City Commission unanimously passed was a motion to direct the formation of an ad hoc committee. The ad hoc committee was directed to study demographics and trends in our population and conduct resident surveys to determine the services needed to support our aging population.

City staff recommended creating a new ad hoc committee with a distinct name and a scope of work that clearly distinguished the new committee from the former Ad Hoc Joint Senior Services Committees. The creation of an Ad Hoc Aging in Place Committee (AIPC) composed of seven members with a broad range of experience in providing senior services, experience in senior health, nutrition, elder law and educational outreach was preferred.

One member that can offer experience in providing intergenerational connections/programming was also recommended. An initial eighteen-month term was suggested. The scope of work of the AIPC should include the following:

1. A detailed demographic study of trends and patterns in our population;
2. A review of existing senior services and identification of unmet needs;
3. Development of a citywide aging in place action plan outlining the vision and goals to encourage senior residents to age comfortably in Birmingham.

It is important to note that the focus of this ad hoc committee is on the demographics of our City, examining the current senior services being provided, identifying any unmet needs and finally, developing an action plan to help our residents age in place in a manner that is safe, healthy and comfortable.

The members of the Ad Hoc Aging in Place Committee spent a great deal of time on the requested scope of work and examining tangential items related to the topic. It was very important to the AIPC that the Aging in Place Citywide Action Plan produced by the committee was reflective of our community, thoroughly examined all of the requested areas and that every effort was made to involve the public as much as possible in the process.





AGING IN PLACE GOALS SUMMARY

The following two pages show the City of Birmingham's "Aging in Place Action Plan Goals Summary" as determined by the AIPC. This summary lists all of the intended goals of the action plan to incentivize a reader to want to read the entire plan. The Aging in Place Action Plan Goals Summary is color coordinated with the formal Aging in Place Citywide Action Plan and utilizes a modified version of the AARP "8 Domains of Livability" model.

City of Birmingham Aging in Place Goals

As provided by the Ad Hoc Aging in Place Committee's Aging in Place Plan, January 2025

Birmingham & Your Needs (Community & Health)

1. Develop a facility for senior services (age 50+) to house Next, the City's dedicated senior services provider, that will be a welcoming and dynamic hub where all members of the community can gather in an environment that promotes socialization, physical activity, lifelong learning and community wellness.
2. Establish a funding mechanism to support reliable and sustainable senior services (Next).
3. Continue to prioritize public services (Police, Fire, Department of Public Services) that meet or exceed resident needs.
4. Create an understanding among City residents that Next is the City's primary older adult service provider and to have the services offered by Next known and understood by the community.
5. Maintain a positive, cooperative and mutually beneficial relationship between the City, Next, the Birmingham Public Schools (BPS) and other valued partners.
6. Coordinate health care, housing and other resources as necessary to assist older adults who lack insurance, financial resources or other support systems by networking with local, county, state and federal agencies.

Communication & Information

1. Create a multi-faceted communications model that uses numerous methods to ensure older adults have access to information about services and resources.
2. Expand and enhance the City's media/communications plan promoting Next and all of Next's support services to increase community knowledge.

Social & Civic Engagement

1. Support enhanced senior services and programming to provide older adults with more opportunities for physical, mental and personal growth and development.
2. Create and promote community and social activities/opportunities for older adults.
3. Become an "Age Friendly Community."
4. Install permanent restrooms in neighborhood parks to make older adults comfortable participating in outside physical activity.
5. Provide older adults with assistance in exploring employment and volunteer opportunities in the community.

Housing

1. Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.
2. Increase the availability of affordable, non-income qualified housing options for older adults.
3. Modify the City's zoning ordinances to provide both incentives and options for older adult housing.
4. Increase the walkability of the City for older adults.

Transportation

1. Educate the community about the various transportation services that are available, affordable and safe for all older adults or others with disabilities or special needs.
2. Improve the feeling of safety and walkability by working with the Police Department to evaluate speed concerns, sign violations, failing to yield to pedestrians already in a crosswalk and/or crosswalk encroachment by vehicles.



BACKGROUND INFORMATION

To better understand the issue of providing senior services to the community, it is important to examine the history and timetable of senior services in the City. Who has provided senior services? How have senior services been funded? What does senior services entail? Is aging in place the same as senior services? Below is a brief summary of what the City has done in the past in order to address senior services and the funding to support senior services/aging in place.



Birmingham Area Seniors Coordinating Council (1977-2015)

The Birmingham Area Seniors Coordinating Council (BASCC) was a non-profit organization established in 1977. Individuals from the community and the Birmingham Public School District Lifelong Learning Initiative proposed the establishment of an area wide senior citizen program to the City of Birmingham. The mission of BASCC was to identify and meet the needs of older adults and persons with disabilities by soliciting and coordinating community resources to provide educational, recreational and social programs, supportive outreach services and volunteer opportunities. Communities served by BASCC include all of the communities served by the Birmingham Public School District (BPS). BPS provided a home for BASCC at no cost as an in-kind donation. After several location changes, BASCC moved into the former Midvale Elementary School building (2121 Midvale St., Birmingham, MI). The Midvale Center is located in a neighborhood setting with free parking and affordable programs to enhance seniors socially, physically and intellectually. Programs included health, fitness, sports, creative arts, computer classes, cards and games as well as local and regional travel opportunities.

BASCC also offered outreach services including information and referral services, transportation, tax assistance, counseling, support groups, nutrition support and many more. As a non-profit, BASCC's funding was provided by grants, donations, fundraisers, membership dues, municipal support and investment income. As stated earlier, BPS provided in-kind support that included one-third or 10,000 sq. ft. of space of the Midvale Center. BASCC had a Board of Directors that oversaw its financial and organizational activities.





Next (2015 - present)

In March 2015, BASCC was renamed "Next." Since 2015, Next membership has soared from 1,100 members to over 2,300 members. Average Next program attendance now exceeds over 1,500 participants weekly. Next is inclusive, creating a warm and welcoming center where residents want to gather to experience a vibrant community center filled with life-long learning, enrichment opportunities, fitness classes, travel programs, creative endeavors and most importantly, a hub for socialization. Next continues to offer valuable and expanded support services that are vital to serve the most vulnerable segment of the population.

In this report, Next will be thoroughly analyzed by the Aging in Place Committee (AIPC) as part of the AIPC's review of existing senior services and the identification of senior service related needs.









Ad Hoc Joint Senior Services Committee (2012)

In 2012, the City of Birmingham, along with other neighboring community partners, created the Ad Hoc Joint Senior Services Committee (JSSC). The Ad Hoc JSSC was established to address the areas of need for our rising senior demographic, including the appropriate funding and governance models necessary to support those needs. The seven participating organizations of the JSSC appointed a total of 19 community leaders to serve on the committee. The membership covers all municipalities wholly within the boundaries of the Birmingham Public School District, including: the City of Birmingham, Village of Beverly Hills, Village of Bingham Farms, Village of Franklin and Southfield Township, as well as the existing senior services provider, Birmingham Area Seniors Coordinating Council (BASCC) and the Birmingham Public Schools. The duties of the JSSC were as follows:

1. Study what other communities are doing to fund and manage senior programs and services;
2. Gather public input to create consensus around what senior programs and services our seniors need, want and are willing to fund;
3. Prepare policy recommendations regarding a combination of programs, services, revenue sources and governance models;
4. Solicit public input on these policy recommendations before reporting back to each governing body.

Upon completion of their work, the JSSC recommendations to their respective governing bodies consisted of a two-phase approach to addressing their mission:

1. Phase I (short-term measures):
    a. Increase services and hours to capture the emerging senior:
        i. Increase services and evening and weekend hours.
        ii. Add exercise equipment.
    b. To meet revenue needs, seek an additional $200,000 contribution from the four communities of Birmingham, Beverly Hills, Bingham Farms and Franklin.

2. Phase II (long-term measures):
    a. Utilize a bond issue to fund a new or upgraded facility.
    b. Replace municipal and Birmingham Public School District funding with a millage.
    c. Increase space for the senior center by 50%.
    d. Be open at least 69 hours per week.

The JSSC presented its final report in June of 2013. The final report of the JSSC was presented to all four communities by September of 2013. The Birmingham City Commission took no further action.

Ad Hoc Joint Senior Services Committee (2018)

In June of 2018, the City Commission once again addressed the issue of senior services and, by resolution, formed a second Ad Hoc Joint Senior Services Committee (JSSCII). Along with the communities of Beverly Hills, Bingham Farms and Franklin, its objective was to conduct a long-term study and evaluation of what the necessary funding and governance model would be to effectively provide adequate senior services to participating residents. The scope of work for this second JSSCII was as follows:

1. Review the JSSC Final Recommendation to the Municipalities Report from June of 2013.
2. Evaluate service demands and projected trends for senior demographics and future service demands.
3. Analyze funding sources and operational structure of the current contracted senior service model.
4. Compare and contrast current senior services funding and governance models in the participating communities to other area communities and best practices.
5. Review and evaluate cost and budget implications of any proposed recommendations and include strategic funding alternatives.
6. Compile the Committee's findings and recommendations into a report to be presented at the end of the Committee's term.

From City reports and meeting minutes, it appears that the JSSCII did meet and conduct meetings. However, as a result of the COVID-19 pandemic, it appears that the JSSCII did not meet often and most meetings were via Zoom. The JSSCII did come up with a proposed interlocal agreement between the City of Birmingham and the three other communities (Village of Beverly Hills, Village of Bingham Farms and the Village of Franklin) that would address the financial issues surrounding the support of Next. Unfortunately, it was determined that this interlocal agreement in its current form would not be the most appropriate avenue for the City of Birmingham. Likewise, the other three municipalities and their leaders did not want to enter into such a complex interlocal agreement because it would necessitate the local communities providing the senior services instead of a non-profit 501(c)(3) organization.

As a result, the proposed JSSCII Interlocal Agreement was never presented to any of the respective municipalities for approval. In addition, the JSSCII did not prepare a final report with their findings and/or recommendations at the end of their committee's term. The Birmingham City Commission took no further action.

Next Interlocal Agreement (2021)

After the JSSCII Interlocal Agreement was not accepted by the City Commission and/or the other municipal partners, the Birmingham City Attorney reworked the interlocal agreement with different language and shared that revised agreement with the legal counsels of the other three municipal partners. In August 2021, the Birmingham City Commission first examined the new interlocal agreement between the City and Beverly Hills, Bingham Farms and Franklin to support Next financially. The City Commission asked for some language changes and updates. In September of 2021, the City Commission approved the new language and approved the interlocal agreement between the City of Birmingham and the Village of Beverly Hills, Village of Bingham Farms and the Village of Franklin for Joint Senior Services.

The purpose of the interlocal agreement was to enable Next to rely upon stabilization and predictability for its finances in order to serve the seniors residing in the four governmental units. In terms of participation, each unit agreed to participate in granting money to Next as requested in the amounts equivalent to each governmental unit's past year's contribution. The governmental units may annually increase or decrease these contributions, which are payments for services rendered to communities' seniors, during each fiscal year as approved by the municipal governmental unit.

Current financial contributions of the four municipalities served by Next account for approximately 18% of Next's total budget.





PROCESS

The Ad Hoc Aging in Place Committee (AIPC) began meeting in July of 2023. There was a great deal of discussion and debate as to the methodology the committee should use to accomplish its scope of work. It was decided that it was logical to begin the committee's work with a discussion concerning older adults and what it means to "age in place."

The AIPC then held monthly meetings with guest speakers and topics directly related to the scope of work. All of the AIPC meetings were open to the public, and they were encouraged to actively participate with the committee. Meeting discussion points:

1. Review senior services in Oakland County, MI.
2. Analyze City demographics, SEMCOG information and census data.
3. Review and analyze Next operations and services.
4. Review City building codes and zoning ordinances with the Building and Planning Departments.
5. Discuss and review AARP "8 Domains of Livability" and its pertinence to the Community Survey and scope of work.
6. Discuss and develop the Aging in Place Community Survey.
7. Hold a public engagement meeting at Baldwin Public Library.
8. Issue final Aging in Place Community Survey to the public: online (Engage Birmingham); deliver hard copies to each City resident through City water bills; distribute hard copies at various locations in the City (City Hall, Next, Baldwin Public Library, Birmingham Museum, Birmingham Ice Arena and Baldwin House); and distributed at the City's Winter Markt event.
9. Hold a public engagement meeting at Next
10. Analyze Community Survey results.
11. Complete Aging in Place Community Survey Final Report.
12. Discuss and develop outline of the Aging in Place Citywide Action Plan.

Review of Recently Developed Plans for Older Adults

The final task of the AIPC was to develop a Citywide Aging in Place Action Plan to assist Birmingham residents to age in place. Although the scope of work was different, the AIPC did review the City's JSSC Final Report from 2013 and the JSSC II Interlocal Agreement from 2021. While this is the City's first venture into the realm of aging in place, other entities have developed plans for addressing the needs of seniors or older adults. The AIPC considered county, regional and state efforts in consideration of developing a plan for Birmingham:

1. Oakland County Ad Hoc Committee on Healthy Aging
2. The Michigan Department of Health and Human Services Aging & Adult Services Agency
3. The Michigan Commission on Services to the Aging
4. The State of Michigan Advisory Council on Aging
5. Ageways (formerly known as the Area Agency on Aging 1-B)



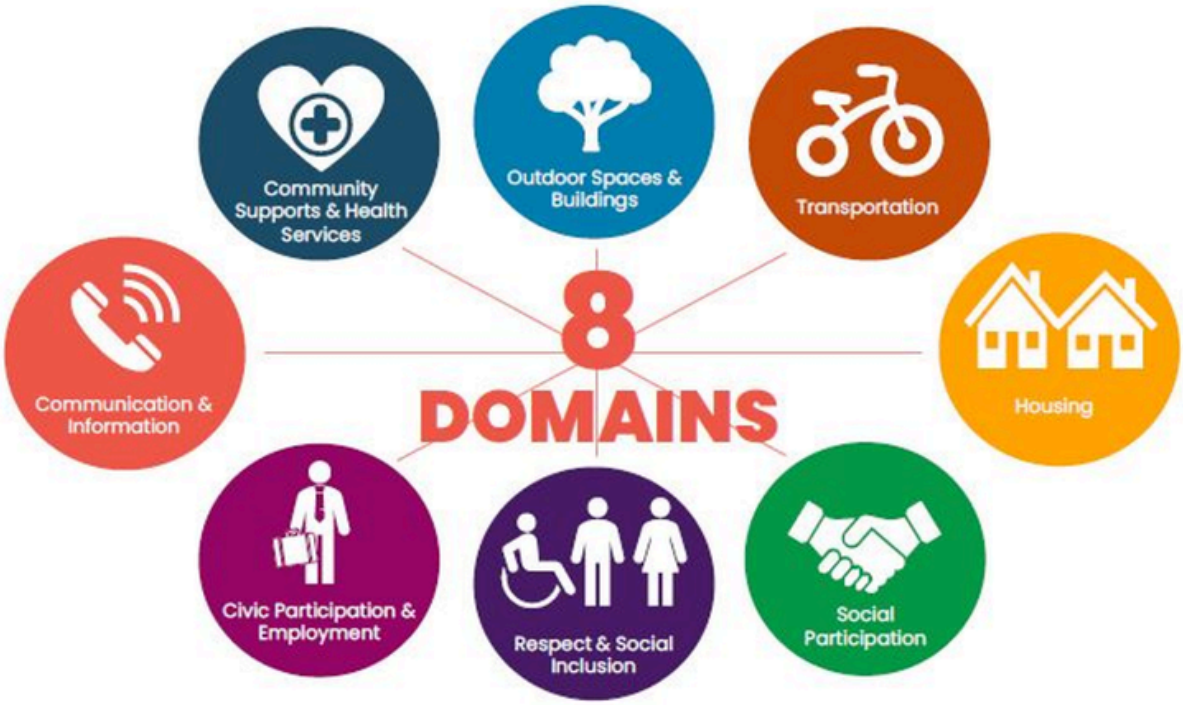
AARP "8 Domains of Livability"

While all of the older adult plans and studies reviewed by the AIPC contained valuable information and resources to consider moving forward, all of the plans looked at the issue of aging in place from a more global point of view (e.g., county level/state level). Again, the topic of aging in place is not new and the key issues and needs (framework) have been identified. The goal of the AIPC was to take the framework and apply it to Birmingham and the surrounding communities.

The AIPC believed a well written, comprehensive and easy to understand Aging in Place Community Survey would be key in trying to accomplish the scope of work requested by the City Commission. The AIPC took into consideration the work of the other entities listed on page 15, along with the AARP "8 Domains of Livability" criteria as the committee moved forward with an Aging in Place Community Survey that would specifically address our City and the surrounding communities. Most aging in place plans utilize some form of the AARP "8 Domains of Livability." The availability and quality of these community features impact the well-being of older adults and help make communities more livable for people of all ages. The domains are as follows and are reflected in a graphic chart created by AARP:

1. Outdoor Spaces and Buildings
2. Transportation
3. Housing
4. Social Participation
5. Respect and Social Inclusion
6. Work and Civic Engagement
7. Communication and Information
8. Community and Health Services





As mentioned, many aging in place plans and reports from around the country and within Michigan use either the domains listed by the AARP or domains that are very similar to AARP "8 Domains of Livability." The domains are used as measures to gauge where a community is in terms of aging in place and assist communities in identifying unmet needs that need to be addressed to improve the ability of older adults to age in place. The AIPC adopted this format, modifying it to directly align the aging in place plan with our community. This was especially prevalent during the development of the committee's Aging in Place Community Survey as previously described. Upon examination, there is overlap between domains and certain actions undertaken could impact more than one domain at a time.

The Birmingham Plan 2040

The Birmingham Plan 2040 ("2040 Plan") was adopted in May 2023 by the City Commission. The 2040 Plan is a comprehensive master plan, which is a document and policy guide designed to help Birmingham conceive a vision of what we want the City to look like in the future. The City of Birmingham is required to adopt and maintain a comprehensive master plan pursuant to the Michigan Planning Enabling Act. Using the 2040 Plan as a guide, the City will develop new ordinances, policies and programs related to land use, transportation systems, housing, sustainability, and other issues important to Birmingham residents.

In general, master plans are most successful when they represent a vision that brings together the concerns of different interest groups. In this case, the Aging in Place Citywide Action Plan is able to connect with the 2040 Plan in a number of ways:

1. The 2040 Plan contains several recommendations related to housing.
2. Transportation is a major component of the 2040 Plan.
3. The 2040 Plan emphasizes sustainability, which is a major consideration for a vulnerable aging population.
4. Neighborhood planning districts in the 2040 Plan are structured around the needs of the community, which includes gathering places and parks.

At a high level, the 2040 Plan contains themes of "connecting the City" and "retaining neighborhood quality" that really resonated with residents throughout the drafting of the plan. These themes resulted in several recommendations that directly relate to some of the goals of the Aging in Place Citywide Action Plan. In connecting these threads together across plans, the two plans will be able to support each other in implementation and will enable City Staff, the City Commission, the Planning Board and all other stakeholders to engage more meaningfully with the goals of each plan.

The AIPC felt that many areas addressed in the Aging in Place Citywide Action Plan were connected not only to the 2040 Plan but also to the City's Five-Year Parks and Recreation Master Plan, the Multi-Modal Transportation Plan, the Birmingham Green: Healthy Climate Plan and the Unimproved Roads Plan.



AGING IN PLACE COMMUNITY SURVEY DEVELOPMENT METHODOLOGY

With the framework in place for how the survey would be structured, the AIPC turned its attention to engaging the public. The AIPC wanted as much public feedback and participation as possible. The AIPC also discussed trying to reach as many older adults as possible that have not weighed in on the issue of aging in place or whose voices have not been heard in the past due to a lack of communication. The AIPC considered the following questions and created strategies for addressing them:

1. How can the AIPC increase the participation level of residents and others in completing the Aging in Place Community Survey?
    - Mail every resident a hard copy of the survey in their City water bill and provide an easy mechanism for the return of the survey in the water bill or in a separate envelope.
    - Distribute and collect hard copies in specific locations throughout the City (City Hall, Baldwin Public Library, Birmingham Museum, Birmingham Ice Arena, Department of Public Services Building and Baldwin House).
    - Use Engage Birmingham for an online version of the survey.



2. How can the AIPC communicate and increase awareness of the Aging in Place Community Survey to the public?

- Include monthly update in the City Manager's Report.
- Use Announcements section of City Commission meetings.
- Make personal appearances by City staff at interlocal partners' Village Board meetings (Beverly Hills, Bingham Farms and Franklin) informing them about the survey and providing hard copies and the Engage Birmingham link.
- Use two public engagement meetings to discuss the survey; one at the Baldwin Public Library and one at Next. The purpose of these meetings was to allow for public comment on the survey and accept other public comments on the topic of aging in place.
- Send e-blasts and press releases through the City's Communications Team.
- Facilitate local media (Oakland Press, Downtown Magazine) publications of articles about the survey.

The AIPC spent a significant amount of time designing and editing the Aging in Place Community Survey to ensure it accomplished the goals and objectives of the AIPC. The final survey:

1. Was well-written, easy to read and simple to complete.
2. Was limited to two pages (double-sided) in order to be included free of charge in the City's water bills.
3. Covered demographic information and was targeted toward adults of any age; identified what features of the City were important to respondents; and utilized a modified AARP "8 Domains of Livability" framework emphasizing our City and local communities.

The Aging in Place Community Survey was distributed from December of 2023 through April 1, 2024. The AIPC received 690 survey submittals, which is the highest number of survey responses the City has ever received, according to the Communications Department. The AIPC discussed the results obtained from the survey at great length. A final Aging in Place Community Survey Report was approved by the AIPC with accompanying graphs and explanations.

BIRMINGHAM
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AGING IN PLACE COMMUNITY SURVEY

Complete this form or take this survey online at engage.bhamgov.org/aginginplace.



ACTION PLAN FOR OLDER ADULTS

Share your feedback about an action plan to improve the health, safety and welfare of older adults in Birmingham. Whether you are an older adult or know of older adults within our community, your feedback is important!

Did you know?
The U.S. Centers for Disease Control and Prevention defines aging in place as "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level".

Birmingham maintains its small town feel while offering the recreational and cultural advantages of an urban area. What is most important about Birmingham for older adults? Check all that apply.

- ☐ Arts and entertainment
- ☐ Community and social activities
- ☐ Houses of worship
- ☐ Historic character
- ☐ Library/Museum
- ☐ Next
- ☐ Parks and trail system
- ☐ Recreational activities
- ☐ Safe neighborhoods
- ☐ Shops & restaurants
- ☐ Walkability
- ☐ Other: _____

Demographics

What is your zip code? _____

Your age range: ☐ Under 35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66-75 ☐ 76-85 ☐ Over 85

Gender: _____

Number of people living in your home: _____

Are you employed? ☐ Full-time ☐ Part-time ☐ Retired ☐ Not employed

If not employed, would you like to re-enter the workforce? ☐ Yes ☐ No ☐ Considering it

Birmingham & Your Needs

Circle the number which best describes your feelings about the statements below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is important for me to remain in Birmingham as I age.	1	2	3	4	5
I feel the City of Birmingham's police, fire and public services meet my needs.	1	2	3	4	5
Birmingham has accessible parks and facilities.	1	2	3	4	5
I have a support system in place to assist me as I age.	1	2	3	4	5
I have adequate health care and am healthy enough to age in my residence.	1	2	3	4	5
I would support the continuation of a senior millage (one mill or less) for older adults.	1	2	3	4	5
I am familiar with Next, a nonprofit organization that is the City's primary provider of lifelong learning and activities for older adults.	1	2	3	4	5
I am familiar with Next's comprehensive support services.	1	2	3	4	5

I need help with the following support services. Check all that apply.

- ☐ Grass cutting
- ☐ Snow removal
- ☐ Minor home repairs/modifications
- ☐ Daily living activities
- ☐ Transportation
- ☐ Other: _____

BIRMINGHAM
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Transportation

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have adequate personal transportation.	1	2	3	4	5
I am familiar with the City's partnership with Next to provide SMART transportation services to local appointments/destinations.	1	2	3	4	5

Housing

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel safe in my residence.	1	2	3	4	5
I am able to modify my residence so I may age in place.	1	2	3	4	5
It is important to stay in my current residence as I age.	1	2	3	4	5
The affordability of housing is a factor in my decision to remain in Birmingham.	1	2	3	4	5
Birmingham offers a variety of living options for older adults.	1	2	3	4	5

I am interested in the following alternative housing options in Birmingham. Check all that apply.

☐ Accessory Dwelling Units (ADUs) ☐ Rental Units ☐ Small/Tiny Homes
☐ Co-Housing ☐ Senior Living Facilities ☐ Other:_____

I have the following concerns about aging in my current home. Check all that apply.

☐ Unable to care for myself ☐ Unable to care for my property ☐ Stairs or other physical barriers
☐ Unable to afford to live in home ☐ Feeling isolated/Being alone
☐ Other: _____ (Attach additional pages if needed.)

Social & Civic Engagement

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with Birmingham's civic destinations and outdoor spaces and facilities.	1	2	3	4	5
Birmingham has adequate public restrooms.	1	2	3	4	5
I am satisfied with my social life and feel connected to the community.	1	2	3	4	5

Communications

What is your primary source of City information? Check all that apply.

☐ City electronic newsletters/eblasts ☐ City website ☐ Social media
☐ City print newsletters ☐ Family/friends/neighbors

I would like more information about older adult services and opportunities. ☐ Yes ☐ No
I would like to receive a weekly phone call to check on my welfare. ☐ Yes ☐ No
I would like to volunteer my time to assist others. ☐ Yes ☐ No
I would like to be contacted for a personal interview regarding my survey responses. ☐ Yes ☐ No

My contact information (optional): _____

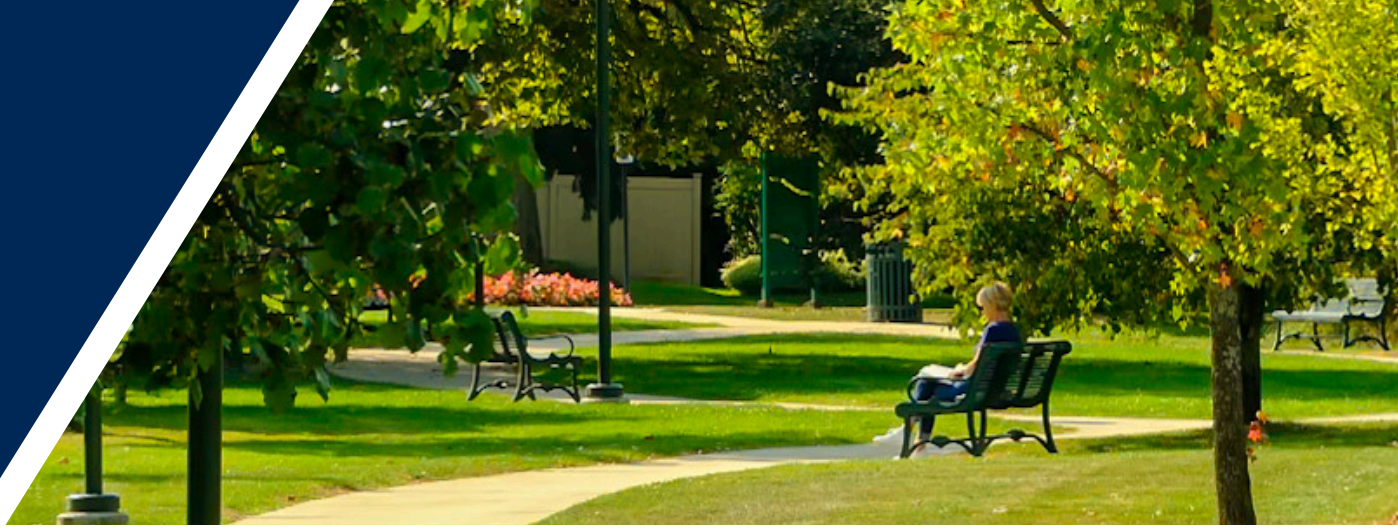
If you have additional information you would like us to consider as we develop an action plan to help older adults age in place, please add additional pages or email clemencem@bhamgov.org.

Submit Your Survey

1: U.S. Mail: City of Birmingham Attn: Aging in Place Survey, 151 Martin Street, Birmingham, MI 48009
2: Drop Off: City Hall drop boxes, Clerk's Office, Baldwin Public Library or Next (2121 Midvale Street)
3: Engage Birmingham – Submit this survey online at engage.bhamgov.org/aginginplace

Thank you for completing this survey and helping to improve the health and wellness of older adults in Birmingham.

December 2023



BIRMINGHAM AGING IN PLACE CITYWIDE ACTION PLAN

The AIPC's Aging in Place Citywide Action Plan is based on all of the data and sources of information considered by the AIPC and includes the following:

- Section 1: Demographic Analysis (national/state/county and Birmingham-specific)
- Section 2: Review of Existing Senior Services (identification and unmet needs)
- Section 3: Action Plan at a Glance/Citywide Action Plan (outlining the vision, goals, and objectives to support residents to age comfortably in Birmingham)

Executive Summary

What does it mean to age in place? It is a simple question with a complex answer. In simple terms, to age in place means that a person lives in their home as they age for as long as possible. Research has shown that the vast majority (70% to 90%) of older adults in the United States want to age in place. In Birmingham, the Aging in Place Community Survey showed that **72% of residents stated that it was important for them to stay in their current residence as they aged** (20% were neutral and only 8% were negative). It was also interesting to note that **80% of all survey respondents indicated that it was important for them to remain in the City of Birmingham** as they aged (16% were neutral and only 4% were negative).

The residents of the City of Birmingham share the same desire as the majority of most Americans. They want to remain in their homes for as long as possible. Now, the complex part of the aging in place question is, how do we as a society assist our older adults to age in their homes in a safe manner that allows them to continue to be physically active, socially connected and mentally engaged? In other words, how do we assist our fellow residents who are older to continue to be valued members of our community and live meaningful and productive lives?

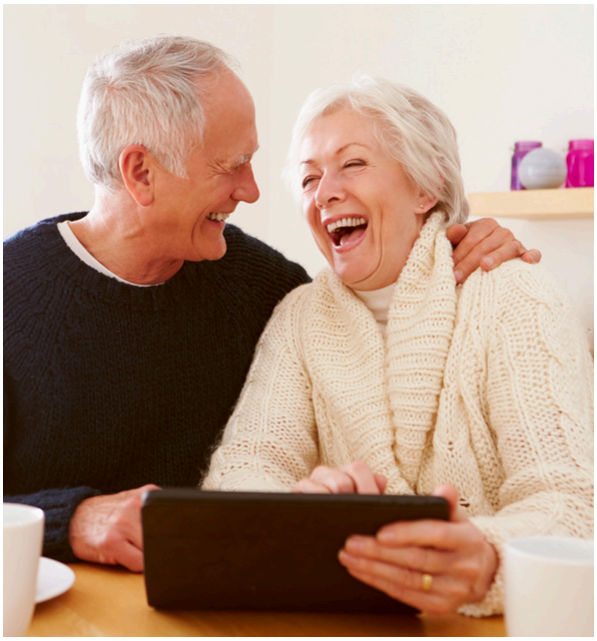
It is an important time for older adults in Birmingham and our surrounding communities. The next several years present unique opportunities for our older population moving forward as the City, Next and our community partners work out the details of a new Birmingham Community and Senior Center and financial support system. The City has purchased the YMCA building at 400 E. Lincoln to house Next. Of paramount interest will be the issues of what the Birmingham Community and Senior Center will be? What role will the YMCA play in the final picture? What will the final agreement look like between Next and the City? How will our interlocal partner communities support Next? Because of ongoing developments in some of these issues, the implementation timeline for the Citywide Aging in Place Action Plan will reflect a timeframe of 1 to 5 years.

Purpose and Structure of the Aging in Place Citywide Action Plan

The Citywide Aging in Place Action Plan is laid out in domains similar to the AARP's 8 Domains of Livability. The AIPC modified the domains to reflect Birmingham and area communities as much as possible. Within each domain is a series of goals that are broken down into corresponding proposed action steps. Finally, each goal and accompanying actions steps were further categorized into three different time frames: short (six months or less), medium (one to two years), or long- term (two to five years). The action plan was color coordinated and delineated in spreadsheet format.

The last piece of the Aging in Place Citywide Action Plan is how the action plan would be implemented. What organizations, groups, City departments or persons would be the best resource to undertake accomplishing the tasks that would lead to the completion of the stated goals?





Implementation

It is the hope of the Ad Hoc Aging in Place Committee (AIPC) that the Aging in Place Citywide Action Plan will be approved in its final form by the Birmingham City Commission and by the other interlocal communities. The information presented will provide insight and a path moving forward for the community as a whole as it relates to aging in place. The City, Next and its residents should be part of an age-friendly community that not only encourages aging in place, but provides the resources and assistance necessary to accomplish the goal of aging in place.

The City has a long history of identifying an issue as a community and working together to collaboratively solve a problem or create a solution. Therefore, when the Aging in Place Citywide Plan is adopted, the AIPC recommends that the Birmingham City Commission establish a permanent Aging in Place Committee whose purpose would be:

1. To make ongoing recommendations to the City Commission on matters relating to aging in place.
2. To work in concert with designated member(s) of City staff, Next and other stakeholders to implement the Aging in Place Citywide Action Plan.

Members of this committee would ideally represent the various interests of aging in place issues in Birmingham, and regular meetings would be open to the public.



SECTION 1

Aging in Place in Birmingham: Demographic Analysis

Summary

The focus of this demographic analysis was to examine the trends and patterns in the City's population as it relates to aging in place. There are numerous sources to examine relating to demographics for a given community. Different studies and reference documents had similar numbers, but there were minor differences. It was the decision of the AIPC that the committee would focus on two specific organizations to interpret demographic data. The two sources were:

1. United States Census Bureau (2020 Census)
2. Southeast Michigan Council of Governments (SEMCOG: 2006-2010 and 2017-2021 American Community Survey 5-Year Estimates, SEMCOG Development)



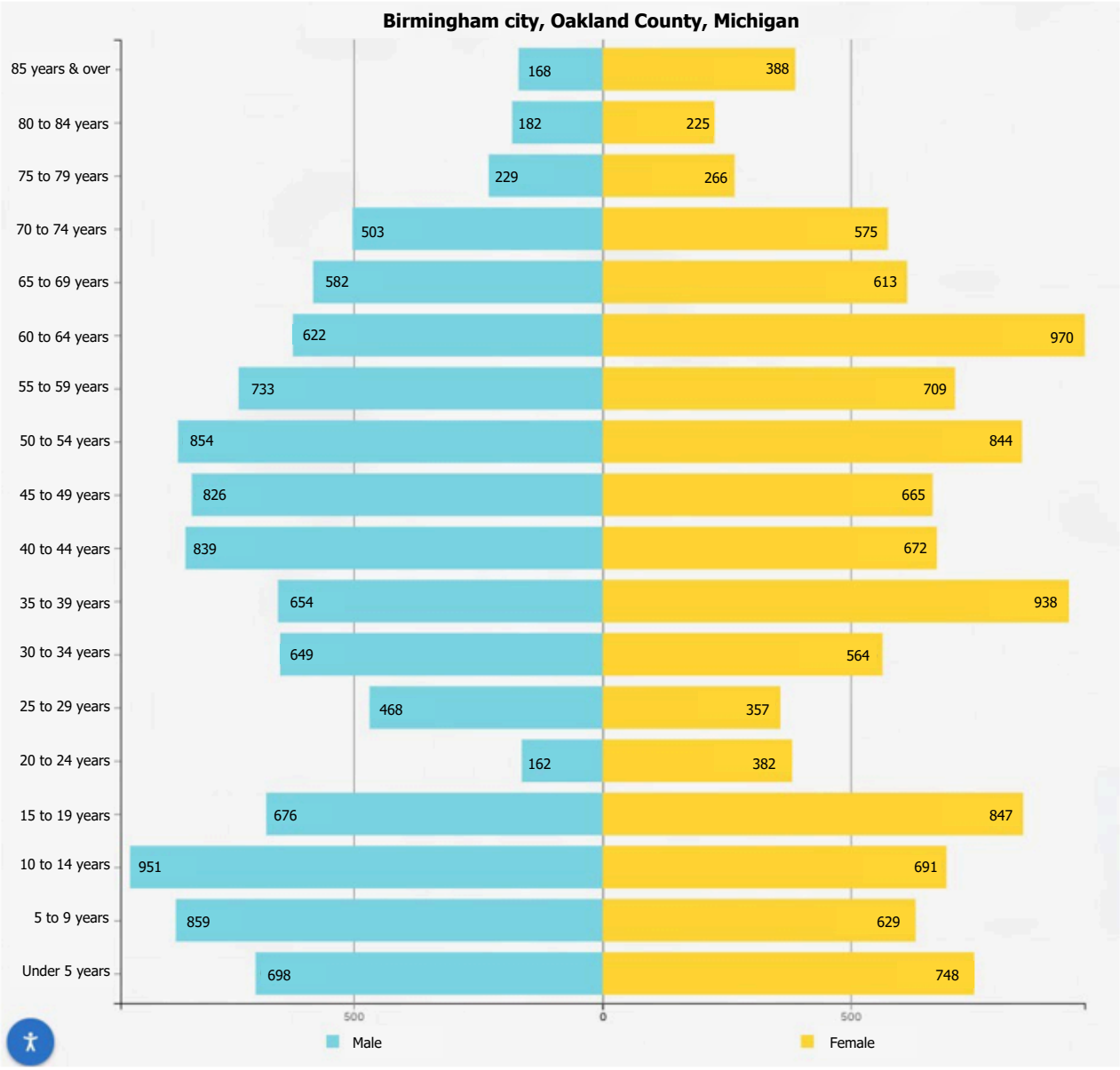
The AIPC examined demographic data that was related to the domains covered in the Aging in Place Citywide Action Plan:

1. Total population analysis breakdown by age.
2. Population changes from 2010 to 2022.
3. Forecasted age population changes from 2020 to 2050.
4. Households with seniors 65 years of age or older changes from 2010 to 2022 and forecasted population changes to 2050.
5. Older adults and youth population changes from 2010 to 2022 and forecasted population changes to 2050.
6. Rapid growth of senior population in Southeast Michigan.
7. Decline in school-age children (ages 5-17).
8. Percent of residents 65 and older.
9. Percent of residents age 65 and older living alone.
10. Percent of residents ages 5 to 17 years of age.
11. Percent of residents living in poverty.
12. Household types.
13. Percent of households with seniors.
14. Average household size.
15. Median housing value.



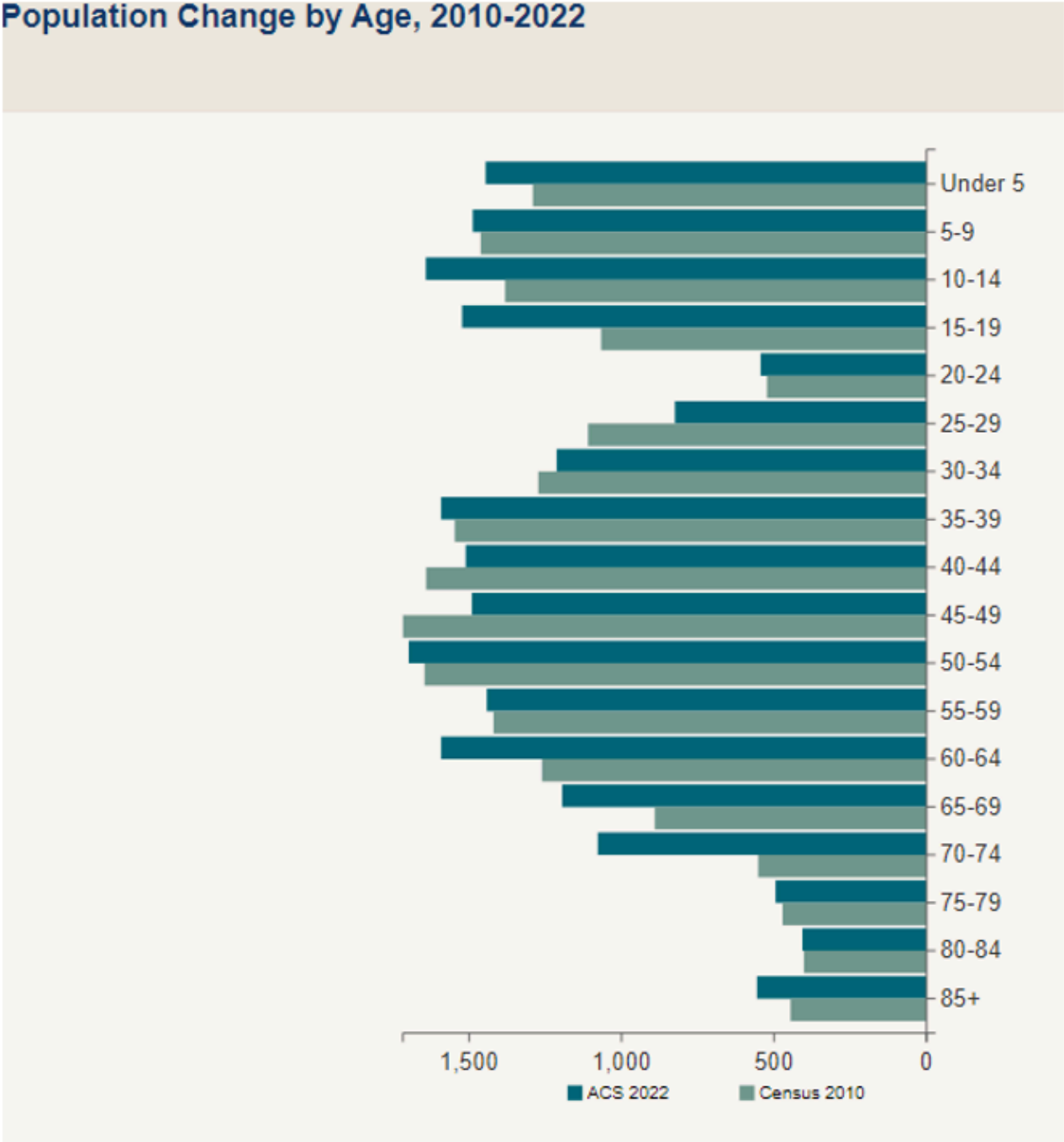
Demographic Data and Charts

The most recent official United States Census Bureau data for the City of Birmingham, Michigan is from April of 2020. The U.S. Census Bureau indicated that the City had a total population of 21,813. The median age for the City is 42.0. The following chart below is also from the 2020 U.S. Census Bureau for the City and covers the age breakdown of residents and the ratio of males (blue) to females (yellow):



Source: 2020 United States Census Bureau

The following two charts came from SEMCOG and show the population change for the City between 2010 and 2022 for all age populations. The key take away from these charts is that every age category for the City after age 49 shows an increase in numbers.



Source: U.S. Census Bureau. Decennial Census and 2017-2021 American Community Survey 5-Year Estimates

The SEMCOG chart below shows the population change for the City between 2010 and 2022 for all age populations.

Age Group	Census 2010	Change 2000-2010	ACS 2022	Change 2010-2022
Under 5	1,291	-40	1,446	155
5-9	1,462	284	1,488	26
10-14	1,382	347	1,642	260
15-19	1,067	315	1,523	456
20-24	523	-21	544	21
25-29	1,110	-321	825	-285
30-34	1,273	-583	1,213	-60
35-39	1,547	-227	1,592	45
40-44	1,641	-36	1,511	-130
45-49	1,717	168	1,491	-226
50-54	1,646	138	1,698	52
55-59	1,420	248	1,442	22
60-64	1,261	477	1,592	331
65-69	891	263	1,195	304
70-74	552	-145	1,078	526
75-79	472	-121	495	23
80-84	402	-46	407	5
85+	446	112	556	110
Total	20,103	812	21,738	1,635
Median Age	41.1	1.8	42	0.9

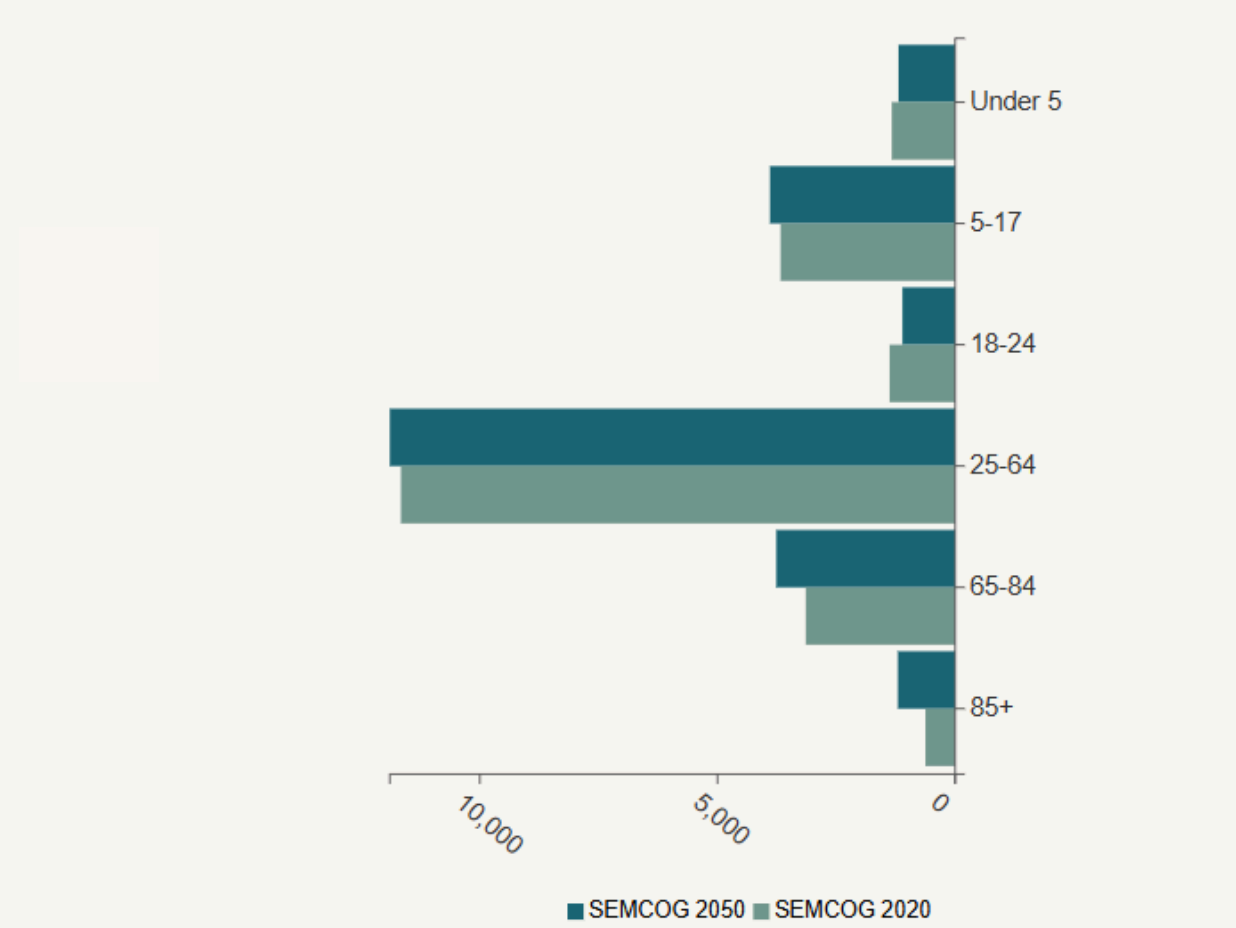
Source: U.S. Census Bureau, Decennial Census, and 2018-2022 American Community Survey 5-Year Estimates

In both the U.S. Census Bureau and SEMCOG data, the highest age population category in Birmingham is adults age 50-54. Interestingly, the number of children from age 0-19 was only 13% higher than the number of adults over the age of 60. The charts clearly show a large increase coming from the 50-59 years of age category in the near future. This supports the theory that the City's older adult population is increasing rapidly.

In 2023, SEMCOG completed the "SEMCOG 2050 Regional Development Forecast" for presentation to the SEMCOG Executive Committee. On SEMCOG's City of Birmingham Community Profile, the following chart forecasted the population change for the City between 2020 and 2050. Three key points jump out from the chart: **a 19.8% increase in the number of 65 to 84 age population, a 92.7% increase in the over 85 age population and finally, a 19.5% decrease in the 18 to 24 age population.** This chart is very important for the City to consider for forecasting purposes as it relates to the service needs of the City's population.



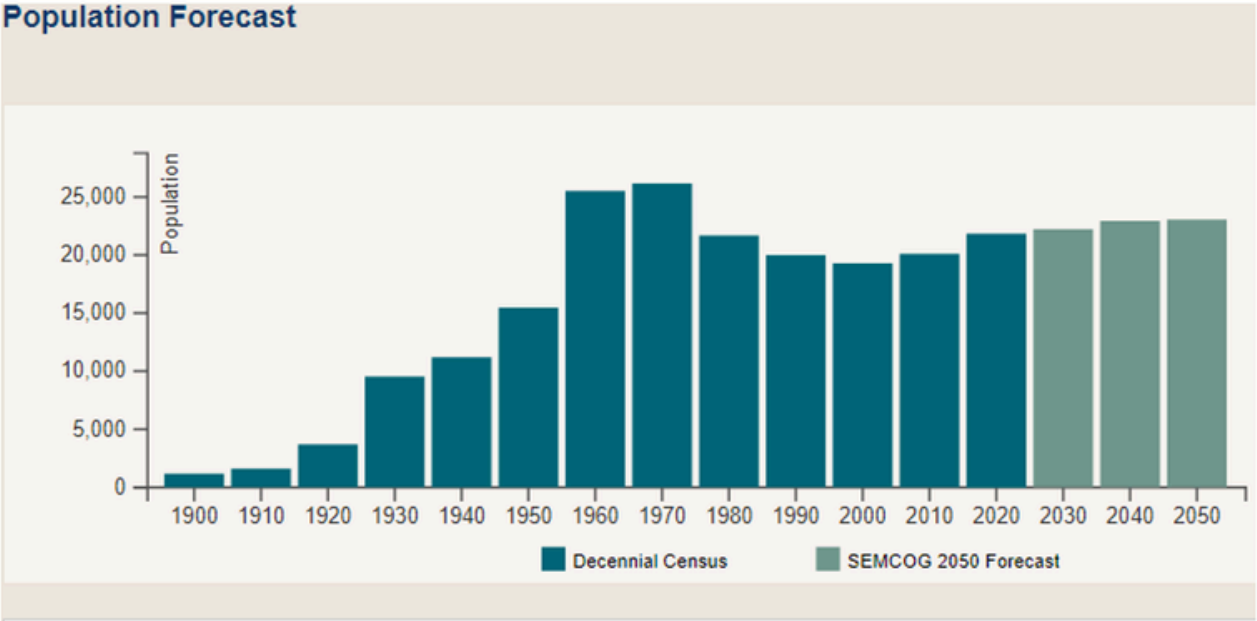
Forecasted Population Change 2020-2050



Age Group	2020	2025	2030	2035	2040	2045	2050	Change 2020 - 2050	Pct Change 2020 - 2050
Under 5	1,333	1,238	1,293	1,306	1,303	1,327	1,192	-141	-10.6%
5-17	3,673	3,629	3,585	3,646	3,785	3,840	3,897	224	6.1%
18-24	1,379	1,352	1,290	1,248	1,113	1,039	1,110	-269	-19.5%
25-64	11,660	11,278	11,472	11,814	11,853	11,996	11,894	234	2%
65-84	3,142	3,531	3,918	3,944	3,902	3,864	3,763	621	19.8%
85+	626	547	671	807	990	998	1,206	580	92.7%
Total	21,813	21,575	22,229	22,765	22,946	23,064	23,062	1,249	5.7%

Source: SEMCOG 2050 Regional Development Forecast

Population Forecast



Note for City of Birmingham : Incorporated in 1933 from Village of Birmingham. Population numbers prior to 1933 are of the village.

From 2010 to 2022, Birmingham's over 65 age population (up 35%) and the City's under age 18 population (up 15.8%) have grown significantly. However, according to SEMCOG's City of Birmingham Community Profile, The City's over age 65 population is forecasted to continue to increase by 2050 (up approximately 25%), while the under 18 age population is expected to decrease by 2050 (down approximately 11%).

Older Adults and Youth Populations

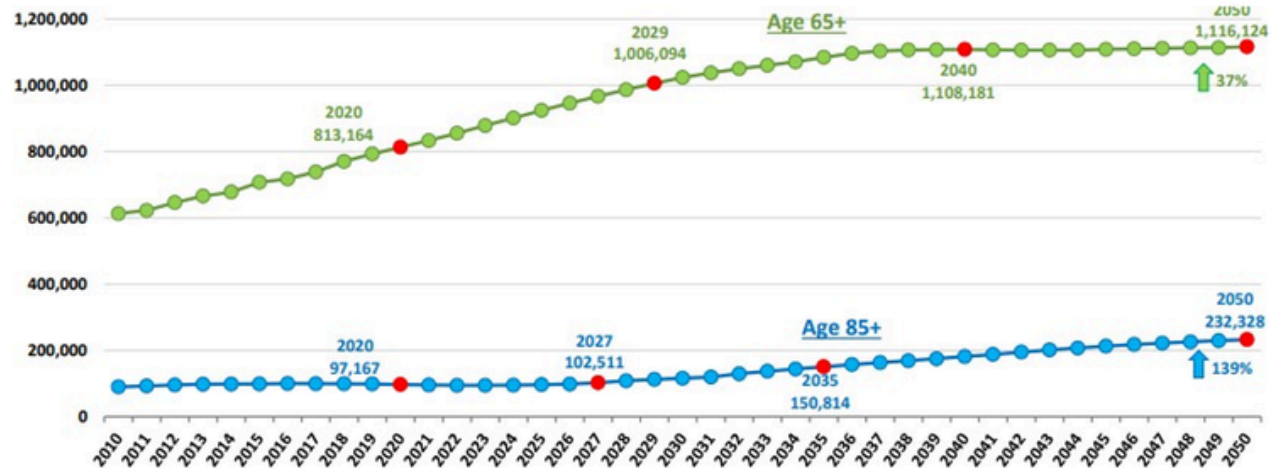
Older Adults and Youth Population	Census 2010	ACS 2022	Change 2010-2022	Pct Change 2010-2022	SEMCOG 2050
65 and over	2,763	3,731	968	35%	4,969
65 to 84	2,317	3,175	858	37%	3,763
85 and Over	446	556	110	24.7%	1,206
Under 18	4,939	5,720	781	15.8%	5,089
5 to 17	3,648	4,274	626	17.2%	3,897
Under 5	1,291	1,446	155	12%	1,192

Note: Population by age changes over time because of the aging of people into older age groups, the movement of people, and the occurrence of births and deaths.

Source: U.S. Census Bureau, Decennial Census, 2018-2022 American Community Survey 5-Year Estimates, and SEMCOG 2050 Regional Development Forecast

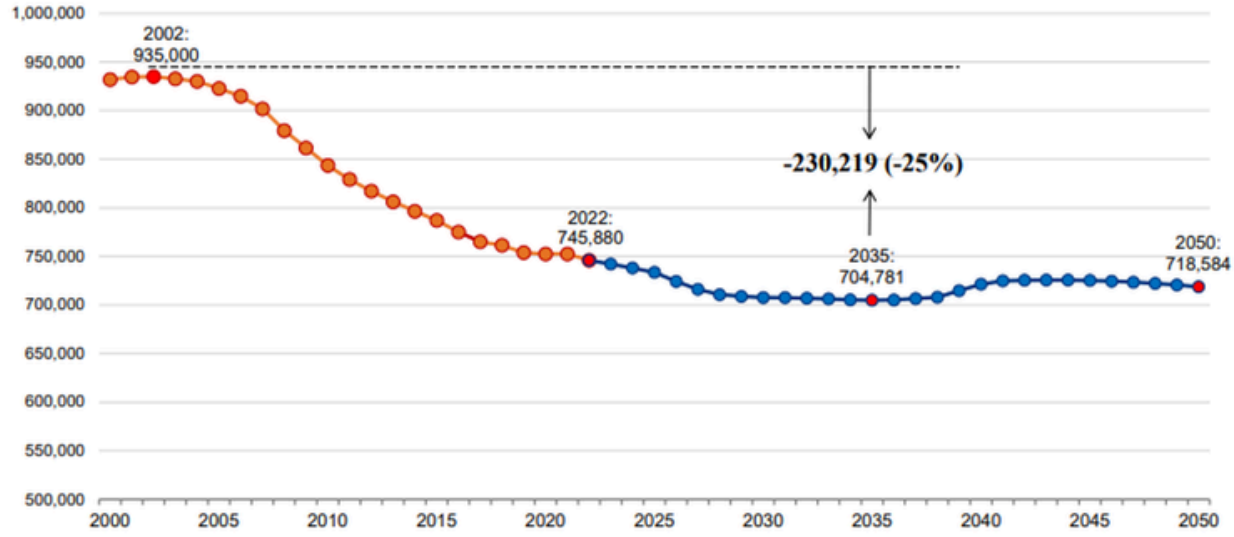
In Southeast Michigan, the senior population is growing rapidly while the school age population (ages 5-17) is declining in population (SEMCOG 2050 Regional Development Forecast).

Rapid Growth of Senior Population - Southeast Michigan



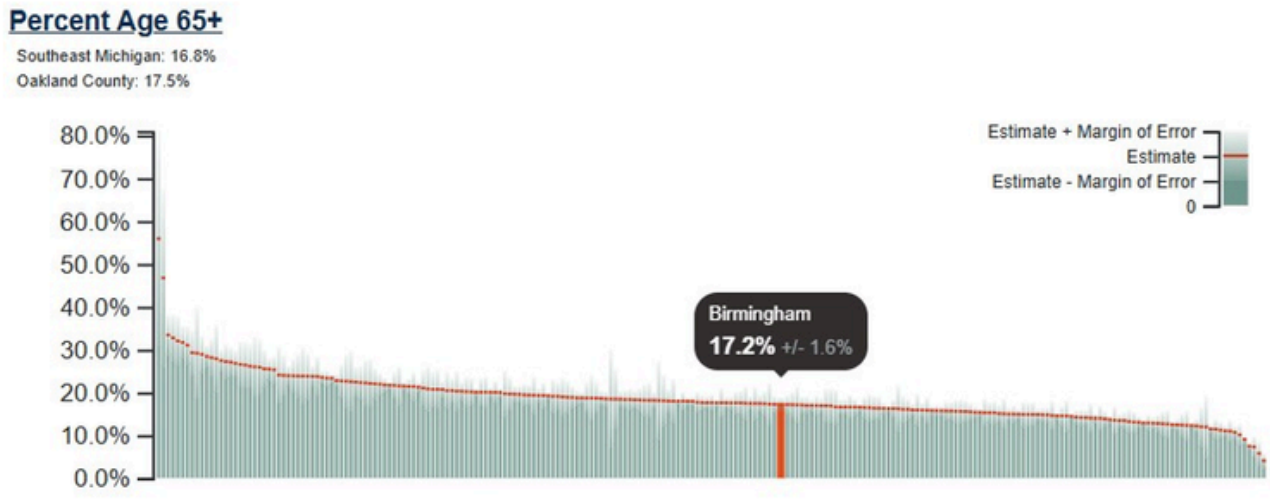
Source: SEMCG 2050 Regional Development Forecast

Declining School Age Population (Ages 5-17) - Southeast Michigan



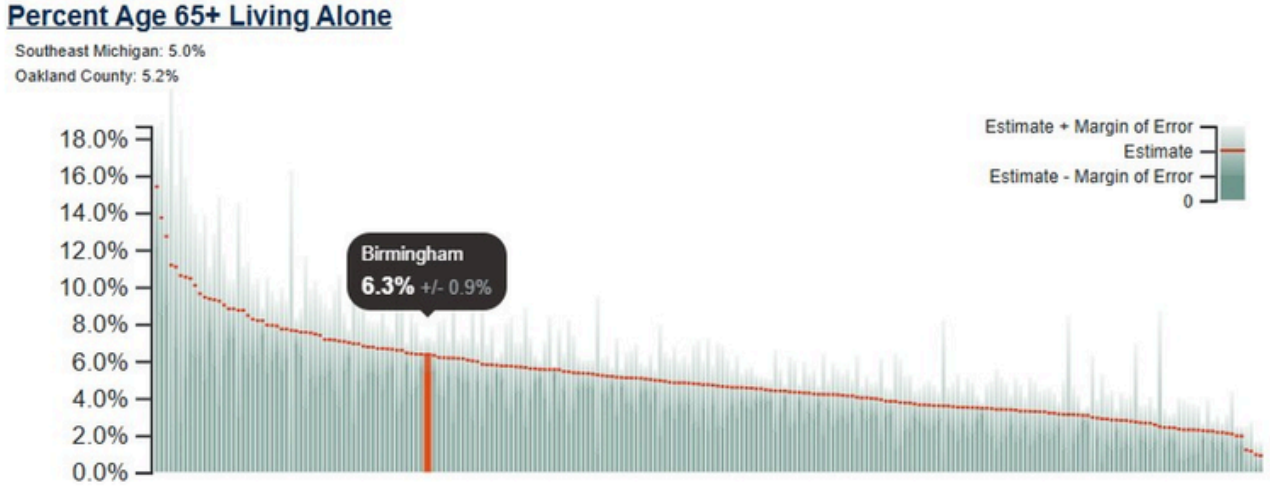
Source: SEMCOG 2050 Regional Development Forecast

Currently, Birmingham's 65 and older population make up 17.2% of Birmingham's population (3,752 residents). Included in the chart is also the 65 and older population percentage for both Southeast Michigan and for Oakland County (Community Profile of Birmingham in SEMCOG's Data Base).



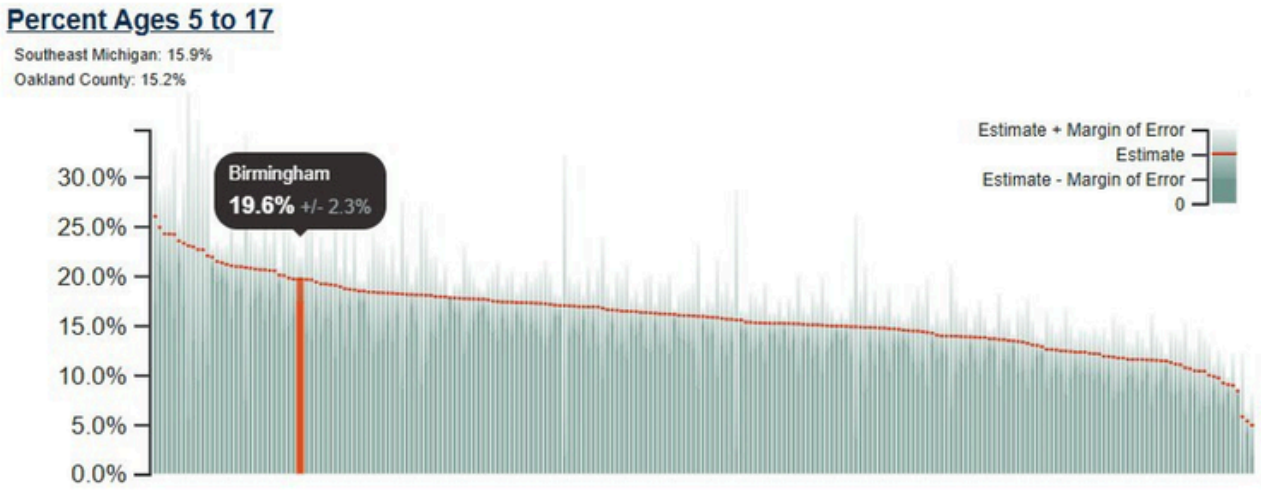
Source: SEMCOG Community Profiles

Birmingham's 65 and older population that currently lives alone make up 6.3% of the City's population (1,375 residents). Included in the chart is also the 65 and older population percentage that lives alone for both Southeast Michigan and for Oakland County (Community Profile of Birmingham in SEMCOG's Data Base).



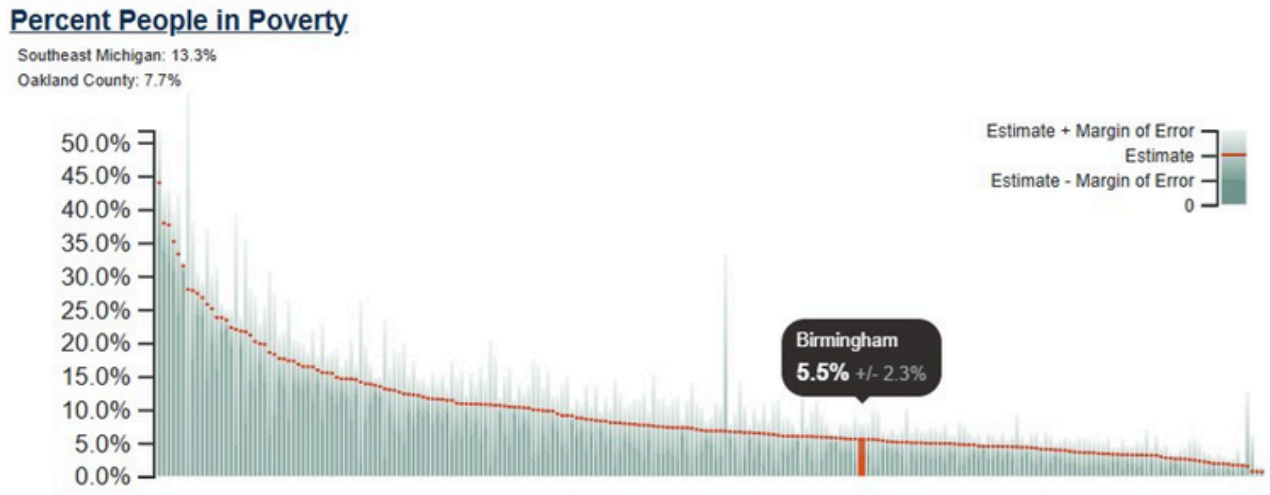
Source: SEMCOG Community Profiles

Birmingham's percentage of individuals between the ages of 5 to 17 years of age is 19.6% of the City's population. Included in the chart is also the percentage of individuals between the ages of 5-17 years of age for both Southeast Michigan and for Oakland County (Community Profile of the City in SEMCOG's Data Base).



Source: SEMCOG Community Profiles

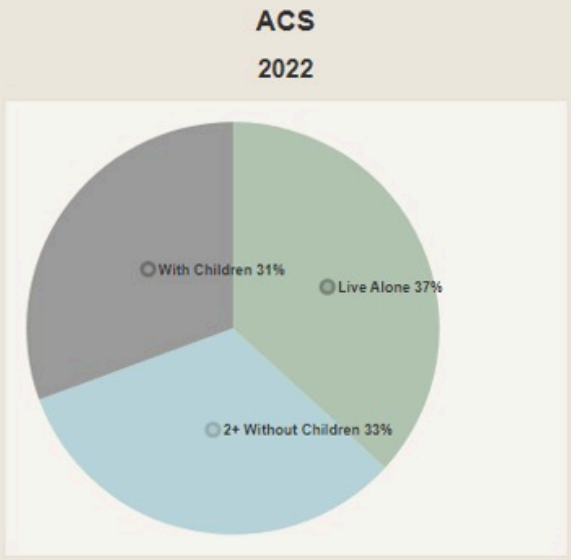
The percentage of people currently living in poverty in Birmingham was 5.5% of the City's population (1,200 residents). Poverty is defined as person with an annual income of less than $30,000 per year. Included in the chart is also the percentage of people living in poverty for both Southeast Michigan and for Oakland County (Community Profile of the City in SEMCOG's Data Base).

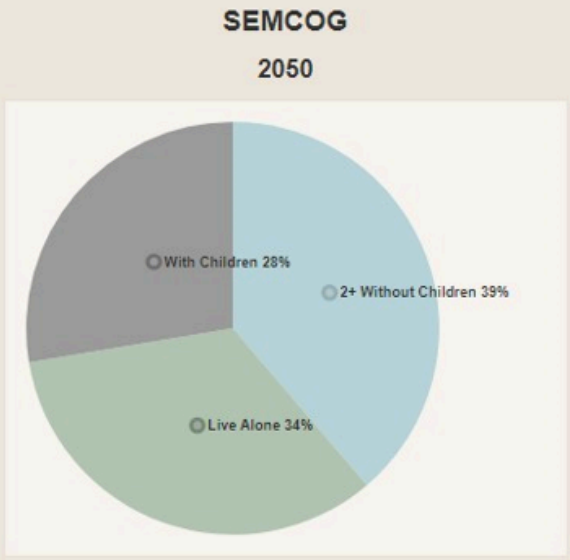


Source: SEMCOG Community Profiles

SEMCOG's Community Profile for Birmingham showed a very interesting trend in regards to households with seniors age 65 and older. From 2010 to 2022, the percentage of households that had a senior 65 or older went up 38.3% while households without seniors fell 6.6%. Also, seniors age 65 and older living alone rose 42% in this same time frame while people under the age of 65 living alone fell 10%.

Household Types

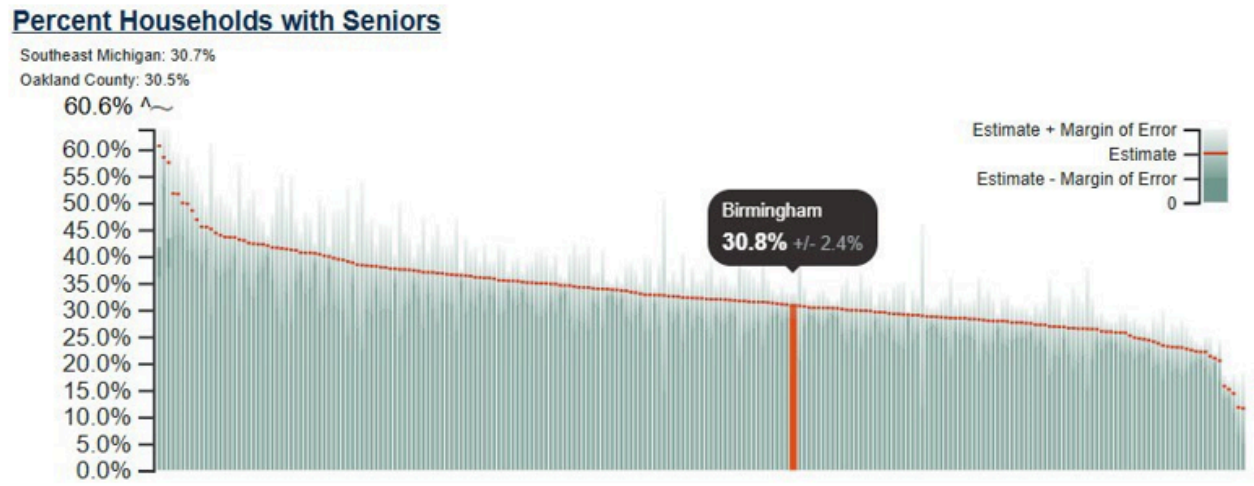




Household Types	Census 2010	ACS 2022	Change 2010-2022	Pct Change 2010-2022	SEMCOG 2050
With Seniors 65+	2,087	2,887	800	38.3%	3,596
Without Seniors	6,952	6,496	-456	-6.6%	6,461
Live Alone, 65+	969	1,376	407	42%	-
Live Alone, <65	2,307	2,077	-230	-10%	-
2+ Persons, With children	2,695	2,873	178	6.6%	2,779
2+ Persons, Without children	3,068	3,057	-11	-0.4%	3,897
Total Households	9,039	9,383	344	3.8%	10,057

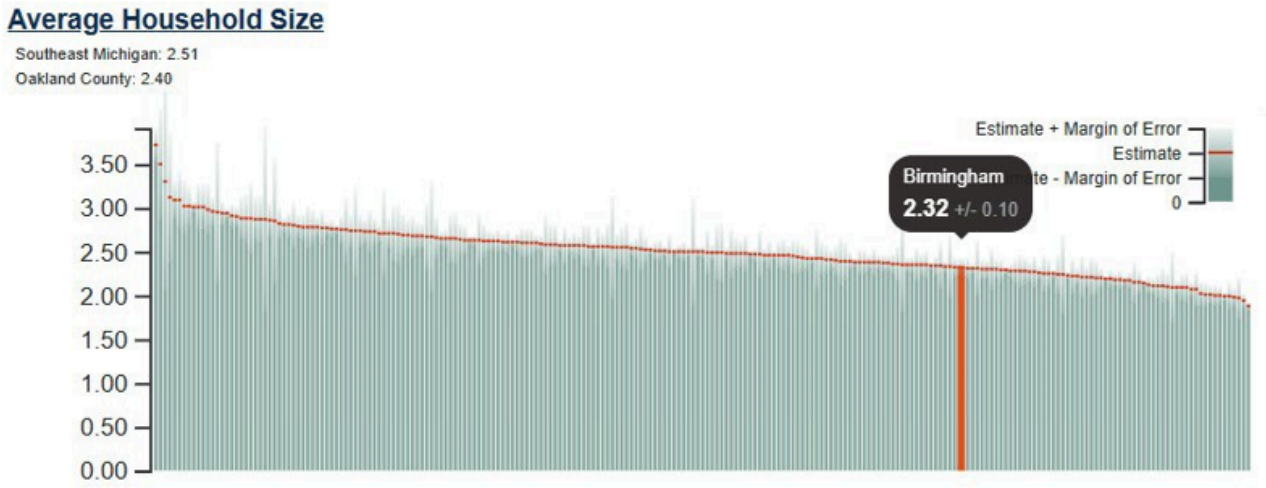
Source: U.S. Census Bureau, Decennial Census, 2018-2022 American Community Survey 5-Year Estimates, and SEMCOG 2050 Regional Development Forecast

The percentage of households with a senior living in the household was 30.8% of the total households in Birmingham (2,992 households). Included in the chart is also the percentage of households with a senior for both Southeast Michigan and for Oakland County (Community Profile of the City in SEMCOG's Data Base).



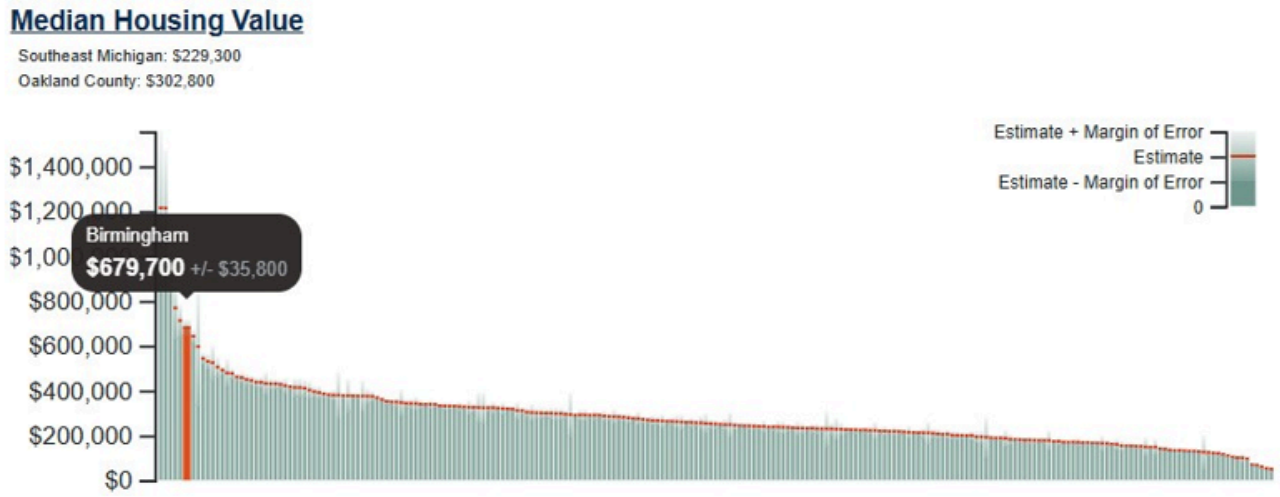
Source: SEMCOG Community Profiles

The average household size in Birmingham was 2.32 people per household. Included in the chart is also the average household size for both Southeast Michigan and for Oakland County (Community Profile of the City in SEMCOG's Data Base).



Source: SEMCOG Community Profiles

According to SEMCOG, the median housing value in the City was $679,700. The City's median housing value is well above both Oakland County and Southeast Michigan. It should also be noted that according to the Oakland County Equalization Department, Office of Management and Budget, the average selling price for a home in the City in 2023 was $904,917. Included in the chart is also the median housing values for both Southeast Michigan and for Oakland County (Community Profile of the City in SEMCOG's Data Base).



Source: SEMCOG Community Profiles



Demographic Data and Summary Analysis

In considering aging in place, key points of available demographic data and projections are as follows:

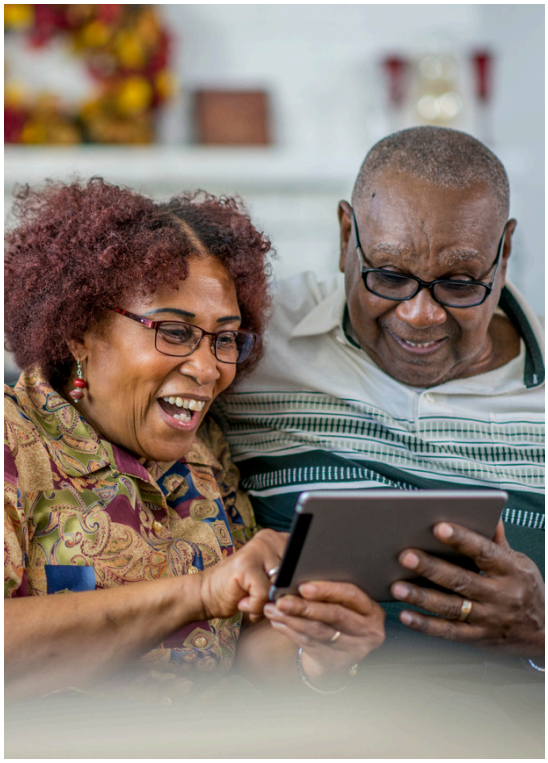
1. The largest population of residents in Birmingham are between 50 and 54 years of age.
2. Three of the top four population changes in Birmingham between 2010 and 2022 were in the age populations between 60 and 74 years of age categories.
3. The forecasted population changes for Birmingham indicate that between 2020 and 2050, the largest two age populations growing by percentage will be residents age 65 to 84 and people over the age of 85.
4. The percentage of households in Birmingham with a resident age 65 or older has gone up 38.3% from 2010 to 2022.
5. The percentage of adults age 65 and older living in the City between 2010 and 2022 has increased 35%. The percentage of residents age 18 and under went up only 15.8% in the same time period.
6. In Southeast Michigan, the population of persons over the age of 65 is projected to increase approximately 27% between 2020 and 2050. Conversely, the number of school age children (ages 5-17) is expected to fall approximately 4% over the same time period.
7. In Birmingham, 17.4% of the population is age 65 or older.
8. 19.6% of the City's population is ages 5 to 17.
9. 6.3% of the City's population are 65 or older and live alone.
10. 5.5% of the City's population live in poverty.
11. The average household size is 2.32 people
12. The median housing value in 2023 was $679,700. The average selling price was $904,917.

Other demographic insights to consider for Southeast Michigan (based on SEMCOG data) from 2020 to 2050 include the following projections:

1. By 2028, the population of those age 65 and older will outnumber the population of children ages 0 to 17 for the first time in the region's history.
2. By 2028, one in five people in the region will be 65 years of age or older.
3. By 2029, the entire "baby boomer" generation will be at least 65 years of age or older.
4. The aging population will lead to a labor shortage.
5. The region will be older and more racially and ethnically diverse.
6. The region will also experience significant demographic transitions in the coming years because of declining birth rates and an aging population.

Conclusion

It is clear from the data analyzed by the AIPC that Birmingham's population is aging. Data shows that the City's population is getting older and that a larger number of older adults will be living alone. Based on housing costs, alternative options for aging in Birmingham are limited. As has been previously discussed, the vast majority of the City's residents want to stay in their homes as they age for as long as possible for financial reasons and to retain their independence.





SECTION 2

Review of Existing Senior Services

Next, a 501(c)(3) nonprofit agency, provides senior/older adult services for the City and three surrounding communities (Beverly Hills, Bingham Farms and Franklin) as well as residents from numerous other communities that independently chose Next to be their senior/older adult services provider. The City has no formal senior/older adult department or municipal office. Senior/older adult services are not addressed in the City Charter (for a complete history of senior/older adult services, please see the **Background** section of this report on page 8).



The City posts a "senior services" section on the City's website that lists City services and opportunities for seniors. These services include:

1. Birmingham Fire Department:
   - File of Life - A single document containing critical information including medical history, emergency contacts and medications
   - Home safety inspections
   - Lift assists (for residents who fall)
   - Free blood pressure checks
   - Knox Box Loaner Program - The Knox Box allows the resident to place a home key inside allowing easy access for the fire department when needed
   - Carbon monoxide detector installation
   - Smoke detector installation
   - When appropriate, seniors are provided information about Next or the Area Agency on Aging contact information

2. Birmingham Police Department:
   - Adopt A Senior Program - Officers provide companionship and assistance when needed. Many seniors live alone and have no nearby relatives. Officers perform small household chores, run errands during their breaks or before or after their assigned shift and periodically visit seniors to check their welfare.

3. Birmingham Museum:
   - Senior rates for admission to the museum; barrier-free accessibility of both the Allen House and the Hunter House
   - Free adult lecture series at the Baldwin Library and ample virtual and video content of local history presentations
   - Specialized group tours with reduced rates for seniors
   - Senior-friendly Facebook content and active social media engagement
   - Research questions and services; information and referral
   - Ability to create senior-specific programs that draw on personal and community shared history

4. Birmingham Golf Courses:
   - Seniors enjoy discounted rates at Birmingham's golf courses.

5. Baldwin Public Library

- Computer Classes - Baldwin's classes are offered virtually and in person with our mobile computer lab.
- Curbside Pickup - Save time and parking costs while Baldwin staff deliver your materials directly to your vehicle. This service is available 7 days a week.
- Gale Legal Forms - Download and edit a wide selection of essential Michigan-specific legal forms that may be customized for the most common legal procedures. These forms are used by attorneys and law firms and include real estate contracts, wills, premarital agreements, bankruptcy, divorce, landlord tenant, and many others.
- Home Delivery - Residents from Birmingham, Beverly Hills, Bingham Farms and Bloomfield Hills can choose from books, magazines, DVDs, audiobooks and magnifiers and have them delivered to their homes through USPS mail in a heavy-duty canvas bag. When finished with the items, simply return them in the canvas bag using the enclosed postage.
- Lifelong Learning - In this program devoted to lifelong learning, a friendly group of retired, semi-retired and curious people explore topics and present their findings with the group. This recurring weekly series meets on Wednesday mornings during the fall and winter months.
- Low Vision Aids - Baldwin offers various services for vision-impaired patrons, including audiobooks on CD, eAudiobooks and eBooks, large print materials, and magnifiers.
- MeLCat is the easy-to-use interlibrary loan system that allows Michigan library cardholders in good standing to borrow books and other library materials from over 450 participating Michigan libraries. Items requested through MeLCat are delivered to Baldwin and circulate for either two weeks or four weeks.
- Michigan Activity Pass - Enjoy complimentary or reduced admission at more than 440 cultural institutions, including nature centers, historical sites, museums, Oakland County parks, and every Michigan state park.
- Oakland Talking Book Service (http://otbs.rhpl.org/) - This free service, administered by the Rochester Hills Public Library, loans talking books and magazines, large print books, Braille and talking book players to eligible Oakland County residents of all ages. If you are unable to read or use standard printed materials as a result of temporary or permanent visual or physical limitations, you should qualify. A talking book player and materials will be mailed at no cost as Free Matter for the Blind. In addition to mailed materials, all eligible individuals have access to tens of thousands of books and dozens of magazines available for download through the National Library Service's Braille and Audio Reading Download (BARD) site.



Review of City Financial Support of Senior/Older Adult Services

The City budgets every year to support Next in providing senior/adult services. In fiscal year 2023-2024, the City budgeted $126,632 for Next (General Fund). The City committed an additional $23,236 to Next in the form of federal Community Development Block Grant funds. (CDBG). CDGB funds are reimbursement funds and are only for low income qualified individuals; funds are received by the City that are then reimbursed by the City to Next to assist with income qualified senior outreach services such as minor home repairs, lawn cutting and snow removal.

As clarified earlier in the **Background** section of this report, the City is part of an active interlocal agreement with the communities of Beverly Hills, Bingham Farms and Franklin. The purpose of the interlocal agreement is to provide Next with a reliable source of revenue for the stabilization and predictability of its finances in order to serve the seniors residing in the various governmental units. As previously noted, the interlocal agreement provides Next with approximately 18% of their total operating budget.

The City of Birmingham is the only community of the four participating governmental units that sought a "senior millage" from its constituency under Michigan Compiled Law 400.576, which authorizes local governments to levy up to 1 mill in millage for services to older citizens. A senior millage does not count towards a government's maximum Headlee tax rate. The City's current three-year Senior Millage of .33 of 1 mill (approved by voters in November of 2023 for the period from July 1, 2024 through June 30, 2027) was specifically approved to "enable the City to make interim improvements to the YMCA building and to establish a sinking fund to contribute toward the cost of permanent improvements to the building for use as a senior/recreation center in the future."



Next Operating Budget

The 2023-2024 Next budget was approximately $1,036,250. The four participating municipalities contributed a total of $185,000. The Birmingham Public Schools contributed $310,000 in "in-kind" revenues in the form of no-cost rent. Next's 2023-2024 budget showed expenses equal to revenues. Remaining revenues of $541,250 came from the following sources:

- Business sponsorships
- Philanthropy/donations
- Planned giving
- Fundraisers
- Membership fees
- Grants
- Transportation
- Program fees

Next has 14 staff members, of which only two are full time employees and the remaining 12 are part time employees. Next offers no benefits to any staff members. All instructors at Next are contract employees and receive a form 1099 at the end of the year, which allows Next to avoid paying employment taxes, FICA and Social Security. Next relies on an army of volunteers to support their events and programming. Volunteers provide over 3,885 hours of service per year to Next or approximately $174,270 in equivalent personnel savings. These volunteers allow Next to keep their costs down and are an invaluable asset to Next operations.

Remaining 2023-2024 expenses resulted from the following:

- Operating
- Facilities & Overhead
- Fundraising
- Hospitality
- Marketing & Newsletter
- Programming
- Transportation
- Outreach

Next Building

Next is currently housed within a former elementary school (Midvale School, 2121 Midvale, Birmingham, MI) in the Birmingham Public School District (BPS). Midvale is also the current location for BPS's Early Childhood Center. The two organizations share the building and the adjacent parking lot. Next operates out of approximately 10,000 square feet of space: (5) rooms, some small office space, a large lobby and the shared use of one gymnasium (one pickleball court in size). There are fitness machines located outside the building in an adjacent courtyard.

BPS provides the building space to Next at no cost as a benefit for the entire BPS community for older adults. While this has been a mutually beneficial relationship for many years, Next has outgrown the space and BPS is looking to expand their Early Childhood Center offerings within the district which would require more space. Next operations are limited to available space and in hours of operation so as to avoid conflict with the drop-off and pick-up times of the Early Childhood Center. The gymnasium is shared between the two entities and results in limited physical offerings and/or pickleball opportunities. Additionally, if a program exceeds more than fifty people in size, it must be moved from the largest multi-purpose room into an available Next time slot in the gymnasium. This results in other regularly scheduled programming in the gymnasium being canceled. Next office space is very limited, consisting of one private office, three small shared offices and a general reception desk office area. There is no space for private meetings between members and staff other than a multi-purpose room if available.

On the plus side, the current Next building lobby is used extensively by members for playing cards, social conversations and other small group gatherings and is looked at very positively by members as a warm and inviting space. Next offers a complimentary beverage and coffee serving station and limited food offerings. Next has a computer room to provide access for older adults who have no home internet service, valuable computer training to enhance skills and a library space that also serves as a general purpose room. While certainly not ideal for a variety for reasons, the current home for Next has functioned to the best of its abilities and BPS should be commended for providing Next a home at a very reasonable cost for more than forty-five years.

Review of Next Services

The mission of Next is to be a welcoming place that enriches the lives of its members and the community. Next is guided by the following principles:

- To be a recognized leader in serving the community
- To deliver lifelong learning and wellness through comprehensive programming
- To be an integral part of the larger community
- To provide exceptional customer service

The Aging in Place Committee (AIPC) spent a considerable amount of time examining Next's service offerings, as well as other providers in the area, including Oakland County and the State of Michigan (Area Agency on Aging or AAA 1-B). It became apparent to the AIPC that the programming and service offerings of Next met or exceeded most of the other senior/older adult service providers.

As discussed in the **Process** section of this report, the AIPC Community Survey was designed with senior services and needs in mind. It also provided the AIPC with the ability to directly communicate with the entire community, not just seniors/older adults. The AIPC also held two community meetings to directly engage the public in order to receive input from a wide demographic and age range of respondents.



Programming

Next offers over 230 offerings each month, including, but not limited to:

- Thursday evening speaker series
- Henry Ford Health partnership
- Unique daytime presentations
- Entertainment including music, dance, comedy and more
- Fitness - pickleball, yoga, tai chi, strength training, aerobics, golf, softball, bowling, line dancing and tennis
- Art - painting, pottery, drawing, photography, writing
- Card games & clubs
- Discussion groups & special interest groups
- Opportunities to meet and socialize









Support Services

Next offers a comprehensive list of support services to the community that provide valuable lifelines to those who are in need of extra assistance in order to remain healthy and independent. Residents do not need to be a member of Next to receive support services.

Many of these support services are unknown to the community for a variety of reasons; most notably, many people are simply not aware of these services because they have not needed them yet. Next's support services include:

- Reliable transportation to important appointments (SMART transportation services)
- Meals on Wheels
- Medical equipment loaner program
- Yard maintenance & minor home repair programs
- Nutritional support & health screenings
- Information and referrals to area resources
- Home loans for major repairs



Aging in Place Committee Identification of Senior/Older Adult Service Needs

The single greatest senior/older adult service need is a facility to house Next that will allow the organization the space it needs to continue to not only meet senior/older adult needs, but also to acquire the space, support and financial assistance necessary to meet the challenges identified in the AIPC Citywide Aging in Place Action Plan. The Ad Hoc Senior Center Committee (SCC) Vision Statement summed it up best—the City wants to create "a welcoming and dynamic hub where all the members of the community can gather in an environment that promotes socialization, physical activity and lifelong learning that enhance both personal and community wellness." The new senior/recreation center project is a critical component in addressing not only senior/older adult services, but also for also offering the opportunity to create a civic space for all members of the community.



In considering aging in place, the AIPC carefully reviewed the service offerings available, not only in Birmingham, but also in our adjacent communities (interlocal partners), as well as the offerings from both the county and state programs. Analysis and review of this data and the results of the AIPC Community Survey identified areas of service interest needs that guided the AIPC as they developed the Citywide Aging in Place Action Plan. These included:

- 69% of respondents were familiar with Next as the City's primary provider of lifelong learning and activities for older adults, but only 38% were familiar with Next's comprehensive support services.
- When asked what the most pressing support services were needed by respondents, the number one support service need identified was minor home repair/modifications. Snow removal and yard work were also identified as important needs. Respondents also provided numerous comments about the need for a reliable and affordable "handy-man" service listing.
- 95% of respondents indicated that they had adequate personal transportation, which was higher than anticipated. However, when asked whether or not they were familiar with the City's partnership with Next to provide SMART transportation, 41% stated that they were not and another 26% were neutral.
- 57% of respondents felt they had a support system in place to assist them as they age, while 30% were neutral on the issue. 13% of respondents felt they did not have a support system in place.
- 61% of respondents indicated the affordability of housing in Birmingham was a factor in their decision on whether to remain in Birmingham or not.
- 40% of respondents indicated that stairs or other barriers were their greatest concern regarding their ability to age in place in their homes.
- Regarding alternative housing options, the most popular was senior living facilities at 35%. Interestingly, small/tiny homes was the second most popular option at 24% and rental units were third at 16%. This suggests that serious consideration should be given to updating the City's zoning ordinances to promote senior living options and home modifications.
- The lack of public restrooms has been a concern for some time in the City. The Community Survey indicated that only 14% of respondents felt that the City had adequate public restrooms.

- Communication is one of the most important components to an effective and responsive government. The Community Survey identified that City electronic newsletters/e-blasts were the most effective communication tool. Printed communications were also very important for seniors/older adults.
- 78% of survey respondents indicated they would like to volunteer to assist others. As it seems that the City, Next, or other community-based groups are always looking for volunteers, this begs the question of what we may be doing wrong that precludes us from understanding this dynamic and utilizing it for the betterment of all?
- 15% of respondents reported feeling isolated/being alone. The number was even higher for persons **under** the age of 65 (19%).

The above issues have been incorporated more specifically into the Aging in Place Citywide Action Plan.



SECTION 3

Aging in Place Citywide Action Plan

The Aging in Place Citywide Action Plan developed by the AIPC identifies goals that relate to the AARP's nationally recognized "8 Domains of Livability" as they specifically relate to the City and our Next interlocal partners.

For Birmingham, the AIPC identified five relevant domains:

I. Birmingham & Your Needs (Community & Health)
II. Communication & Information
III. Social & Civic Engagement
IV. Housing
V. Transportation

Each domain has a set of specific goals, with a total of nineteen (19) for the plan. For each goal, the plan lays out various tasks and/or activities that need to be implemented to achieve the stated goal. As with any action plan, the AIPC also identified who is best suited to work on the task, what resources would be necessary to accomplish the task, what a proposed timeline would look like to achieve the task and the eventual goal achievement.



The goals developed were designed to build upon an already strong system provided by Next to become an even stronger one that addresses previous shortfalls and seeks to be inclusive, welcoming and accessible to all our seniors/older adults. The work of the AIPC has been open and transparent to the public and has included feedback both at regular meetings and public engagement sessions. AIPC meetings at City Hall were hybrid, both in person and online (via Zoom). The dates, agendas, packets and minutes for all AIPC meetings were published on the City's website.

The AIPC requests that the implementation of the Aging in Place Citywide Action Plan be given a high priority by the City Commission, City staff, Next, the senior/older adult population and the community itself. By implementing the plan together, we will be able to address each goal and build a community where our seniors/older adults are valued and are able to maintain independent, fulfilling and meaningful lives as they age in Birmingham.



I. Birmingham & Your Needs (Community & Health)

Summary

This domain is the very fabric of the City Commission's commitment to finding a facility to house Next, the City's dedicated senior services provider. Many of our residents have lived in the City for a long period of time and have a strong desire to age in their homes. Providing our older adults with a facility where senior services, physical activities and socialization are readily available is critically important.

Respondents to the Community Survey had very favorable experiences with City services, including feeling very safe in their homes, being very satisfied with the City's police, fire and public services, feeling that they have adequate health care and are healthy enough to age in place with an adequate support system in place. The City's walkability, civic destinations and parks were also well received.

A significant amount of time was spent by the AIPC discussing Next and the services they provide which were covered earlier in this report. Next is doing a very good job of providing older adult services. Communication needs to improve so that all of the comprehensive support services offered by Next are known to the public. In terms of support services, home repairs/modifications, snow removal and grass cutting were the most commonly mentioned needed support services.

According to information received from respondents to the Community Survey:

- 80% indicated that they wanted to remain in Birmingham as they age.
- When asked what features about Birmingham were the most important for older adults, the top answer was "safe neighborhoods." The second most popular feature was "walkability."
- 91% felt that the City's police, fire and public services met their needs.
- 88% indicated that the City has accessible parks and facilities.
- 57% indicated that they had a support system in place to assist them as they age.
- 89% indicated that they have adequate health care and are healthy enough to age in their residence.
- 69% stated that they would support the continuation of a senior millage (one mill or less) for older adults.
- 69% indicated that they were aware of Next as being the City's primary provider of lifelong learning and activities for older adults.
- Home repairs/modifications (41%), snow removal (37%) and grass cutting (24%) were support services most needed by older adults in the City.

1. GOAL: Develop a facility for senior services (age 50+) to house Next, the City's dedicated senior services provider, that will be a welcoming and dynamic hub where all members of the community can gather in an environment that promotes socialization, physical activity and lifelong learning that enhance both personal and community wellness.

a. Provide Next with resources to deliver a wide range of programs and services.
b. Design a facility that encourages social interactions, community connections and emotional enrichment for the community through the use of both indoor and outdoor gathering spaces.
c. Design a facility that promotes health, fitness and recreational programming for the community.

2. GOAL: Establish a funding mechanism to support reliable and sustainable senior services (Next).

a. Capitalize on strong community support for older adults by asking for a senior millage.
   i The Community Survey indicated that 69% of respondents were positive in their support of a continuation of a senior millage.
   ii. The support for the continuation of the current senior millage mirrored the voting results from the original three year senior millage from 2023 by residents (69% were "Yes" and 31% were "No").
b. Convene a committee of public officials representing all four communities covered in the interlocal agreement (Birmingham, Beverly Hills, Bingham Farms and Franklin) in their support of senior services (Next) to study and determine a mutually beneficial funding model where all four communities pay a representative share of operations and costs.
c. Examine all avenues of financial support available to the City (conducted by City staff, interlocal partners, Next) to support older adults/senior services with all outside sources to assist with both the development of a facility to house senior services and the creation of a reliable and predictable funding mechanism.

3. GOAL: Continue to prioritize public services (police, fire, department of public services) that meet or exceed resident needs.

a. Prioritize police, fire and department of public services operations. The Community Survey identified "safe neighborhoods" as the number one most important quality of Birmingham.
b. Implement and deliver new community engagement programming and operational ideas by the police, fire and department of public services that support their missions in the delivery of services.

c. Demonstrate and highlight to the community the high level of safety, security and services they currently receive. 95% of respondents in the Community Survey indicated that they felt safe in their homes. This feeling of safety is another reason why older adults want to age in place in their home in Birmingham. City staff and Next should utilize this data to emphasize the desirability of the City to older adults.

4. GOAL: Create an understanding among City residents that Next is the City's primary older adult service provider and to have the services offered by Next known and understood by the community.

a. Develop a consistent outreach plan to increase awareness of all of the support services and assistance offered by Next.
   i. Utilize the City Communications team to publicize service information and offerings in conjunction with Next.
   ii. Hold a City Commission workshop on Next services.
   iii. Hold in-person community workshops/meetings to enlighten the community about services provided by Next.
   iv. Include a Next staff member at City staff meetings to further the communication connections between the City and Next.
   v. Include Next at City community events to further publicize the relationship between Next and the City (DPS Open House, Fire Dept. Open House, Police Dept. Open House, Farmers Market and Library Events).

5. GOAL: Maintain a positive, cooperative and mutually beneficial relationship between the City, Next and the Birmingham Public Schools (BPS) as valued partners in serving the community.

a. Establish what the new paradigm will be moving forward in the relationship between the City, Next and BPS.
b. Demonstrate support for older adults' well-being and continued service offerings between the City, BPS, Next and the other three interlocal partners.

6. GOAL: Coordinate health care, housing and other resources as necessary to assist older adults who lack insurance, financial resources or other support systems by networking with local, county, state and federal agencies.

a. Encourage City staff (police, fire, DPS, manager's office) and Next staff to have open lines of communication in this area in order to produce a guide or listserv of available resources and Next support service offerings.
b. Maintain a strong relationship between Next and other community based organizations that support older adult services to ensure that as many service offerings as possible are known and being utilized by the City and other interlocal community partners including, but not limited to:
   i. Ageways (formerly the Area Agencies on Aging 1-B) - State of Michigan
   ii. Oakland County Office of Older Adult Services
   iii. Other local senior centers/commissions/councils

II. Communication & Information

Summary

Information delivery comes in many different platforms. Both the City and Next recognize that older adult's communication methods and practices vary greatly and that communication with our older population is absolutely critical for their inclusion in our community and in their quality of life.

One of the key findings that the AIPC learned in this process was that there is a multitude of services available to older adults. Assembling this information will be critical in serving our older adult population.

The Community Survey revealed that most respondents were familiar with Next (69%) as the City's primary provider of lifelong learning and activities for older adults. It also revealed that only 38% indicated that they were familiar with Next's comprehensive support services and only 33% stated that they were familiar with Next's partnership with the City and SMART to provide transportation services.

The Community Survey showed that respondents felt very strongly that the City's police, fire and public services meet their needs (95%). The police and fire department community outreach programs should continue to be emphasized as much as possible by the City.

According to information received from respondents to the Community Survey:

- Electronic Newsletters/Eblasts were the most popular communication platform and the second most popular platform was the City's Print Newsletter.
- After the age of 76, the most popular communication platform was the City's Print Newsletters.
- Social media was the least popular communication platform at just 29%.

1. GOAL: Create a multi-faceted communications model that uses numerous methods to ensure older adults have access to information about services and resources.

a. Offer a variety of communication mechanisms to ensure the effective dissemination of information to older adults.
b. Coordinate communication team members from the City, Next, BPS, Baldwin Public Library, Next interlocal partner communities and any other entity that this group feels is important to ensure a broader distribution of information to the community at large and to provide increased awareness of programming and other opportunities for older adults.

2. GOAL: Expand and enhance the City's media/communications plan promoting Next and all of Next's support services to enhance community knowledge of what Next has to offer.

a. Establish Next as the City's and surrounding community's primary older adult services provider.
b. Create community awareness that Next is available to provide assistance and answer questions.
c. Create additional video content to enhance knowledge about Next for publication on the City's, Next's and other community's websites and local cable television stations.
d. Update the City's website with current older adult service offerings and provide links to the resources.





III. Social & Civic Engagement

Summary

Socialization for older adults is important for many reasons. Socialization improves mental health, creates a sense of community or belonging, establishes a support system that allows for independence and assistance and improves cognitive function and physical health.

One of the most interesting takeaways from the Community Survey was how many respondents were interested in volunteering. It seems that the City or Next or other community groups are always looking for volunteers, but find few takers. Why is this? What are we doing wrong that precludes us from understanding this dynamic and utilizing it for the betterment of all? If 78% of the Community Survey respondents indicated that they want to volunteer, why aren't they? How do we reach these people?

Community Survey respondents followed a very similar pattern with the rest of the country in that as our community ages, a person is twice as likely to be living alone after age 55 than before and 91% of older adults after age 66 either live alone or in a two-person household.

In terms of employment, survey respondents indicated that they were "retired" (74%). Surprisingly, of that number, 82% were under the age of 65. Therefore, if the majority of respondents were retired people under the age of 65, what are they doing to occupy their time? The need for older adult services appears to be more of a necessity for this population with regard to activities and socialization.

The City's use of temporary or portable restroom facilities is a compromise with having permanent restroom accommodations. Only 14% of respondents felt that the City has adequate public restrooms. With the City Parks and Recreation Five Year Master Plan being updated, there will be an opportunity for more permanent restrooms throughout the park system, including at St. James Park. According to information received from respondents to the Community Survey:

- 78% indicated that they were satisfied with the City's civic destinations, outdoor spaces and facilities.
- 69% stated that they were satisfied with their social life and felt connected to the community.
- 78% stated that they were interested in volunteering their time to help others.
- 15% indicated that they were either looking to go back to work or were considering going back to work.

1. **GOAL: Support enhanced senior services and programming to provide older adults with more opportunities for physical, mental and personal growth and development.**
   a. Create clear and simple communication strategies to reach older adults who may not be aware of available older adult opportunities or services.
   b. Develop City programming (in partnership with Next) for older adults. For example, BSD Shopping Day/Night event, reduced pricing for seniors at coffee shops, bistros or restaurants or other special event activities like karaoke or live music catering to older adults.
   c. Formulate a plan to coordinate and advertise older adult programing opportunities from the City, other community partners (Beverly Hills, Bingham Farms and Franklin), the Birmingham Public Schools and its Community Education Department.

2. **GOAL: Create and promote community and social activities/opportunities for older adults.**
   a. Plan future projects/programming around advancing and improving the areas that mean most to community members. As indicated in the Community Survey, the most important features of the City were: safe neighborhoods, walkability, the library/museum, community and social activities and the parks and trail systems.
   b. Increase communication to promote multiple social and community events from a variety of resources that include the City, the BSD, BPS, Next or any other community based organization.
   c. Coordinate a master list or calendar of event happenings to increase awareness of social and community activities available to older adults.
   d. Identify opportunities for older adults to attend BPS functions at no cost or a reduced cost. This includes activities like school plays, concerts, athletic events or other special events. These opportunities would provide inter-generational contacts.

3. **GOAL: Become an "Age Friendly Community."**
   a. Expand the role of the police community resource officer by adding an older adult's component in concert with Next to provide community outreach.
   b. Expand the role of the fire community resource officer by adding an older adult's component in concert with Next to provide community outreach.
   c. Explore the opportunities to become an AARP "Age Friendly Community" or a "Dementia Friendly Community" or any other designation that would enhance the City's reputation as being older adult friendly.

4. **GOAL: Install permanent restrooms in neighborhood parks to make older adults comfortable participating in outside physical activity.**
    a. Identify parks that are immediate candidates for restroom installation.
    b. Develop and formulate a plan to operate public restrooms in a safe and convenient manner.
    c. Include funding in the City's new Five-Year Master Park Plan to facilitate the addition of public restrooms.

5. **GOAL: Connect older adults with volunteer opportunities.**
    a. Explore existing volunteer opportunities and create awareness of those opportunities.
    b. Explore future opportunities for volunteering.
    c. Form an internal sub-committee at Next that focuses on the issue of volunteering and how to identify and recruit potential volunteers to fill service voids or needs.
    d. Create a volunteer page on both the City's and Next's respective websites that focuses solely on volunteerism.

6. **GOAL: Provide older adults with assistance in examining employment opportunities in the community.**
    a. Educate older adults about the availability of employment opportunities.
    b. Identify outside agency resources (local, county and state) that older adults could use to improve their employability.



IV. Housing

Summary

Birmingham's population is aging. According to the Southeast Michigan Council of Government's (SEMCOG) Community Profile, the largest category of residents as of 2021 were individuals age 50 to 54 years old (9%). The second most populous age category in the City was age 60 to 64 (8%). In total, 40% of the City's population is age 50 or older. SEMCOG also projected that by 2028, the senior population (those age 65 and older) will outnumber children (those age 17 and under) for the first time and that 1 in 5 persons in the region will be age 65 or older. The average selling price of a home in Birmingham in 2023 was $904,000. The type and variety of housing is a concern as well as the affordability of living options.

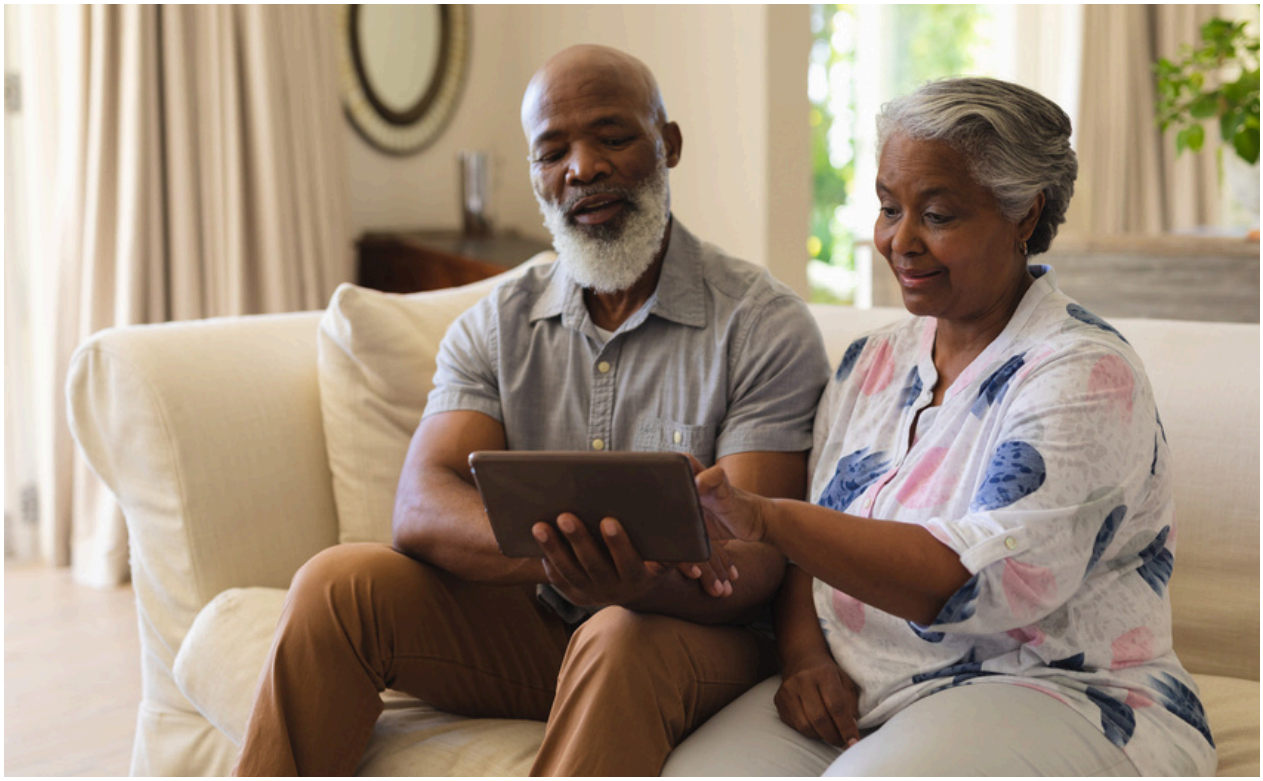
According to information received from respondents to the Community Survey:

- 95% indicated that they felt safe in their residence.
- 61% were concerned with the affordability of Birmingham as being a factor in their decision to remain in the City.
- 75% felt that Birmingham did not offer a variety of living options for older adults.
- 75% indicated that they were not able to modify their residence so that they may age in place.
- The biggest concerns for respondents as it relates to aging in place in their residence were stairs and other physical barriers (40%) and being unable to care for their property(32%).
- The top two alternative housing options that respondents were interested in were "senior living facilities" (35%) and "small/tiny" homes (24%).



1. GOAL: Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.

a. Expand the support services department (currently two part-time employees) at Next that specializes in home services.
b. Create a mechanism where all City staff, especially those in direct communication with the public, become mindful of older residents and other persons with special needs who may need assistance. This information needs to be conveyed to Next for follow-up.
c. Create an inventory of "model" homes in the community that can be used as examples to others on how to better modify their homes to address physical barriers.
d. Improve communication offerings by both Next and the City (on-line resources, print media, City/Next websites, E-blasts, programming at Next/Library) to promote service offerings related to home modifications, maintenance and barriers that are of concern to older adults.
e. Explore volunteer networks to increase awareness of the multitude of service/community based organizations (Rotary Club, Senior Men's/Women's Clubs, Chamber of Commerce, Lions Club) faith-based institutions, and public/private schools that offer services and/or assistance to older persons.
f. Add a postcard to the City's Welcome Packet specific to seniors that lists senior services and inquires about any special needs of new residents.



2. GOAL: Increase the availability of affordable, non-income qualified housing options for older adults.

a. Actively pursue grant programs or government subsidy programs that would assist developers interested in senior housing.
b. Research and seek out alternative forms of senior housing for potential pilot programs by encouraging private individuals to think outside the box.
   These programs include:
   i. House Sharing
   ii. Co-Housing
   iii. Programs where developers and/or neighborhood residents collaborate together to assist one another.
c. Identify property within the City that could be developed for affordable senior housing.
d. Explain property taxes in a public forum so that the public understands how taxes are levied, by whom, at what rate and where their tax dollars actually end up (who receives the tax revenue). The Community Survey respondents cited high taxes and property values as impediments to aging in place.
e. Offer comprehensive in-person programming by Next with guest speakers on the topic of planning for the future. Topics to be considered include: housing costs (includes food, utilities property taxes and maintenance), transportation, health care (insurance costs), medications and additional discretionary funding for entertainment and/or travel.

3. GOAL: Modify the City's zoning ordinances to provide both incentives and options for older adult housing options.

a. Prioritize the revisions to the City's zoning ordinances to encourage the pursuit of this goal in accordance with the City's 2040 Master Plan.
b. Evaluate modifications to the City's zoning ordinances as they pertain to senior living facilities, small/tiny homes and auxiliary dwelling units.

4. GOAL: Increase the walkability of the City for older adults.

a. Install level and well maintained sidewalks as a priority. Walkability was listed as the second most important feature of the City from the Community Survey. Older adults want to be able to walk more, walk safely and have adequate shade and resting locations.
b. Install organized wayfinding (signage) with designated walking routes (with accompanying distances) as possible walkability enhancements.
c. Make St. James Park an older adult friendly park with amenities specifically designed for older adults as part of the City's Five Year Master Park Plan.
d. Ensure older adult safety and quality of life issues by the enforcement of City ordinances related to noise, construction sites (fencing, debris, hours of operation), property maintenance (grass, trees, shrubs) and snow removal by the City's Code Enforcement officers.
e. Continue the City's existing sidewalk improvement plan with better communication about sidewalk repair work and enhancements to increase awareness of City efforts in this area.
f. Examine the feasibility of providing snow sidewalk clearing for all residents.



V. Transportation

Summary

The vast majority of survey respondents indicated that they had adequate personal transportation. Fewer respondents knew that the City and Next have a cooperative agreement with the Suburban Mobility Authority for Regional Transportation (SMART) to assist those without personal transportation and/or other options to receive necessary transportation to address daily living needs (i.e. stores, pharmacy and/or medical appointments). There are numerous opportunities to advance service delivery to older adults through public and private support networks.

According to information received from respondents to the Community Survey:

- 95% indicated that they had adequate personal transportation.
- 33% indicated that they were familiar with the City's partnership with Next to provide SMART transportation services.



1. GOAL: Educate the community about the various transportation services that are available, affordable and safe for all older adults or others with disabilities or special needs.

a. Promote and educate the public about the City's partnership with Next and the SMART Community Partnership Program for transportation services for local appointments/destinations.
b. Explain what SMART is, how it works, how it is affiliated with Next and the City.
c. Extend the hours of the Community Partnership Program bus operations to include operating after 6:00 pm.
d. Extend the SMART FLEX program to the service area of Next. SMART FLEX works on an "on-demand" basis. Rides are not booked in advance. A client would book their ride shortly before they are ready to leave with an average wait time of 5 to 30 minutes (if available).
e. Explain the SMART Connector Service. SMART Connector Service is an advance registration, curb-to-curb service within a 10-mile radius of a designated service area. Rides are available on a first come, first served basis and reservations are required. A six-business day notice is recommended for medical appointments and a two business day notice for other destinations.
f. Inform the public about MyRide2.com, a transportation service provider that helps seniors and adults with disabilities in Oakland, Macomb, Washtenaw and Wayne counties.
g. Explore volunteer networks to see if those with adequate personal transportation and who have also indicated a desire to volunteer their time to assist others could somehow be connected in a way that was safe, legal and beneficial to everyone (rideshare/buddy ride program).
h. Provide programming at Next to explain how transportation services such as Uber and Lyft work and assist older adults in setting up accounts and understanding how to use and pay for the services.

2. GOAL: Improve the feeling of safety and walkability by working with the Police Department to evaluate speed concerns, sign violations, failing to yield to pedestrians already in a crosswalk and/or crosswalk encroachment by vehicle violations and any parking related issues.

a. Develop a media campaign and/or a traffic program highlighting actions taken to address pedestrian/bicycle related issues of safety created by City staff (Police Department, Communications Team).
b. Coordinate a wayfinding program to improve walkability routes and safety measures coordinated by City staff (Police Department, Fire Department, Planning Department, Communications Team).

SECTION 4

Aging in Place Citywide Action Plan — Spreadsheet Format

The final section is the actual Aging in Place Action Plan in spreadsheet form and contains the following:

1. Birmingham's five domains of livability
2. Under each domain are the associated goals and the respective tasks proposed to achieve the goals.
3. For each task, the plan contains the following:
   a. The appropriate organization(s) to undertake the task and work to achieve it.
   b. The resources required to achieve the designated task.
   c. The timeline for implementing the task to achieve the goal. This category has been sub-divided into three time frames:
      i. Short-term: Less than one year.
      ii. Medium-term: 1 to 3 years.
      iii. Long-term: 3 to 5 years



BIRMINGHAM

A WALKABLE CITY

Aging in Place Citywide Action Plan

Goals & Tasks

8E





Birmingham & Your Needs (Community & Health)

1. GOAL: Develop a facility for senior services (age 50+) to house Next, the City's dedicated senior services provider, that will be a welcoming and dynamic hub where all members of the community can gather in an environment that promotes socialization, physical activity, lifelong learning and community wellness.

8E

Task	Who	Resources	Timeline
a. Provide Next with resources to deliver a wide range of programs and services.	a. City Commission, Next staff	a. General fund, millage	a. Medium-term
b. Design and maintain a facility that encourages social interactions, community connections and emotional enrichment for the community through the use of both indoor and outdoor gathering spaces.	b. City Commission, City staff, architects	b. General fund, bond issue	b. Long-term
c. Design and maintain a facility that promotes health, fitness and recreational programming for the community.	c. City Commission, City staff, architects	c. General fund, bond issue	c. Long-term

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

2. GOAL: Establish a funding mechanism to support reliable and sustainable senior services (Next).

Task	Who	Resources	Timeline
a. Capitalize on strong community support for older adults by asking for a senior millage. i. The Community Survey indicated that 69% of respondents were positive in their support of a continuation of a senior millage. ii. The support for the continuation of the current senior millage mirrored the voting results from the original three year senior millage from 2023 by residents (69% were "Yes" and 31% were "No").	City Commission, City staff, voters	a. General fund	a. Medium-term
b. Convene a committee of public officials representing all four communities covered in the interlocal agreement (Birmingham, Beverly Hills, Bingham Farms and Franklin) in their support of senior services (Next) to study and determine a mutually beneficial funding model where all four communities pay a representative share of operations and costs.	b. City staff, Next staff	b. City staff time, Next staff time, interlocal partner staff time	b. Short-term
c. Examine all avenues of financial support available to the City to support older adult/senior services with outside resources to assist with both the development of a facility to house senior services and the creation of a reliable funding mechanism.	c. City staff, interlocal partners, Next staff	c. City staff time, Next staff time, interlocal partner staff time	c. Medium-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

3. GOAL: Continue to prioritize public services (Police, Fire, and Department of Public Services) that meet or exceed resident needs.

Task	Who	Resources	Timeline
a. Prioritize police, fire and department of public services operations. The Community Survey identified "safe neighborhoods" as the number one most important quality of Birmingham.	a. City Commission	a. General fund	a. Medium-term
b. Implement and deliver new community engagement programming and operational ideas by the police, fire and department of public services that support their missions in the delivery of services.	b. City Police and Fire staff	b. City staff time, general fund	b. Medium-term
c. Demonstrate and highlight to the community the high level of safety, security and services they currently receive. 95% of respondents in the Community Survey indicated that they felt safe in their homes. This feeling of safety is another reason why older persons want to age in place in their home in Birmingham. City staff and Next should utilize this data to emphasize the desirability of the City to older persons.	c. City Communications, Police, Fire Staff, City Commission	c. City staff time	c. Short-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

4. GOAL: Create an understanding among City residents that Next is the City's primary older adult service provider and to have the services offered by Next known and understood by the community.

Task	Who	Resources	Timeline
a. Develop a consistent outreach plan to increase awareness of all of the support services and assistance offered by Next. i. Utilize the City Communications team to publicize service information and offerings in conjunction with Next. ii. Hold a City Commission workshop on Next services. iii. Hold in-person community workshops/ meetings to enlighten the community about services provided by Next. iv. Include a Next staff member at City staff meetings to further the communication connections between the City and Next. v. Include Next at City community events to further publicize the relationship between Next and the City (DPS Open House, Fire Dept. Open House, Police Dept. Open House, Farmers Market and Library Events).	City Communications staff, Next staff, City Commission	City staff time, Next staff time, general fund	Medium-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

5. GOAL: Maintain a positive, cooperative and mutually beneficial relationship between the City, Next, Birmingham Public Schools (BPS) and other valued partners.

Task	Who	Resources	Timeline
a. Establish what the new paradigm will be moving forward in the relationship between the City, Next, BPS and other valued partners.	a. City staff, Next staff, BPS staff	a. City staff time, Next staff time, BPS staff time	a. Short-term
b. Demonstrate support for older person well-being and continued service offerings between the City, BPS, Next and the other three interlocal partners.	b. City staff, Next staff, BPS staff, interlocal partners	b. City staff time, Next staff time, BPS staff time, general fund	b. Short-term

6. GOAL: Coordinate healthcare, housing and other resources as necessary to assist older adults who lack insurance, financial resources or other support systems by networking with local, county, state and federal agencies.

8E

Task	Who	Resources	Timeline
a. Encourage City staff (Police, Fire, DPS, Manager's Office) and Next staff to have open lines of communication in this area in order to produce a guide or listserv of available resources and Next support service offerings.	a. City Police, Fire, and Manager's Office staff, Next staff	a. City staff time, Next staff time	a. Short-term
b. Maintain a strong relationship between Next and other community based organizations that support older adult services to ensure that as many service offerings as possible are known and being utilized by the City and other interlocal community partners including, but not limited to: i. Ageways (formerly the Area Agencies on Aging 1-B) - State of Michigan ii. Oakland County Office of Older Adult Services iii. Other local senior centers/commissions/councils iv. Faith based organizations	b. Next staff, State of Michigan staff, Oakland County staff	b. City staff time, Next staff time	b. Short-term

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years



Communication & Information

1. GOAL: Create a multi-faceted communications model that uses numerous methods to ensure older adults have access to information about services and resources.

8E

Task	Who	Resources	Timeline
a. Offer a variety of communication mechanisms to ensure the effective dissemination of information to older persons.	a. City Communications staff, Next staff	a. City staff time, general fund	a. Short-term
b. Coordinate communication team members from the City, Next, BPS, Baldwin Public Library, Next interlocal partner communities and any other entity that this group feels is important to ensure a broader distribution of information to the community at large and to provide increased awareness of programming and other opportunities for older persons.	b. City Library and Communications staff, Next staff, interlocal partner staff	b. City staff time, Next staff time, interlocal partner staff time	b. Medium-term

2. GOAL: Expand and enhance the City's media/communications plan promoting Next and its support services to enhance community knowledge of what Next has to offer.

Task	Who	Resources	Timeline
a. Establish Next as the City's and surrounding community's primary older adult services provider.	a. City Commission, interlocal partner City elected officials	a. City staff time, City Attorney, interlocal partner staff time	a. Short-term
b. Create community awareness that Next is available to provide assistance and answers to questions.	b. City Communications, Police and Fire staff, City Commission	b. City staff time	b. Short-term
c. Create additional video content to enhance knowledge about Next for publication on the City's, Next's and other community's websites and local cable television stations.	c. City Communications staff	c. City staff time, general fund, video production contractor	c. Medium-term
d. Update the City's website with current older adult service offerings and provide links to the resources.	d. City Communications staff	d. City staff time	d. Short-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years



Social & Civic Engagement

1. GOAL: Support enhanced senior services and programming to provide older adults with more opportunities for physical, mental and personal growth and development.

Task	Who	Resources	Timeline
a. Create clear and simple communication strategies to reach older persons who may not be aware of available older person opportunities or services.	a. City Communications staff	a. City staff time	a. Short-term
b. Develop City programming (in partnership with Next) for older persons. For example, BSD Shopping Day/Night event, reduced pricing for seniors at coffee shops, bistros or restaurants or other special event activities like karaoke or live music catering to older adults.	b. City BSD and DPS staff, volunteer businesses	b. City staff time, donations from businesses	b. Medium-term
c. Formulate a plan to coordinate and advertise older person programing opportunities from the City, other community partners (Beverly Hills, Bingham Farms and Franklin), and the Birmingham Public Schools.	c. City staff, Next staff, interlocal partners, BPS staff	c. City staff time, Next staff time, interlocal partner staff time, BPS staff time	c. Short-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

2. GOAL: Create and promote community and social activities/opportunities for older adults.

Task	Who	Resources	Timeline
a. Plan future projects/programming around advancing and improving the areas that mean most to community members. As indicated in the Community Survey, the most important features of the City were: safe neighborhoods, walkability, the library/museum, community and social activities and the parks and trail systems.	a. City Police, Library, Museum, and DPS staff	a. City staff time, general fund, parks and recreation bond funding	a. Medium-term
b. Increase communication to promote multiple social and community events from a variety of resources that include the City, BSD, BPS, Next or any other community based organization.	b. City Communications staff	b. City staff time	b. Short-term
c. Coordinate a master list or calendar of event happenings to increase awareness of social and community activities available to older adults.	c. Next staff, City staff	c. City staff time, Next staff time	c. Short-term
d. Identify opportunities for older persons to attend BPS functions at no cost or a reduced cost. This includes activities like school plays, concerts, athletic events or other special events. These opportunities would provide inter-generational contacts.	d. BPS staff, Next staff	d. BPS staff time, Next staff time, BPS in-kind donation	d. Short-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

3. GOAL: Become an "Age Friendly Community."

Task	Who	Resources	Timeline
a. Expand the role of the police community resource officer by adding an older adults component in concert with Next to provide community outreach.	a. City Police staff, Next staff	a. City staff time, Next staff time, general fund	a. Medium-term
b. Expand the role of the fire community resource officer by adding an older adults component in concert with Next to provide community outreach.	b. City Fire staff, Next staff	b. City staff time, Next staff time, general fund	b. Medium-term
c. Explore the opportunities to become an AARP "Age Friendly Community" or a "Dementia Friendly Community" or any other designation that would enhance the City's reputation as being older adult friendly.	c. City staff, Next staff	c. City staff time, Next staff time	c. Medium-term

4. GOAL: Install permanent restrooms in neighborhood parks to make older adults comfortable participating in outside physical activity.

8E

Task	Who	Resources	Timeline
a. Identify parks that are immediate candidates for restroom installation.	a. City DPS staff, Parks and Recreation Board	a. City staff time	a. Short-term
b. Develop and formulate a plan to operate public restrooms in a safe and convenient manner.	b. City DPS staff	b. City staff time	b. Medium-term
c. Include funding in the City's new Five-Year Master Park Plan to facilitate the addition of public restrooms.	c. City Finance and DPS staff, City Commission	c. City staff time, general fund, parks and recreation bond	c. Long-term

5. GOAL: Provide older adults with assistance in exploring employment and volunteer opportunities in the community.

Task	Who	Resources	Timeline
a. Educate older adults about the availability of employment opportunities.	a. Next staff	a. Next staff time	a. Short-term
b. Identify outside agency resources (local, county and state) that older persons could use to improve their employability.	b. Next staff	b. Next staff time	b. Short-term

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years



Housing

1. GOAL: Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.

Task	Who	Resources	Timeline
a. Expand the support services department (currently two part-time employees) at Next that specializes in home services.	a. Next staff	a. Increased funding for Next	a. Medium-term
b. Create a mechanism where all City staff, especially those in direct communication with the public, become mindful of older residents and other persons with special needs who may need assistance. This information needs to be conveyed to Next for follow-up.	b. City staff, Next, volunteers	b. Funding, training, volunteer homes	b. Medium-term
c. Create an inventory of "model" homes in the community that can be used as examples to others on how to better modify their homes to address physical barriers.	c. City staff, Next staff	c. Funding, training, volunteer homes	c. Medium-term

Continued on next page.

1. (Continued) GOAL: Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.

Task	Who	Resources	Timeline
d. Improve communication offerings by both Next and the City (on-line resources, print media, City/Next websites, E-blasts, programming at Next/Library) to promote service offerings related to home modifications, maintenance and barriers that are of concern to older adults.	d. City Communications staff, Community Development, Next	d. Staff time	d. Short-term
e. Explore volunteer networks to increase awareness of the multitude of service/community based organizations (Rotary Club, Senior Men's/Women's Clubs, Chamber of Commerce, Lions Club) faith-based institutions, and public/private schools that offer services and/or assistance to older persons.	e. City Communications staff, volunteers	e. Volunteers, Service based organizations	e. Short-term
f. Add a postcard to the City's Welcome Packet specific to seniors that lists senior services and inquires about any special needs of new residents.	f. City staff	f. General fund, staff time	f. Short-term

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2. GOAL: Increase the availability of affordable, non-income qualified housing options for older adults.

Task	Who	Resources	Timeline
a. Actively pursue grant programs or government subsidy programs that would assist developers interested in senior housing.	a. City staff	a. Staff time	a. Short-term
b. Explore alternative forms of senior housing for potential pilot programs by encouraging private individuals to think outside the box. These programs include:	b. City Planning staff	b. Staff time	b. Medium-term

Continued on next page.

2. (Continued) GOAL: Increase the availability of affordable, non-income qualified housing options for older adults.

Task	Who	Resources	Timeline
i. House Sharing ii. Co-Housing iii. Programs where developers and/or neighborhood residents collaborate together to assist one another.			
c. Identify property within the City that could be developed for affordable senior housing.	c. City Planning staff	c. Staff time	c. Short-term
d. Explain property taxes in a public forum so that the public understands how taxes are levied, by whom, at what rate and where their tax dollars actually end up (who receives the tax revenue). The Community Survey respondents cited high taxes and property values as impediments to aging in place.	d. City Finance staff	d. Staff time	d. Short-term
e. Offer comprehensive in-person programming by Next with guest speakers on the topic of planning for the future. Topics to be considered include: housing costs (includes food, utilities property taxes and maintenance), transportation, health care (insurance costs), medications and additional discretionary funding for entertainment and/or travel.	e. Next staff	e. Next funding	e. Short-term

8E

3. GOAL: Modify the City's zoning ordinances to provide both incentives and options for older adult housing.

Task	Who	Resources	Timeline
a. Prioritize the revisions to the City's zoning ordinances to encourage the pursuit of this goal in accordance with the City's 2040 Master Plan.	a. City Planning staff, Planning Board	a. Staff time, consultants, general fund	a. Medium-term
b. Evaluate modifications to the City's zoning ordinances as they pertain to residential accessibility of small/tiny homes, auxiliary dwelling units, shared housing and senior living facilities.	b. City Planning staff, Planning Board	b. Staff time, consultants, general fund	b. Medium-term

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

4. GOAL: Increase the walkability of the City for older adults.

Task	Who	Resources	Timeline
a. Install level and well maintained sidewalks as a priority. Walkability was listed as the second most important feature of the City from the Community Survey. Older persons want to be able to walk more, walk safely and have adequate shade and resting locations.	a. City Engineering staff, City Commission	a. General fund, grant funding	a. Medium-term
b. Install organized wayfinding (signage) with designated walking routes (with accompanying distances) as possible walkability enhancements.	b. City Planning staff, BSD staff, Wayfinding Committee	b. General fund, grant funding, BSD funding	b. Medium-term
c. Make St. James Park an older person friendly park with amenities specifically designed for older persons as part of the City's Five Year Master Park Plan.	c. City DPS staff, Parks and Recreation Board	c. Parks & recreation bond funding, general fund, grant funding	c. Long-term
d. Ensure older person safety and quality of life issues by the enforcement of City ordinances related to noise, construction sites (fencing, debris, hours of operation), property maintenance (grass, trees, shrubs) and snow removal by the City's Code Enforcement officers.	d. City Building Department staff	d. Additional staffing, general fund	d. Medium-term
e. Continue the City's existing sidewalk improvement plan with better communication about sidewalk repair work and enhancements to increase awareness of City efforts in this area.	e. City Engineering and Communications staff	e. General fund, grant fund	e. Short-term
f. Examine the feasibility of providing snow sidewalk clearing for all residents.	f. City DPS staff	f. General fund	f. Medium-term

8E

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years



Transportation

1. GOAL: Educate the community about the various transportation services that are available, affordable and safe for older adults or others with disabilities or special needs.

Task	Who	Resources	Timeline
a. Promote and educate the public about the City's partnership with Next and the SMART Community Partnership Program (Suburban Mobility Authority for Regional Transportation) for transportation services for local appointments/destinations.	a. SMART, Next staff	a. SMART staff time, Next staff time	a. Short-term
b. Explain what SMART is, how it works, how it is affiliated with Next and the City.	b. SMART, Next staff	b. SMART staff time, Next staff time	b. Short-term
c. Extend the hours of the Community Partnership Program bus operations to include operating after 6:00 pm.	c. SMART, City staff, Next staff	c. SMART staff time, City staff time, Next staff time	c. Short-term

Continued on next page.

1. (Continued) GOAL: Educate the community about the various transportation services that are available, affordable and safe for older adults or others with disabilities or special needs.

Task	Who	Resources	Timeline
d. Extend the SMART FLEX program to the service area of Next. SMART FLEX works on an "on-demand" basis. Rides are not booked in advance. A client would book their ride shortly before they are ready to leave with an average wait time of 5 to 30 minutes (if available).	d. SMART, Next staff	d. SMART staff, Next staff	d. Short-term
e. Explain the SMART Connector Service. SMART Connector Service is an advance registration, curb- to-curb service within a 10-mile radius of a designated service area. Rides are available on a first come, first served basis and reservations are required. A six-business day notice is recommended for medical appointments and a two business day notice for other destinations.	e. SMART, City Communications staff	e. SMART and City staff time	e. Medium-term
f. Inform the public about MyRide2.com, a transportation service provider that helps seniors and adults with disabilities in Oakland, Macomb, Washtenaw and Wayne counties. City staff and other local government officials work with SMART to extend the SMART FLEX program to the service area of Next.	f. SMART, City Communications staff, Next staff	f. City staff time, SMART staff time, partner government official staff time	f. Medium-term

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Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years

1. (Continued) GOAL: Educate the community about the various transportation services that are available, affordable and safe for older adults or others with disabilities or special needs.

Task	Who	Resources	Timeline
g. Explore volunteer networks to see if those with adequate personal transportation and who have also indicated a desire to volunteer their time to assist others could somehow be connected in a way that was safe, legal and beneficial to everyone (rideshare/buddy ride program).	g. Next staff, volunteers	g. Next staff time, volunteer time	g. Short-term
h. Provide programming at Next to explain how transportation services such as Uber and Lyft work and assist older persons in setting up accounts and understanding how to use and pay for the services.	h. Next staff	h. Next staff time	h. Short-term

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2. GOAL: Improve the feeling of safety and walkability by working with the Police Department to evaluate speed concerns, sign violations, failing to yield to pedestrians already in a crosswalk and/or crosswalk encroachment by vehicles.

Task	Who	Resources	Timeline
a. Develop a media campaign and/or a traffic program highlighting actions taken to address pedestrian/bicycle related issues of safety created by City staff (Police Department, Communications Team).	a. City Police, Planning, and Communications staff	a. City staff time, general fund	a. Short-term
b. Coordinate a wayfinding program to improve walkability routes and safety measures coordinated by City staff (Police Department, Fire Department, Planning Department, Communications Team).	b. City Police, Fire Department, Planning, and Communications staff, Wayfinding Committee	b. City staff time, general fund	b. Long-term

Short-term: < year; Medium-term: 1-3 years; Long-term: 3-5 years



Learn more about senior services and the City's Aging in Place Citywide Action Plan at bhamgov.org/seniorservices.

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Aging in Place Citywide Action Plan

Ad Hoc Aging in Place Committee
City of Birmingham

City Manager's Office

Presented by: Mark Clemence

Date: April 7, 2025

8E

Ad Hoc Aging in Place Committee Members:

Rackeline Hoff	Chair and Senior Resident
Cris Braun	Vice-Chair, Representative of Next and Senior Resident
Pam DeWeese	Representative and Senior Resident
Rosemary O'Malley	Representative of Adult Education and Senior Resident
Melissa Mark	Representative of Baldwin Library and Senior Resident
Jay Reynolds	Alternate Representative and Senior Resident
Rebekah Craft	City Staff Representative (Director – Baldwin Public Library)
Leslie Pielack	City Staff Representative (Director – Birmingham Museum)
Mark Clemence	City Staff Liaison to AIPC

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Ad Hoc Aging in Place Committee (AIPC)

- City Commission Strategic Goal # 1 (2022) – Engaged and Connected Community
- AIPC created by City Commission (04/2023) by resolution #04-093-23
- AIPC seated (06/2023) – 18 month term (01/2025)
- Scope of work:
  1. A detailed demographic study of trends and patterns in our population;
  2. A review of existing senior services and identification of unmet needs;
  3. Development of an Aging in Place Citywide Action Plan outlining the vision and goals to encourage senior residents to age comfortably in Birmingham
- City staff was directed to facilitate the requested studies and research necessary to develop an action plan to improve the health, safety and welfare of senior citizens in Birmingham

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Aging in Place Citywide Action Plan

- Introduction
- Aging in Place Goals Summary – 19 Goals Under 5 Modified Domains of Livability
- Background of Senior Services
- Plan Development – Process to be followed to achieve CC goals
- Aging in Place Community Survey
- Aging in Place Citywide Action Plan:
  - Section 1: Demographic Analysis
  - Section 2: Review Existing Services/Identification of Unmet Needs
  - Section 3: Aging in Place Action Plan Framework – Modified AARP 8 Domains of Livability Model
  - Section 4: Aging in Place Citywide Action Plan

Aging in Place Citywide Action Plan

What does it mean to age in place?

In simple terms, to age in place means that a person lives in their home as they age for as long as possible.

National Research:

Depending on the studies examined, 70% to 90% of older adults in the U.S. want to age in place.

Birmingham Community Survey Information:

72% of Birmingham residents stated that it was important for them to stay in their current residence as they aged.

80% of all survey respondents indicated that it was important for them to remain in Birmingham.

Aging in Place Citywide Action Plan Goals Summary



AGING IN PLACE GOALS SUMMARY

The following two pages show the City of Birmingham's "Aging in Place Action Plan Goals Summary" as determined by the AIPC. This summary lists all of the intended goals of the action plan to incentivize a reader to want to read the entire plan. The Aging in Place Action Plan Goals Summary is color coordinated with the formal Aging in Place Citywide Action Plan and utilizes a modified version of the AARP "8 Domains of Livability" model.

City of Birmingham Aging in Place Goals

As provided by the Ad Hoc Aging in Place Committee's Aging in Place Plan, January 2025

Birmingham & Your Needs (Community & Health)

1. Develop a permanent home for senior services (age 50+) to house Next, the City's dedicated senior services provider, that will be a welcoming and dynamic hub where all members of the community can gather in an environment that promotes socialization, physical activity, lifelong learning and community wellness.
2. Establish a funding mechanism to support reliable and sustainable senior services (Next).
3. Continue to prioritize public services (Police, Fire, Department of Public Services) that meet or exceed resident needs.
4. Create an understanding among City residents that Next is the City's primary older adult service provider and to have the services offered by Next known and understood by the community.
5. Maintain a positive, cooperative and mutually beneficial relationship between the City, Next, the Birmingham Public Schools (BPS) and other valued partners.
6. Coordinate health care, housing and other resources as necessary to assist older adults who lack insurance, financial resources or other support systems by networking with local, county, state and federal agencies.

Communication & Information

1. Create a multi-faceted communications model that uses numerous methods to ensure older adults have access to information about services and resources.
2. Expand and enhance the City's media/communications plan promoting Next and all of Next's support services to increase community knowledge.

Social & Civic Engagement

1. Support enhanced senior services and programming to provide older adults with more opportunities for physical, mental and personal growth and development.
2. Create and promote community and social activities/opportunities for older adults.
3. Become an "Age Friendly Community."
4. Install permanent restrooms in neighborhood parks to make older adults comfortable participating in outside physical activity.
5. Provide older adults with assistance in exploring employment and volunteer opportunities in the community.

Housing

1. Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.
2. Increase the availability of affordable, non-income qualified housing options for older adults.
3. Modify the City's zoning ordinances to provide both incentives and options for older adult housing.
4. Increase the walkability of the City for older adults.

Transportation

1. Educate the community about the various transportation services that are available, affordable and safe for all older adults or others with disabilities or special needs.
2. Improve the feeling of safety and walkability by working with the Police Department to evaluate speed concerns, sign violations, failing to yield to pedestrians already in a crosswalk and/or crosswalk encroachment by vehicles.

Aging in Place Citywide Action Plan
Goals Summary

1. **Birmingham Area Seniors Coordinating Council (1977-2015) – BASCC**
   - Non-Profit
   - Individuals from the community and the Birmingham Public School District (BPS) proposed the establishment of an area wide senior citizen program.
   - The mission of BASCC was to identify and meet the needs of older adults and persons with disabilities by coordinating community resources to provide educational, recreational and social programs, supportive outreach services and volunteer opportunities.
   - All communities served by BPS.
   - BPS provided a home for BASCC at no cost. Currently in approx. 10,000 sq. ft. in the former Midvale Elementary School.
2. **Next (2015-Present)**
   - BASCC renamed "Next."
   - Membership has soared to over 2,300 members.
   - Average attendance now exceeds over 1,500 participants weekly
   - Expanded services including support services that are vital to serve the most vulnerable segment of the population.

Aging in Place Citywide Action Plan
Senior Services Committees/Interlocal Agreement

1. Ad Hoc Joint Senior Services Committee (2012) - JSSC

- Created with other neighborhood partners, (Beverly Hills, Bingham Farms, Franklin, Southfield Twp.) and officials from BASCC and BPS.
- Created to address rising senior population, including the appropriate funding and governance models necessary to support those needs.
- JSSC completed their work and recommended a two-phase approach to addressing their mission:
    1. Phase 1 (short-term measures):
        a. Increase hours and add exercise equipment.
        b. Seek an additional $200,000 from the four communities of Birmingham, Beverly Hills, Bingham Farms and Franklin.
    2. Phase 2 (long-term measures):
        a. Utilize a bond issue to fund a new or upgraded facility.
        b. Replace municipal funding and BPS funding with a millage.
        c. Increase space for senior center by 50%.
        d. Be open 69 hours per week.

The JSSC presented its final report in June 2013. The final report was presented to all four communities by September of 2013. No further action was taken by any of the four communities (Note: funding was increased by the participating communities).

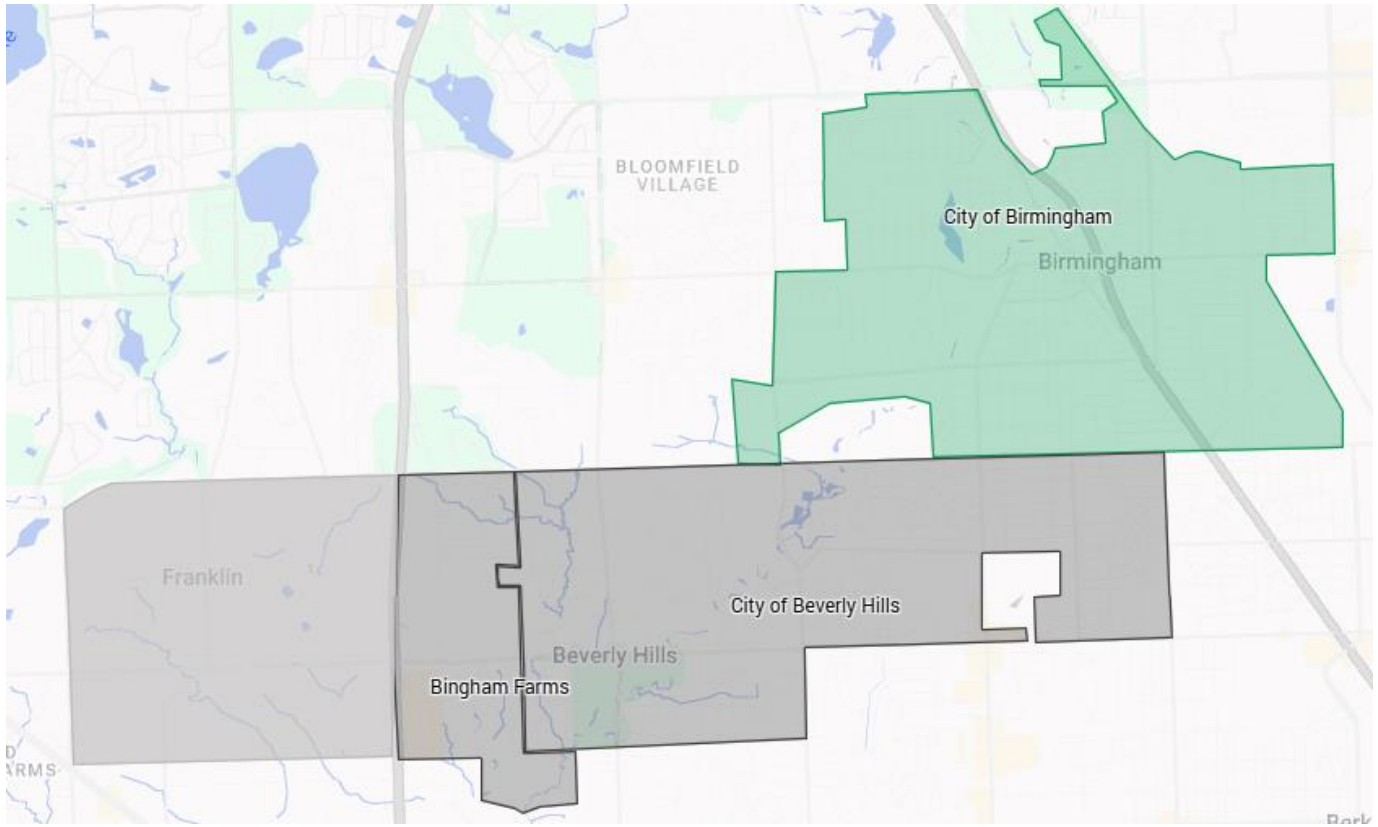
2. Ad Hoc Joint Senior Services Committee (2018) - JSSCII

- Created with the same basic mission as the JSSC.
- Reviewed the first JSSC report of June 2013.
- Work interrupted by the COVID-19 Pandemic. It appears that most meetings were held via Zoom.
- JSSCII did come up with a new interlocal agreement, but the agreement was not acceptable to any of the four communities in its form.
- Interlocal agreement was never presented to any of the four communities for approval. The JSSCII did not prepare a final report.

Aging in Place Citywide Action Plan
Senior Services Committees/Interlocal Agreement

3. Interlocal Agreement (2021) – Birmingham, Beverly Hills, Bingham Farms and Franklin

- Interlocal agreement was to enable Next to rely upon stabilization and predictability for its finances in order to serve the seniors residing in the four governmental units.
- Currently, this interlocal agreement funds approx. 18% of Next's total budget.
- This funding goes directly to Next from each of the four governmental units.



Aging in Place Citywide Action Plan Process



PROCESS

The Ad Hoc Aging in Place Committee (AIPC) began meeting in July of 2023. There was a great deal of discussion and debate as to the methodology the committee should use to accomplish its scope of work. It was decided that it was logical to begin the committee's work with a discussion concerning older adults and what it means to "age in place."

The AIPC then held monthly meetings with guest speakers and topics directly related to the scope of work. All of the AIPC meetings were open to the public, and they were encouraged to actively participate with the committee. Meeting discussion points:

1. Review senior services in Oakland County, MI.
2. Analyze City demographics, SEMCOG information and census data.
3. Review and analyze Next operations and services.
4. Review City building codes and zoning ordinances with the Building and Planning Departments.
5. Discuss and review AARP "8 Domains of Livability" and its pertinence to the Community Survey and scope of work.
6. Discuss and develop the Aging in Place Community Survey.
7. Hold a public engagement meeting at Baldwin Public Library.
8. Issue final Aging in Place Community Survey to the public: online (Engage Birmingham); deliver hard copies to each City resident through City water bills; distribute hard copies at various locations in the City (City Hall, Next, Baldwin Public Library, Birmingham Museum, Birmingham Ice Arena and Baldwin House); and distributed at the City's Winter Markt event.
9. Hold a public engagement meeting at Next
10. Analyze Community Survey results.
11. Complete Aging in Place Community Survey Final Report.
12. Discuss and develop outline of the Aging in Place Citywide Action Plan.

Aging in Place Citywide Action Plan Community Survey

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AGING IN PLACE COMMUNITY SURVEY

Complete this form or take this survey online at engage.bhamgov.org/aginginplace.



ACTION PLAN FOR OLDER ADULTS

Share your feedback about an action plan to improve the health, safety and welfare of older adults in Birmingham. Whether you are an older adult or know of older adults within our community, your feedback is important!

Did you know?
The U.S. Centers for Disease Control and Prevention defines aging in place as "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level".

Birmingham maintains its small town feel while offering the recreational and cultural advantages of an urban area. What is most important about Birmingham for older adults? Check all that apply.

- ☐ Arts and entertainment
- ☐ Community and social activities
- ☐ Houses of worship
- ☐ Historic character
- ☐ Library/Museum
- ☐ Next
- ☐ Parks and trail system
- ☐ Recreational activities
- ☐ Safe neighborhoods
- ☐ Shops & restaurants
- ☐ Walkability
- ☐ Other: _____

Demographics

What is your zip code? _____

Your age range: ☐ Under 35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66-75 ☐ 76-85 ☐ Over 85

Gender: _____

Number of people living in your home: _____

Are you employed? ☐ Full-time ☐ Part-time ☐ Retired ☐ Not employed

If not employed, would you like to re-enter the workforce? ☐ Yes ☐ No ☐ Considering it

Birmingham & Your Needs

Circle the number which best describes your feelings about the statements below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is important for me to remain in Birmingham as I age.	1	2	3	4	5
I feel the City of Birmingham's police, fire and public services meet my needs.	1	2	3	4	5
Birmingham has accessible parks and facilities.	1	2	3	4	5
I have a support system in place to assist me as I age.	1	2	3	4	5
I have adequate health care and am healthy enough to age in my residence.	1	2	3	4	5
I would support the continuation of a senior millage (one mill or less) for older adults.	1	2	3	4	5
I am familiar with Next, a nonprofit organization that is the City's primary provider of lifelong learning and activities for older adults.	1	2	3	4	5
I am familiar with Next's comprehensive support services.	1	2	3	4	5

I need help with the following support services. Check all that apply.

- ☐ Grass cutting
- ☐ Snow removal
- ☐ Minor home repairs/modifications
- ☐ Daily living activities
- ☐ Transportation
- ☐ Other: _____

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Transportation

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have adequate personal transportation.	1	2	3	4	5
I am familiar with the City's partnership with Next to provide SMART transportation services to local appointments/destinations.	1	2	3	4	5

Housing

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel safe in my residence.	1	2	3	4	5
I am able to modify my residence so I may age in place.	1	2	3	4	5
It is important to stay in my current residence as I age.	1	2	3	4	5
The affordability of housing is a factor in my decision to remain in Birmingham.	1	2	3	4	5
Birmingham offers a variety of living options for older adults.	1	2	3	4	5

I am interested in the following alternative housing options in Birmingham. Check all that apply.

- ☐ Accessory Dwelling Units (ADUs)
- ☐ Co-Housing
- ☐ Rental Units
- ☐ Senior Living Facilities
- ☐ Small/Tiny Homes
- ☐ Other: _____

I have the following concerns about aging in my current home. Check all that apply.

- ☐ Unable to care for myself
- ☐ Unable to afford to live in home
- ☐ Unable to care for my property
- ☐ Feeling isolated/Being alone
- ☐ Stairs or other physical barriers
- ☐ Other: _____ (Attach additional pages if needed.)

Social & Civic Engagement

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with Birmingham's civic destinations and outdoor spaces and facilities.	1	2	3	4	5
Birmingham has adequate public restrooms.	1	2	3	4	5
I am satisfied with my social life and feel connected to the community.	1	2	3	4	5

Communications

What is your primary source of City information? Check all that apply.

- ☐ City electronic newsletters/eblasts
- ☐ City print newsletters
- ☐ City website
- ☐ Family/friends/neighbors
- ☐ Social media

I would like more information about older adult services and opportunities.	☐ Yes ☐ No
I would like to receive a weekly phone call to check on my welfare.	☐ Yes ☐ No
I would like to volunteer my time to assist others.	☐ Yes ☐ No
I would like to be contacted for a personal interview regarding my survey responses.	☐ Yes ☐ No

My contact information (optional): _____

If you have additional information you would like us to consider as we develop an action plan to help older adults age in place, please add additional pages or email clemencem@bhamgov.org.

Submit Your Survey

1: U.S. Mail: City of Birmingham Attn: Aging in Place Survey, 151 Martin Street, Birmingham, MI 48009
2: Drop Off: City Hall drop boxes, Clerk's Office, Baldwin Public Library or Next (2121 Midvale Street)
3: Engage Birmingham - Submit this survey online at engage.bhamgov.org/aginginplace

Thank you for completing this survey and helping to improve the health and wellness of older adults in Birmingham.

December 202

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Aging in Place Citywide Action Plan
Demographic Information/Analysis

In considering aging in place, key points of available demographic data and projections are as follows:

1. The largest population of residents in Birmingham are between 50 and 54 years of age.
2. Three of the top four population changes in Birmingham between 2010 and 2022 were in the age populations between 60 and 74 years of age categories.
3. The forecasted population changes for Birmingham indicate that between 2020 and 2050, the largest two age populations growing by percentage will be residents age 65 to 84 and people over the age of 85.
4. The percentage of households in Birmingham with a resident age 65 or older has gone up 38.3% from 2010 to 2022.
5. The percentage of adults age 65 and older living in the City between 2010 and 2022 has increased 35%. The percentage of residents age 18 and under went up only 15.8% in the same time period.
6. In Southeast Michigan, the population of persons over the age of 65 is projected to increase approximately 27% between 2020 and 2050. Conversely, the number of school age children (ages 5-17) is expected to fall approximately 4% over the same time period.
7. In Birmingham, 17.4% of the population is age 65 or older.
8. 19.6% of the City's population is ages 5 to 17.
9. 6.3% of the City's population are 65 or older and live alone.
10. 5.5% of the City's population live in poverty.
11. The average household size is 2.32 people
12. The median housing value in 2023 was $679,700. The average selling price was $904,917.

Aging in Place Citywide Action Plan
Review of Existing Services/Identification of Unmet Needs

Existing Services:

- Next, a 501(c)(3) nonprofit agency, provides senior/adult services for the City and the communities of Beverly Hills, Bingham Farms and Franklin (interlocal partners in support of Next).
  - 2023-2024 Next budget was approximately $1,036,250 and includes the BPS $310,000 "in-kind" revenue in the form of no-cost rent.
  - Next only has 14 employees, only two of which are full time. Next relies heavily on volunteers who provide approx. 3,885 hours of service per year.
  - Next is housed within a former elementary school (Midvale) in approximately 10,000 sq. ft. of space. Next shares the building with the BPS Early Childhood Center.
  - Next has a separate entrance with a lobby that is used extensively by members.
  - Next offers over 230 offerings each month.
  - 69% of Community Survey respondents were familiar with Next as the City's primary older adult services provider.
  - Next offers a comprehensive list of support services to the entire community (not just members) for residents in need of extra assistance or support (Meals on Wheels, transportation services, medical equipment loaner program, yard and home maintenance assistance, information and referral to area resources, nutritional support and health screenings)
- The City has no formal senior/older adult department or municipal office. Senior/older adult services are not addressed in the City Charter.
- The City posts a "senior services" section on the City website that lists City related services and opportunities from the following City Departments: Fire, Police, Museum, Golf Courses, Library.
- The City currently budgets approximately $126,632 to support Next (General Fund). The interlocal agreement with the other three communities accounts for approximately 18% of Next's total operating budget.
- The City electorate approved a three year, .33 mil senior millage (7-1-24 to 6-30-27). The senior millage was to "enable the City to make interim improvements to the YMCA building and to establish a sinking fund to contribute toward the cost of permanent improvements to the building for use as a senior/recreation center in the future."

Aging in Place Citywide Action Plan
Review of Existing Services/Identification of Unmet Needs

Unmet Needs:

- The single greatest unmet senior/older adult service need is a permanent home for providing older adult services. A permanent home would allow the City's service provider, Next, the space it needs to continue to not only meet older adult needs, but also acquire the space, support and financial assistance necessary to meet the challenges identified in the Aging in Place Citywide Action Plan.
- Only 38% of Community Survey respondents were familiar with Next's comprehensive support services.
- The most pressing support service need according to Community Survey respondents was minor home repairs/modifications.
- 61% of Community Survey respondents indicated that the affordability of housing was a factor in their decision on whether to remain in Birmingham or not.
- 40% of Community Survey respondents indicated that stairs or other barriers were their greatest concern regarding their ability to age in place in their homes.
- Regarding alternative housing options, the most popular was senior living facilities at 35% of respondents, small/tiny homes at 24% and rental units at 16%.
- Only 14% of Community Survey respondents felt that the City had adequate public restrooms.
- The Community Survey indicated that e-newsletters/e-blasts were the most effective communication tool.
- 78% of Community Survey respondents indicated that they would like to volunteer to assist others.
- 15% of Community respondents reported feeling isolated/being alone.

Aging in Place Citywide Action Plan
Framework – Modified AARP "8 Domains of Livability"

Framework:

Many aging in place plans and reports from around the country and within Michigan use either the domains listed by the AARP or domains that are very similar to the AARP "8 Domains of Livability." The domains are used as measures to gauge where a community is in terms of aging in place and assist communities in identifying unmet needs that require attention to improve the ability of older adults to age in place.



Aging in Place Citywide Action Plan
Framework – Modified AARP "8 Domains of Livability"

Modified Framework:

- The AIPC adopted a modified version of the AARP "8 Domains of Livability" into the following 5 domains:
  1. Birmingham & Your Needs (Community & Health, Outdoor Spaces & Buildings)
  2. Communication & Information
  3. Social & Civic Engagement (Civic Participation, Employment, Social Participation & Inclusion)
  4. Housing (Housing, Community Supports & Health Services)
  5. Transportation
- The City's Community Survey domains are color coordinated for ease of use in the Aging in Place Citywide Action Plan. The AIPC felt that there was overlap between domains and that goals and associated action steps to complete those goals could impact more than one domain at a time.
- The AIPC adopted the modified framework to directly align the aging in place action plan with our community sentiments.
- The modified framework allowed the Community Survey to be completed in the required two-page format and the AIPC's desire for a clear, easy to complete, community orientated survey that was also simple to return.



Aging in Place Citywide Action Plan Format

Format:

- The AIPC developed goals for all five domains based upon all of the information gathered by the committee as it related to demographics, current senior service/unmet needs and the Community Survey data analysis.
- The AIPC reduced the number of **goals** from over 30 to 19 total goals over the course of the action plan development. The AIPC did not want to produce an "overwhelming" plan, but one that was directly tailored to our specific community.
- For each goal, the action plan lays out various **tasks** and/or activities that need to be implemented to achieve the stated goal. In the action plan, there are 64 tasks/activities listed to achieve the stated goals. Similar to the goals, the AIPC also reduced the number of tasks to streamline the process.
- As with any action plan, the AIPC also identified **who** was best suited to work on the tasks. The group or groups are listed in the action plan.
- The AIPC also identified what **resources** would be necessary to achieve the tasks. Those resources are listed in the action plan.
- Finally, the AIPC also proposed a **timeline** to achieve the tasks. The timeline is included in the action plan.
- The AIPC felt that many areas addressed in the Aging in Place Action Plan were connected not only to the City's Birmingham 2040 Plan, but also to the City's Five-Year Parks and Recreation Master Plan, the Multi-Modal Transportation Plan, The Birmingham Green: Healthy Climate Plan and the Unimproved Roads Plan.
- The goals developed were designed to build upon an already strong system proved by Next to become an even stronger one that addresses previous shortfalls and seeks to be inclusive, welcoming and accessible to all our senior/older adults.
- The Aging in Place Citywide Action Plan is 20 pages in length, color coordinated by goals, utilizes larger text and is easy to read.

Aging in Place Citywide Action Plan
Sample Goal and Related Information



Housing

1. GOAL: Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.

Task	Who	Resources	Timeline
a. Expand the support services department (currently two part-time employees) at Next that specializes in home services.	a. Next staff	a. Increased funding for Next	a. Medium-term
b. Create a mechanism where all City staff, especially those in direct communication with the public, become mindful of older residents and other persons with special needs who may need assistance. This information needs to be conveyed to Next for follow-up.	b. City staff, Next, volunteers	b. Funding, training, volunteer homes	b. Medium-term
c. Create an inventory of "model" homes in the community that can be used as examples to others on how to better modify their homes to address physical barriers.	c. City staff, Next staff	c. Funding, training, volunteer homes	c. Medium-term

Continued on next page.

Aging in Place Citywide Action Plan
Sample Goal and Related Information

Housing

1. (Continued) GOAL: Improve communication and connection with older adults in order to provide a network of service providers willing to assist with home modifications and maintenance.

Task	Who	Resources	Timeline
d. Improve communication offerings by both Next and the City (on-line resources, print media, City/Next websites, E-blasts, programming at Next/Library) to promote service offerings related to home modifications, maintenance and barriers that are of concern to older adults.	d. City Communications staff, Community Development, Next	d. Staff time	d. Short-term
e. Explore volunteer networks to increase awareness of the multitude of service/community based organizations (Rotary Club, Senior Men's/Women's Clubs, Chamber of Commerce, Lions Club) faith-based institutions, and public/private schools that offer services and/or assistance to older persons.	e. City Communications staff, volunteers	e. Volunteers, Service based organizations	e. Short-term
f. Add a postcard to the City's Welcome Packet specific to seniors that lists senior services and inquires about any special needs of new residents.	f. City staff	f. General fund, staff time	f. Short-term

2. GOAL: Increase the availability of affordable, non-income qualified housing options for older adults.

Task	Who	Resources	Timeline
a. Actively pursue grant programs or government subsidy programs that would assist developers interested in senior housing.	a. City staff	a. Staff time	a. Short-term
b. Explore alternative forms of senior housing for potential pilot programs by encouraging private individuals to think outside the box. These programs include:	b. City Planning staff	b. Staff time	b. Medium-term

Continued on next page.

Aging in Place Citywide Action Plan

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to adopt the Aging in Place Citywide Action Plan in its entirety and through this plan, commit to improving the health, safety, welfare and quality of life for older adults in the City of Birmingham.

OTHER:

- While not for consideration at this time, the AIPC would like the City Commission to consider establishing a permanent Aging in Place Committee whose purpose would be:
  1. To make ongoing recommendations to the City Commission on matters related to aging in place.
  2. To work in concert with designated member(s) of City staff, Next and other stakeholders to implement the Aging in Place Citywide Action Plan.
- Members of this permanent committee would ideally represent the various interests of aging in place issues in Birmingham and all regular meetings would be open to the public.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Changing next

1 message

'Ruth Foon' via City Commission <city-commission@bhamgov.org> Thu, Mar 20, 2025 at 2:09 PM
Reply-To: Ruth Foon <devra1234@aol.com>
To: city-commission@bhamgov.org

Please do no do anything to change the location or anything about NEXT .

WE LOVE THE WARMTH OF THE SPACE THE KINDNESS OF EVERYONE

Why would you muddle the YMCA WITH NEXT?

Bad idea , bad thought for seniors who rely on the MIDVALE LOCATION

Sent from the all new AOL app for iOS

--
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/1583340575.3515287.1742494199410%40mail.yahoo.com.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT/YMCA Building

1 message

Claudia Scroggins <cmascrog@gmail.com> Fri, Mar 21, 2025 at 11:15 AM
To: city-commission@bhamgov.org, "Jecker@bhamgov.org" <Jecker@bhamgov.org>
Cc: "abingham@bhamgov.org" <abingham@bhamgov.org>

Commission Members, Ms. Ecker:

As a Birmingham resident and property owner of nearly 50 years as well as a member of NEXT and Birmingham Y, it is especially important to me that you move the process forward for the proposed new facility. I've aged in place in Birmingham and am now in my 70's participating in activities at both these organizations. As I'm sure you are aware the senior population of Birmingham continues to grow. Despite this fact, it amazes me how lacking this community's senior offerings are when compared to facilities in other nearby communities. That the City of Birmingham wouldn't jump at the opportunity to offer its own much improved facility baffles and frustrates me. I am a swimmer and regularly attend Bham Y water aerobics classes as well as other activities. With the elimination of water classes through the Birmingham continuing education program, the Y became the only facility offering year round classes.
Please understand that the convenience of having a community activity center, with a pool, in one's own city, is a vital part of a senior's life for the myriad benefits it brings to that life.
Thank you for considering my concerns. Please vote to move this project forward.
Sincerely
Claudia M Scroggins
1421 Henrietta
Birmingham MI 48009

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT building design

1 message

Grace Keane <keanegma@gmail.com> Thu, Mar 20, 2025 at 4:20 PM
To: city-commission@bhamgov.org, "Jecker@bhamgov.org" <Jecker@bhamgov.org>, abinham@bham.gov.org

I am proud to tell you that Birmingham NEXT is the best part of my life.There, I have the ability to grow genuine friendships with amazingly educated and genuine men and women of the community.
We share a kinship of understanding, teaching each other how to maintain an active and busy life.The variety of skill and hobby development as well as educational evenings is under ONE ROOF.
The staff is the invisible glue that keeps us coming back week after week, in sunshine, rain, and snow.
We need space to grow. At present, meeting rooms do not accommodate the number of members in attendance.
Attendance has outgrown the facility.

Grace Keane

--
Unless expressly stated otherwise, this message and any associate files are confidential, and may be privileged. It is intended for the addressee(s) only. Access to this E-mail by anyone else is unauthorized.

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To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CABntUQxi1GKcACLLM3vdR5ijVEMQ3MtR8s%3DGyKNszXOhjAqOyw%40mail.gmail.com.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Suggestion for new NEXT Facility

2 messages

Diana Alexanian <agop45@sbcglobal.net> Fri, Mar 21, 2025 at 10:55 AM
To: "city-commission@bhamgov.org" <city-commission@bhamgov.org>

When you come to play cards, or any activity, it's nice to have a coat rack so your coat is not dragging on the floor from the back of your chair.

Glad to hear of a welcoming entrance, I don't like the entrance at the Bloomfield Seniors Services at all. Desk area is cramped and off to the side.

Good luck!

Diana Alexanian

--
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To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/2051008169.292144.1742568911119%40mail.yahoo.com.

Therese Longe <tlonge@bhamgov.org> Fri, Mar 21, 2025 at 11:02 AM
To: Jana Ecker <Jecker@bhamgov.org>, Alex Bingham <abingham@bhamgov.org>

---------- Forwarded message ---------
From: **Diana Alexanian** <agop45@sbcglobal.net>
Date: Fri, Mar 21, 2025, 10:55 AM
Subject: Suggestion for new NEXT Facility
To: city-commission@bhamgov.org <city-commission@bhamgov.org>

When you come to play cards, or any activity, it's nice to have a coat rack so your coat is not dragging on the floor from the back of your chair.

Glad to hear of a welcoming entrance, I don't like the entrance at the Bloomfield Seniors Services at all. Desk area is cramped and off to the side.

Good luck!

Diana Alexanian

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BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT CENTER for SENIORS

Bonita Bohl <bsbohl@gmail.com> Fri, Mar 21, 2025 at 2:15 PM
To: citycommission@bhamgov.org, jecker@bhamgov.org, abingham@bhamgov.org

To City Commissioners, Birmingham City manager, Jana Ecker, and Birmingham City Clerk, Alex Bingham:

My husband and I are long time residents of the city of Birmingham. We wish to remain in Birmingham and enjoy the
many amenities offered by the city — shops, restaurants, recreation. It is of utmost importance that you provide an UPDATED facility that caters to aging
residents. We are VITAL members of the community who deserve and will make full use of the programs offered to seniors.

I am hopeful that you will design the new Community Center housing NEXT and the YMCA so that it accommodates ALL age groups. I am excited to
know that the YMCA plans to collaborate and coordinate their needs with those of NEXT. We are a diverse community that needs to cater to all residents.

Yours truly,
Bonita S. Bohl
John C. Bohl
bsbohl@gmail.com

February 25, 2025

To: The City of Birmingham
Attn: City Clerk Alex Bingham

Dear Alex,

This note is in response to the request for input into the new NEXT building. I am a frequent user at the current site where I play bridge.

My suggestion is for the architects to pay particular attention to the heating and cooling design for the building. Senior citizens do not adjust easily to temperature extremes. There are many of us who layer clothing to keep warm in the winter months in the current building. This layering includes keeping our winter coats on while we play cards.

Similarly we freeze in the summer months with the A/C being too cold.

10A

I appreciate that you are seeking input from your customers. I wish you the best of luck as this project moves forward.

Sincerely
Pamela Kane

10A

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

What does Next mean to our community

Beverly Singer <BSinger@birmingham.k12.mi.us> Sun, Mar 23, 2025 at 10:27 PM
To: "city-commission@bhamgov.or" <city-commission@bhamgov.or>, "jecker@bhamgov.org" <jecker@bhamgov.org>, "abingham@bhamgov.org" <abingham@bhamgov.org>
Cc: Christine Braun <CBraun@birmingham.k12.mi.us>

Hello,

My name is Beverly Singer and I have been on staff at Next for 10 years and personally witnessed the difference it's made in our members' lives. We offer a warm and welcoming place to be socially, physically, and mentally active for the 50+ community.

Our membership has grown year over year and our dedicated director and staff offer a diverse list of programming opportunities from under one roof. A single space that allows people to congregate and enjoy each other's company.

We need this type of dedicated space for our members to feel comfortable and involved.

Trust me when I say, as someone who lived in Birmingham for nearly my entire life, everyone in the community will use Next at some point in their lives —either for themselves, a parent, grandparent or neighbor. I hope it will always be there in a safe, inviting space dedicated to the needs of the 50+ community that has given us so much and still has so much to give.

Respectfully yours,
Bev Singer

Bev Singer
Staff Assistant
Next
248.203.5270
www.BirminghamNext.org

At **Next,** we are proud of serving the growing 50 plus population in our community. Armed with an entrepreneurial spirit and a dynamic approach to addressing community issues, **Next** receives very little municipal support, and relies on a diverse revenue stream to support its day-to-day operations. Philanthropy is key to keeping our programs and services growing and thriving, while ensuring accessibility to all who want to participate.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Baldwin Public Library's establishment and funding mechanism

1 message

Rebekah Craft <rebekah.craft@baldwinlib.org> Mon, Mar 24, 2025 at 12:35 PM
To: City Commission <city-commission@bhamgov.org>, Jana Ecker <jecker@bhamgov.org>, Mary Kucharek <mkucharek@bhlaw.us.com>, BPL Board <board@baldwinlib.org>, "Seurynck, Anne" <ASeurynck@fosterswift.com>

Jana,

I received your voicemail this morning, but am currently out on vacation this week and unable to meet with you this afternoon due to prior engagements. I hear that you are concerned about comments about library funding you are hearing from community members and want to smooth things over. Though I'm not available this afternoon, I plan on being present at tonight's Commission meeting along with several members of the Library Board.

I have attached a letter from the Library's attorney explaining how the City's attempt to move funding from the Library to the proposed Community Center is not in line with our establishment with the State of Michigan. The Library Board, not the City Commission, has the ultimate decision on the annual levy that may be assessed for library services.

The Baldwin Public Library has strong support in the community, and the concerns you are hearing from community members are just a small part of the backing that we have for our institution and its future funding needs.

Back on February 27, weeks after my budget discussion with you and the Finance department, Mark Clemence presented me with a new contract for Administrative Services that more than doubled the rate. Then, last Tuesday, Melissa Fairbairn and Mark Gerber informed me that the City would propose cutting the library's millage rate by more than $1M in FY 26/27 and 27/28 and would be presenting this BCSC funding option to the Commission at its March 24 City Commission meeting, just four business days later.

Since 2009, Library leadership has worked cooperatively with the City to repair and develop necessary relationships that are crucial to the successful operation of the Library. I was dismayed by the delivery of the proposed increase for Administrative services, the last minute declaration that library funding would be cut by more than $1M in FY 26/27 and 27/28, and the cavalier way it seems Library funding can be shared around to benefit a building that has not yet been approved by Birmingham residents.

In 1998 Birmingham voters voted to support the Baldwin Public Library with a tax rate of 1.75 mills. Starting in 2009, the millage rate was lowered in retaliation against former library director Marti Custer who was later relieved of her position. Upon review, it seems this was done unlawfully as the City did not have the authority to change the millage rate. The library’s millage rate was not restored to the Headlee maximum until we began our three phase building plan in 2016. Since then, the library has used voter-approved library funds and more than $500,000 in donations to make $9 million dollars in improvements to the library building, which is owned by the city.

Former director Doug Koschik spoke with me last Friday and let me know that former City Managers Bob Bruner and Joe Valentine both acknowledged that the financial and legal situation between the library and city was never fully resolved. We hope to resolve this issue with members of the City administration in the coming weeks.

As you know, the City's and Library's budgets are cut every year due to Headlee rollbacks.Cutting library funding to pay for the BCSC would be detrimental to the Baldwin Public Library and is not in line with our establishment.

I hope that you will consider meeting with our attorney and me to resolve the library's establishment so that both of us can lawfully operate our respective organizations to the benefit of Birmingham's residents.

Sincerely,
Rebekah
--
Rebekah Craft she/her
Library Director
Baldwin Public Library
300 W. Merrill St. Birmingham, MI 48009
www.baldwinlib.org | 248-554-4681

--
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2 attachments

City of Birmingham Contracted Services Agreement with the Baldwin Public - packet.pdf
575K

Library Millage Opinion(201321862.1).pdf
150K

DATE: February 26, 2025

TO: Rebekah Craft, Baldwin Public Library Director

FROM: Mark H. Clemence, Assistant City Manager

SUBJECT: City of Birmingham Contracted Services Agreement with the Baldwin Public Library

INTRODUCTION

In November of 2009, the City of Birmingham (City) entered into a contract with the Baldwin Public Library (Library) in which the City agreed to provide the following services to the Library:

1. Tax billing and collection;
2. Banking and investment, excluding the Baldwin Public Library Trust;
3. Assessing services and legal for tax tribunal;
4. Library accounts payable;
5. Library payroll;
6. Accounting services;
7. Budget;
8. HR and benefit services.

In exchange for the City furnishing these services to the Library, the Library agreed to annually reimburse the City its administrative costs. Total administrative charges were determined to be $104,889.00 per year at the time the contract was agreed upon. The initial term of the contract was seven (7) months in length, commencing on November 30, 2010 and terminating on June 30, 2010. However, after the initial term, the contract also contained three subsequent one-year renewal terms. Each renewal term was automatic unless the City notified the Library or the Library notified the City, in writing, at least six (6) months prior to the end of any term that there was a need to negotiate the subsequent renewal (see Attachment A).

Each of the three subsequent one-year renewals occurred without change from either the City or the Library. The contract expired on June 30, 2013.

BACKGROUND

The City continues to provide all eight (8) of the services to the Library that are enumerated in the introduction section. However, the contract expired on June 30, 2013 and a new or revised contract was never negotiated nor agreed upon. As a result, the Library has continued to receive all the City's listed administrative services for the past eleven (11) years at the same cost negotiated in 2009 for $104,889.00.

The City's Finance Department was consulted and confirmed that the $104,889.00 figure is the amount currently being charged for the City's administrative services to the Library. The Finance Department was asked to examine the contract and determine the current expenses to the City to fulfill the contract terms as previously agreed. The Finance Department examined the contract and determined that the original formula used to determine the contract amount was cumbersome to work with and included several categories where assumptions were made. The Finance Department has determined that since the contract was expired, they will propose a new, but similar financial model that will be more user friendly. The new formula to determine the administrative costs to the City to provide the same services is as follows (see Attachment B):

<u>Expense Allocation by Department Summary</u>

1. Human Resources

   Library allocation - 20% (Library represents 20% of the City's employees
   430 total active employees/87 Library employees)

   HR actual expenditures FY 2023-2024 $398,265

   Total Expense $79,653

2. Payroll

   Library allocation - 20% (Library represents 20% of the City's employees
   430 total active employees/87 Library employees)

   Finance actual expenditures FY 2023-2024 $111,792

   Total Expense $22,358

3. Assessing

   Library allocation - 10% (Library accounts for 10% of the City's assessing costs
   1.3142 Library millage rate/13.3164 total millage rate)

   Oakland County contract FY 2023-2024 $227,068

   Total Expense $22,707

4. Treasury

Library allocation - 5% (Library accounts for 5% of the City's Treasury expenditures

Based on AUDIT expense allocation Library allocation for revenue)

Treasury actual expenditures FY 2023-2024		$750,425
	Total Expense	$37,521

5. Finance

Library Allocation - 6% (Library accounts for 6% of the City's Finance expenditures)

Finance actual expenditures FY 2023-2024		$947,132
	Total Expense	$56,828
	TOTAL	$219,067.00

LEGAL REVIEW

The City Attorney has drafted a new contract (see Attachment C) for consideration by the Library Board that is reflective of the new formula and updated costs incurred by the City to provide the administrative services to the Library. If you or the Library Board have any questions, City Attorney Kucharek will address them.

FISCAL IMPACT

Based upon the new formula used by the Finance Department, using up-to-date financial costs, the City shall request $219,067 from the Library in order to reimburse administrative costs incurred by the City to provide services. This figure is $114,178 higher, which is an increase of approximately 109% than the current budgeted amount.

SUSTAINABILITY

None

DESIGN CONSIDERATIONS

None.

PUBLIC COMMUNICATIONS

City budgets, which are published documents, have reflected revenue to the City for administrative services provided to the Baldwin Public Library in the amount of $104,889.00 in every budget since the 2010-2011 budget.

SUMMARY

In November of 2009, the City of Birmingham (City) entered into a contract with the Baldwin Public Library (Library) in which the City agreed to provide administrative services for the Library. In exchange, the Library agreed to annually reimburse the City its administrative costs associated with the services received. The contract expired in June of 2013. The City and the Library are

currently working without a legally binding contract and the associated costs to provide the administrative services to the Library have not been increased since its inception in 2009.

Based on data determined by the City's Finance Department, the current cost to provide the same administrative services to the Library have increased approximately 109% from 2009 to a current value of $219,067 for FY 2023-2024.

Myself, Finance Director Mark Gerber and Finance Director Designee Mary Chavez are all available to answer any questions and would make ourselves available to be present at a Library Board meeting if you so desire.

Attachment

A

CITY OF BIRMINGHAM
CONTRACTED SERVICES AGREEMENT
WITH THE BALDWIN PUBLIC LIBRARY

THIS AGREEMENT, made and entered into this 30 day of November, 2009, by and between the **CITY OF BIRMINGHAM**, a Michigan Municipal Corporation located at 151 Martin Street, Birmingham, Michigan, hereinafter referred to as the **CITY**, and the **BALDWIN PUBLIC LIBRARY**, located at 300 West Merrill Birmingham, MI 48009, hereinafter referred to as the **LIBRARY**.

WITNESSETH:

WHEREAS, the LIBRARY operates a free public library in the City of Birmingham, and;

WHEREAS, the CITY, pursuant to Chapter XVI, Section 1 of the City Charter, is responsible for maintaining the Library, and;

WHEREAS, the City has provided the Library with services in addition to those set forth in the City Charter in the past, and;

WHEREAS, the services provided to the Library by the City have not been formally agreed upon or reduced to writing, and;

WHEREAS, the Library and the City believe that it is in their respective best interests to have a written agreement that sets forth the services provided by the City in writing.

NOW, THEREFORE, for and in consideration of the mutual undertakings of the parties hereto, all as hereinafter set forth, it is agreed by and between the parties as follows:

1. While this agreement remains in effect, the City shall provide the following services to the Library:

a) Tax billing and collection;
b) Banking and investment, excluding the Baldwin Public Library Trust;
c) Assessing services and legal for tax tribunal;
d) Library accounts payable;
e) Library payroll;
f) Accounting services;
g) Budget;
h) HR and benefit services;

2. In exchange for the City furnishing these services to the Library, the Library agrees to annually reimburse the City its administrative charges pursuant to the following:

a)	Tax billing and collection (Treasury staff time devoted to library)	$13,257

b) Banking services (Treasury staff time devoted to library)	3,090
c) Investment services (Library allocation of investments 5% x investment advisor costs $50,200, 5%x CLASS Pool annual fee of $5,000 plus treasury staff time)	4,006
d) Assessing services (Library allocation 7% of total city mills levied x costs $394,528 including contract with Oakland County)	27,617
e) Legal for Michigan Tax Tribunal cases (Library allocation 7% of total city mills x $58,957 legal fees for prior 12 months)	4,127
f) Accounts Payable (Library allocation 2% of total accounts payable x $152,277 finance department costs plus direct costs for City provided computer $144/annual)	3,190
g) Payroll (Library allocation 12% of total payroll x $108,348 Finance department costs plus IT support for computer connection $159)	13,161
h) Accounting services (Library allocation 4.5% of total accounting services x $183,426 finance dept. costs for general ledger maintenance/audit prep/monthly expenditure reports, journal entries)	8,254
i) Budget (Library allocation 4.5% of total budget services x $188,251 finance department costs for budget)	8,471
j) HR and benefit services (Library allocation 7.5% of total number of employees x $250,681 H.R. dept. costs including contracted benefit administration plus library pre-placement testing $517/yr plus background investigations for Library $398/yr)	19,716
Total Administrative Charges	**$104,889**

Any costs or fees incurred by the City on behalf of the Library not specifically covered or provided for in this Agreement will be billed on an actual cost reimbursement basis to the Library.

3. The initial term of this Agreement shall be seven (7) months commencing on November 30 and shall terminate on June 30, 2010; provided, however, that following such initial term there shall be three subsequent one-year renewal terms. Each renewal term shall be automatic unless the City notifies the Library or the Library notifies the City in writing, at least six (6) months prior to the end of any term then in effect that due to changed circumstances, a need exists to negotiate the subsequent renewal.

4. The Library and the City acknowledge that certain confidential and/or proprietary information may become involved pursuant to this Agreement. The Library and the City recognize that the unauthorized exposure of such confidential or proprietary information could irreparably damage the other. Therefore, the Library and the City agree that in exchanging information with each other, they each may specify which items of information should be deemed "confidential". The Library and the City shall be responsible for clearly identifying and segregating any confidential information submitted to the other by clearly printing or stamping "CONFIDENTIAL INFORMATION" on the information so submitted. The Library and the City agree to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Library and the city shall inform their respective employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Library and the City further agree to use such confidential or proprietary information only for the purposes set forth in this Agreement.

5. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan.

6. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.

7. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Library or the City without the prior written consent of the other party. Any attempt at assignment without prior written consent shall be void and of no effect.

8. The Library and the City agree that neither of them nor their subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Library and the City shall inform the other of all claims or suits asserted against them that may arise out of this Agreement. The Library and the City shall provide each other with periodic status reports concerning all such claims or suits at intervals agreed to by each of them.

9. The Library and any entity or person for whom the Library is legally liable, agrees to be responsible for any liability, all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against the Library, its elected and appointed officials, employees, volunteers or others working on behalf of the Library, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, caused by or resulting from the Library's own acts or

omissions of its elected or appointed officials, employees, volunteers or others working on behalf of the Library.

The City and any entity or person for whom the City is legally liable, agrees to be responsible for any liability, all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against the City, its elected and appointed officials, employees, volunteers or others working on behalf of the City, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, caused by or resulting from the City's own acts or omissions of its elected or appointed officials, employees, volunteers or others working on behalf of the City.

The Library and the City carry Liability insurance to protect them in the event of a claim or loss. Property and Liability insurance is for coverage that exceeds the $125.000 deductible for claims and legal expenses. The City shall not be responsible for the $125,000 deductible resulting from claims involving the Library. The Library shall not be responsible for the $125,000 deductible resulting from claims involving the City. The parties agree and understand that they are responsible for paying their own deductibles in the event of a loss.

10. If either party fails to perform its obligations hereunder, the aggrieved party may take any and all remedial actions provided by the general specifications or otherwise permitted by law.

11. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit 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 suit in the Oakland County Circuit Court or the 48th District Court.

12. Notices shall be given to:

a. City of Birmingham
151 Martin Street
P.O. Box 3001
Birmingham, MI 48012-3001

Attention: Thomas M. Markus
City Manager

With copies to:

Timothy J. Currier, City Attorney

Beier Howlett, P.C.
200 E. Long Lake Road, Ste. #110
Bloomfield Hills, MI 48304

b. Baldwin Public Library
300 West Merrill
Birmingham, MI 48009

Attention: _____,

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

WITNESS:

Doreen Ann Mart

Doreen Ann Mart

CITY OF BIRMINGHAM

By: Rackeline J. Hoff
Rackeline J. Hoff, Mayor

By: Laura M. Broski
~~Nancy M. Weiss, City Clerk~~
Laura M. Broski, City Clerk Designee

BALDWIN PUBLIC LIBRARY

By: _____
Its: President

APPROVAL (Sec 2-289 City Code)

Thomas Markus, City Manager
as to Substance

B. Sharon Ostin, Director of
Finance as to Financial Obligation

Timothy J. Currier, City Attorney as to
Form

Attachment

B

Library

Expense Allocation by Department Summary

HUMAN RESOURCES

Library allocation 20%

HR actual cxpenditures FY 2023-2024 $398,265

Total Expense $79,653

NUMBER OF EE VS TOTAL EES
430 total active employees
87 library employees paid PY dated 9.28.24

PAYROLL

Library allocation 20%

Finance actual expenditrues FY 2023-2024 $111,792 20%

Total Expense $22,358

1.3142 library milage rate
13.3164 total millage rate
10% ALLOCATION

ASSESSING

Library allocation 10%

Oakland County contract FY2023-2024 $227,068

Total Expense $22,707

Based on AUDIT expense allocation
Library allocation for Revenue 5%

TREASURY

Library allocation 5%

Treasury actual expenditrues FY 2023-2024 $750,425

Total Expense $37,521

Based on AUDIT expense allocation
Library allocation for Expense 6%

FINANCE

Library allocation 6%

Finance actual expenditrues FY 2023-2024 $947,132

Total Expense $56,828

TOTAL $219,067

10A

Attachment C

CITY OF BIRMINGHAM
CONTRACTED SERVICES AGREEMENT
WITH THE BALDWIN PUBLIC LIBRARY

THIS AGREEMENT, made and entered into this ___ day of _____, 2025, by and between the **CITY OF BIRMINGHAM,** a Michigan Municipal Corporation located at 151 Martin Street, Birmingham, Michigan, (hereinafter referred to as the "City"), and the **BALDWIN PUBLIC LIBRARY,** located at 300 West Merrill, Birmingham, MI, 48009, (hereinafter referred to as the "Library").

WITTNESTH:

WHEREAS, the Library operates a free public library in the City of Birmingham; and

WHEREAS, the City, pursuant to Chapter XVI, Section 1 of the City Charter, is responsible for maintaining the Library; and

WHEREAS, the City has provided the Library with services in addition to those set forth in the City Charter in the past; and

WHEREAS, the services provided to the Library by the City have been formally agreed upon or reduced to writing in an Agreement that has since expired; and

WHEREAS, the Library and the City believe that it is in their respective best interests to continue an agreement setting forth the services provided by the City to the Library.

NOW, THEREFORE, for and in consideration of the mutual undertakings of the parties hereto, all as hereinafter set forth, it is agreed by and between the parties as follows:

1. While this Agreement remains in effect, the City shall provide the following services to the Library:

   a) Human Resources
   b) Payroll
   c) Assessing
   d) Treasury
   e) Finance

2. In exchange for the City furnishing these services to the Library, the Library agrees to annually reimburse the City its administrative charges pursuant to the following:

a) **HUMAN RESOURCES**

Library allocation	20%	
HR actual expenditures FY 2023-2024		$398,265
Total Expense		$79,653

b) **PAYROLL**

Library allocation	20%	
Finance actual expenditures FY 2023-2024		$111,792
Total Expense		$22,358

c) **ASSESSING**

Library allocation	10%	
Oakland County contract FY2023-2024		$227,068
Total Expense		$22,707

d) **TREASURY**

Library allocation	5%	
Treasury actual expenditures FY2023-2024		$750,425
Total Expense		$37,521

e) **FINANCE**

Library allocation	6%	
Finance actual expenditures FY-2023-2024		$947,132
Total Expense		$56,828

TOTAL **$219,067**

Any costs or fees incurred by the City on behalf of the Library not specifically covered or provided for in this Agreement will be billed on an actual cost reimbursement basis to the Library.

3. The term of this Agreement shall be three years commencing on _____ _____and shall terminate on _____. Each year on the anniversary date of commencement, there will be an increase of three percent (3%) of the total charges due from the Library to the City.

4. The Library and the City acknowledge that certain confidential and/or proprietary information may become involved pursuant to this Agreement. The Library and the City recognize that the unauthorized exposure of such confidential or proprietary information could irreparably

damage the other. Therefore, the Library and the City agree that in exchanging information with each other, they each may specify which items of information should be deemed "confidential." The Library and the City shall be responsible for clearly identifying and segregating any confidential information submitted to the other by clearly printing or stamping "CONFIDENTIAL INFORMATION" on the information so submitted. The Library and the City agree to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Library and the City shall inform their respective employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Library and the City further agree to use such confidential or proprietary information only for the purposes set forth in this Agreement.

5. This Agreement shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan.

6. If any provision of this Agreement is declared invalid, illegal or unenforceable, such provision shall be severed from this Agreement and all other provisions shall remain in full force and effect.

7. This Agreement shall be binding upon the successors and assigns of the parties hereto, but no such assignment shall be made by the Library or the City without the prior written consent of the other party. Any attempt at assignment without prior written consent shall be void and of no effect.

8. The Library and the City agree that neither of them nor their subcontractors will discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight or marital status. The Library and the City shall inform the other of all claims or suits asserted against them that may arise out of this Agreement. The Library and the City shall provide each other with periodic status reports concerning all such claims or suits at intervals agreed to by each of them.

9. The Library and any entity or person for whom the Library is legally liable, agrees to be responsible for any liability, all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against the Library, its elected and appointed officials, employees, volunteers or others working on behalf of the Library, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, caused by or resulting from the Library's own acts or omissions of its elected or appointed officials, employees, volunteers or others working on behalf of the Library.

The City and any entity or person for whom the City is legally liable, agrees to be responsible for any liability, all claims, demands, suits, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against the City, its elected and appointed officials, employees, volunteers or others working on behalf of the City, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, caused by or resulting from the City's own

acts or omissions of its elected or appointed officials, employees, volunteers or others working on behalf of the City.

The Library and the City carry liability insurance to protect them in the event of a claim or loss. Property and Liability insurance is for coverage that exceeds the deductible for claims and legal expenses. The City shall not be responsible for the deductible resulting from claims involving the Library. The Library shall not be responsible for the deductible resulting from claims involving the City. The parties agree and understand that they are responsible for paying their own deductibles in the event of a loss.

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11. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suit 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 suit in the Oakland County Circuit Court or the 48th District Court.

12. Notices shall be given to:

a) City of Birmingham
151 Martin Street
P.O. Box 3001
Birmingham, MI 48012-3001

Attention: Jana Ecker, City Manager

With copies to:

Mary M. Kucharek, City Attorney
Beier Howlett, P.C.
3001 W. Big Beaver Road, Ste. 600
Troy, MI 48084

b) Baldwin Public Library
300 West Merrill
Birmingham, MI 48009
Attention: Rebekah Craft, Library Director

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

WITNESS:

_____

_____

CITY OF BIRMINGHAM

By:_____
Therese Long, Mayor

By:_____
Alexandria Bingham, City Clerk

BALDWIN PUBLIC LIBRARY

_____

By: _____
Rebekah Craft, Library Director

APPROVAL (Sec 2-289 City Code)

_____ Jana Ecker, City Manager (as to substance)	
_____ Mark Gerber, Finance Director (as to Financial Obligation)	_____ Mary M. Kucharek, City Attorney (as to form)

Lansing
313 S. Washington Square
Lansing MI 48933

Southfield
28411 Northwestern Highway – Suite 500
Southfield MI 48034

Grand Rapids
1700 E. Beltline NE – Suite 200
Grand Rapids MI 49525

Detroit
333 W. Fort Street – Suite 1400
Detroit MI 48226

Holland
151 Central Avenue – Suite 260
Holland MI 49423

Walter S. Foster
1878-1961
Richard B. Foster
1908-1996
Theodore W. Swift
1928-2000
John L. Collins
1926-2001

Webb A. Smith - *Retired*

Charles A. Janssen
Charles E. Barbieri
Scott L. Mandel
Michael D. Sanders
Brent A. Titus
Brian G. Goodenough
Matt G. Hrebec
Deanna Swisher

Thomas R. Meagher
Douglas A. Mielock
Scott A. Chernich
Paul J. Millenbach
Dirk H. Beckwith
Brian J. Renaud
Lynwood P. VandenBosch
Lawrence Korolewicz
James B. Doezema
Anne M. Seurynck
Michael D. Homier
Scott H. Hogan
Benjamin J. Price
Michael R. Blum
Jonathan J. David
Andrew C. Vredenburg
Julie I. Fershtman
Todd W. Hoppe
Jennifer B. Van Regenmorter

Thomas R. TerMaat
Frederick D. Dilley
David R. Russell
Joel C. Farrar
Laura J. Genovich
Karl W. Butterer, Jr.
Mindi M. Johnson
Ray H. Littleton, II
Jack L. Van Coevering
Anna K. Gibson
Nicholas M. Oertel
Alicia W. Birach
Adam A. Fadly
Michael J. Liddane
Ryan E. Lamb
Clifford L. Hammond
Matthew S. Fedor
Andrea Badalucco
Stefania Gismondi

Leslie A. Abdoo
Julie L. Hamlet
Michael C. Zahrt
Mark T. Koerner
Warren H. Krueger, III
Taylor A. Gast
Thomas K. Dillon
Robert A. Hamor
Jacquelyn A. Dupler
Dora A. Brantley
James F. Anderton, V
Sara L. Cunningham
Michael A. Cassar
Alexander S. Rusek
Amanda J. Dernovshek
Brandon M. H. Schumacher
Bryan Cermak
Kevin J. Roragen
Steven J. Tjapkes

Erica E.L. Huddas
Jennifer L. Montasir
Mikhail Murshak
Courtney G. Agrusa
Rachael Kuilema Klein
Michael R. Kluck
Gabrielle C. Lawrence
Kelly Reed Lucas
Paula K. Manis
Michael G. Oliva
Michael H. Rhodes
Jeffrey S. Theuer
Lino A. Taormina
Jeffrey G. Schultz
Alaina M. Nelson
Anthony M. Dalimonte
Benjamin C. Dilley
Nicholas J. Stock, II
Keith T. Brown

Mallory E. Reader
Benjamin M. Williams
Reed K. Powers
Dina D. Kashat
Danielle N. Romano
Lindsey M. Mead
Destiny R. Hughes
Samantha L. Diamond
McKenna S. Rivers
Melanie A. Assad
Matthew C. Murray
Mackenzie M. Almassian
Patrick E. Quinn
James A. Ryan
Charles R. Sarchet

Writer's Direct Phone: 616.726.2240 **Fax**: 517.367.7196 **Reply To**: Grand Rapids **Email**: ASeurynck@fosterswift.com

March 24, 2025

Rebekah Craft, Director
Baldwin Public Library
300 W. Merrill St.
Birmingham, MI 48009

Re: Library Millage Issues

We understand that the City of Birmingham is considering a proposal at its meeting tonight that will affect the Baldwin Public Library's budget in 2026. In the board packet, the City will discuss how to fund the construction of a new community and senior center. To do so, the City will consider a proposal "to return the library's millage rate to its pre-construction rate of 1.1 mills" so that the City's overall tax rate would not increase. You have asked our opinion on whether the City Commission or the Library Board has the authority to determine the annual millage.

Approximately 15 years ago, the Library and the City exchanged correspondence regarding the establishment of the Library. In that correspondence, the Library concluded that it was established as a village library under Section 10 but is now operating under Section 10a of the City, Village and Township Libraries Act, 1877 PA 164 ("PA 164"). The City claimed that the Library is a city library operating under the City of Birmingham Charter. To date, we understand that this issue has not been resolved.

However, after reviewing all of the available information, we have also concluded that the Library is a Section 10a PA 164 city library. As a Section 10a city library, the Library Board, not the City Commission, determines the annual levy within its authorized amount:

> If the free public library is established under this section, and a governing board is elected and qualified as provided in section 11, ***the board***, on or before the first Monday in September in each year, ***shall prepare an***

> ***estimate*** of the amount of money necessary for the support and maintenance of the free public library for the ensuing year, not to exceed 2 mills on the dollar of the taxable property of the city. ***Unless any period specified in the petition for the levy of the tax has expired, the governing board shall report the estimate to the legislative body of the city***. The legislative body ***shall raise by tax*** upon the taxable property in the city ***the amount of the estimate*** in the same manner that other general taxes are raised in the city.

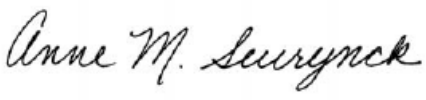
Pursuant to the express language of this provision, the Legislature intended to permit the library board, not the city commission, to have the ultimate decision on the annual levy that may be assessed.

This interpretation is confirmed by the Michigan Attorney General, who has opined that the "township library board is the final judge of the amount, within the one mill tax limitation, which is to be raised for maintenance of the township library." OAG, 1979-1980, No 5460, p 91 (March 16, 1979). In the opinion, the township library had been established and the voters had approved a millage of one mill to be used for library purposes. The Attorney General determined that the library board had the authority to determine the amount raised within the one mill limitation, not the township board. This opinion was consistent with an earlier opinion of the Attorney General in which he opined that the city commission cannot "directly or indirectly usurp the authority of the library board." OAG, 1959-1960, No 3432, p 166 (August 14, 1959). Although the Attorney General Opinions reference a township library board, their authority is identical to the city library board under PA 164.

We would be happy to set up a time to discuss this in more detail and present the establishment information to the City.

Sincerely,

FOSTER SWIFT COLLINS & SMITH PC



Anne M. Seurynck

AMS:als

99999:ASEURYNC:201321862-1

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Letter of Support – Birmingham Community and Senior Center

1 message

Kelly Stubbe <kstubbe@ymcadetroit.org> Sun, Mar 23, 2025 at 6:49 PM
To: city-commission@bhamgov.org, Jana Ecker <jecker@bhamgov.org>, Alex Bingham <abingham@bhamgov.org>

Dear City Commissioners, City Manager Ecker, and City Clerk Bingham,

Attached is a letter from the Birmingham Family YMCA Advisory Board of Directors in support of the proposed community and senior center project. We appreciate your leadership and look forward to future collaboration.

Thank you,
Kelly Stubbe
--
Kelly Stubbe
Executive Director
BIRMINGHAM FAMILY YMCA
400 E Lincoln St, Birmingham, MI 48009
248-220-3231 | kstubbe@ymcadetroit.org | ymcadetroit.org | facebook.com/YMCADetroit | @YMCADetroit | Donate

YMCA OF METROPOLITAN DETROIT | Making Every Day Better Since 1852

This email message and any attachments are confidential and may be protected from disclosure. If you are not the intended recipient, please notify us immediately by reply email and destroy all copies of this message and any attachments. Please do not copy, forward, or disclose the contents to any other person. Thank you.

Letter of Support – Birmingham Community and Senior Center.pdf
208K

FOR YOUTH DEVELOPMENT®
FOR HEALTHY LIVING
FOR SOCIAL RESPONSIBILITY

March 23, 2025
Birmingham City Commission
151 Martin Street
Birmingham, MI 48009

Dear Members of the Birmingham City Commission,

On behalf of the Birmingham Family YMCA Advisory Board of Directors, we express our strong support for the development of a new community and senior center in Birmingham—a space that will serve as a vital hub for residents of all ages and backgrounds.

We commend the City of Birmingham and Neumann Smith Architects for leading this important project. The new facility presents a unique opportunity to enhance community well-being and to create a welcoming space where individuals and families can connect, grow, and thrive together.

The Birmingham Family YMCA, part of the YMCA of Metropolitan Detroit, has served our community from 400 E. Lincoln St. since 1958. As a trusted local resource, we offer programs that nurture youth, support healthy living, and foster social connections.

A YMCA presence as a service provider in the new community and senior center would allow us to further support Birmingham residents in meaningful ways. Recent highlights from our YMCA include:

- **High demand for youth services**: Our Day Camp, which serves up to 150 children daily, reached **97% capacity early this month**, reflecting the strong need for safe, enriching programs for families.
- At our YMCA, **29% of members are older adults**, underscoring our vital role in fostering connection and well-being for seniors. We are committed to providing a **continuum of service with Next** to support this population.
- Since **March 2020 to 2025**, our membership has grown from **1,381 to 1,788 units**—with each unit representing a **family or individual**—a clear reflection of our expanding reach and impact in the **Birmingham community**.

We are excited to partner with the City, Next, and others to create a space that unites people of all ages through shared experiences. Together, we can foster lasting connections, promote wellness, and strengthen the fabric of Birmingham.

We appreciate your leadership and commitment to making Birmingham a place where everyone can thrive.

Thank you for your continued support of our community and for considering this important initiative.

Sincerely,

Joseph Valentine

On behalf of the Birmingham YMCA Advisory Board of Directors

BIRMINGHAM FAMILY YMCA
400 E. Lincoln Street, Birmingham, MI 48009
P 248 644 9036 **F** 248 644 8378 ymcadetroit.org/birmingham

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Proposed Senior Center

1 message

Jacalyn Simon <jacalyn@ameritech.net> Sun, Mar 23, 2025 at 5:27 PM
To: Jecker@bhamgov.org
Cc: abingham@bhamgov.org, city-commission@bhamgov.org

I have been enjoying the senior center for about four years now. While I don't partake in everything, there are many programs and events I enjoy on a regular basis. I appreciate the relationships created, the fraternity of members, the terrific office staff, and the knowledge that I gain. I would like to mention that I used to attend lectures for seniors at The Hawk, the community center for Farmington Hills. You probably know it was converted from a high school.

From what I can tell from the plans, some mistakes made by The Hawk will be replayed at the community center. The seniors have one large room on the second floor at The Hawk. It's basically a lecture\movie room. There is one elevator. I can do stairs but many cannot. The elevator is slow. If you don't catch it when it's about to close, the wait is long for it to return. It cannot handle a large capacity of people. Often people are left to wait for the elevator to return.

There is no dedicated entrance for seniors at The Hawk. It is so important to have a separate door(s) for seniors and a door with a button that can be pushed to make the door open by itself. Seniors move slower. They get jostled. They fall. Children can get underfoot. Seniors tend to prefer an atmosphere that is less noisy. Importantly, having the new Next on the first floor would eliminate several problems for us.

You may not realize it, but many people come from far and wide to participate. You really must give us something worthwhile. While I could attend the West Bloomfield Senior Center, its programs and activities are not nearly as interesting, stimulating, or as fun as those offered at Next. On most days, Next is bustling and often filled to the brim. We have truly outgrown the space. Instead or reducing programs due to lack of space, more space would mean more activities. My husband and his brother play pickle ball there most days that the gym is open, sometimes twice a day. There are days they can't use the gym because the preschoolers need it or there's a special program that requires more room. It would be wonderful to have the dedicated space we need to be able to participate in everything.

Please remember: one day you will be a senior and be grateful for a beautiful, fully functioning space dedicated to you, your friends, and families.

Very sincerely,

Jacalyn Simon
jacalyn@ameritech.net
248-770-4474

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

The new Next Facility

1 message

Patricia Duff <patriciaduff@sbcglobal.net> Sun, Mar 23, 2025 at 3:51 PM
To: city-commission@bhamgov.org, Jecker@bhangov.org, abingham@bhamgov.org

Dear Birmingham City Commission and City Staff,

Thank you for your on-going support and work on behalf of the growing needs of your senior citizens and of all citizens.

In June 2021 I relocated to Birmingham from sunny, Southern California and my home of 38 years. I wished to be closer to my daughter and grandson who had moved to the City from Troy. I chose Birmingham over surrounding cities because I was aware of Birmingham's commitment to support seniors' Aging in Place.

My first few months were busy with modifying the house I bought and learning my way around Oakland County. But when I first really started feeling "at home" in Michigan was the day I walked into Next. The entry opens into a large and very welcoming "living room" with a fireplace, comfortable armchairs, small tables for puzzles, chess, and card games. I was greeted with smiles and hellos even though I was a stranger. My daytime isolation and loneliness was over!

At Next I've met amazing people with whom I've discovered shared interests and experiences and I embrace the strong sense of shared identity generated by Next. I'm deeply grateful to the staff of Next and to the City for affording me and all seniors in our area such an outstanding organization and space.

Next has ample, close parking, and it is very convenient to have so many different kinds of activities under one roof, and with no steps or stairs to navigate. Mahjong, drawing, tai chi, chamber music, Spanish Conversation, chess, women's group, current events group, day trips, movies, health seminars, painting, and numerous lecture series are activities I've enjoyed at Next. Engaging in activities at Next has resulted in new friendships and spontaneous invitations to dinner, tea, and trips to art galleries and plays.

Next is a mutual support society for seniors. We give each other rides to Next, grocery shopping, and medical appointments (which seem to increase with each added decade). If we notice someone is not at an activity, we call and check on them. We ask and share advice and happily help each other. Next is a big, very diverse, extended family of seniors.

I feel physically and emotionally safe at Next, and I feel valued and welcomed. I want a physical space for Next where all of us can feel safe and valued.

Best regards,
Patricia Duff
2361 Windemere Road
Birmingham, MI 48009-5840
Sent from AT&T Yahoo Mail for iPad

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT

1 message

David Kraus <davidmk823@gmail.com> Sun, Mar 23, 2025 at 2:39 PM
To: city-commission@bhamgov.org
Cc: "Jecker@bhamgov.org" <Jecker@bhamgov.org>, "abingham@bhamgov.org" <abingham@bhamgov.org>

I am writing in support of NEXT, which is an integral part of the Birmingham community and, I believe, deserves your full support as a new building is planned.

I have been a member of NEXT for more than 6 years and generally am there at least twice a week. I find it to be much more than just a site for activities; it is a community for its members where they can meet and interact with others at a central location.

I have heard that there has been a suggestion that NEXT does not need as big a space because members can find the same services at other locations in the community. This, of course, fails to take into account the camaraderie that makes NEXT special.

One suggestion that may have been made was that NEXT members could take classes at the Birmingham-Bloomfield Art Center. To investigate that, I contacted the BBAC and learned that the cost of art classes there is about $300 per session if you are a member ($40 per year). If you are not a member, the cost is about $350 per session. For all of these classes, one must provide one's own supplies.

For seniors on a fixed income, this does not seem to be a viable alternative to NEXT.

I hope that you fully take into account the needs of NEXT while planning the building.

David Kraus
(248) 548-7180

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT

1 message

Linda Constantino <lmconstantino99@yahoo.com> Fri, Mar 21, 2025 at 9:42 PM
To: City-commission@bhamgov.org, Jecker@bhamgov.org
Cc: Abingham@bhamgov.org

Hello! When I moved to Beverly Hills, almost 4 years ago from Grand Rapids, joining NEXT was one of the first things I did. I like the community feel, the selection of classes, speakers and programming. Especially yoga on Wednesday mornings. Please help make sure NEXT can continue in our future location with room to grow.
Thank you!
Linda Constantino
Sent from my iPhone

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT

2 messages

'Cciagne' via City Commission <city-commission@bhamgov.org> Fri, Mar 21, 2025 at 5:46 PM
Reply-To: Cciagne <cciagne@yahoo.com>
To: City-commission@bhamgov.org

Hello, I am a wellness instructor sharing a variety of classes with NEXT members five days/week. Within our classes we have built beautiful connection and community. On the coldest of days getting out and showing up is half the battle for my students and they leave feeling “better”.
As I enter NEXT daily I see the buzz of activity and the myriad of offerings in services and programs. The office staff and volunteers are committed and very accommodating and helpful.

Please continue to support the needs of the aging community and work w NEXT in their vision to provide a suitable building/environment. As a 58 year old living in Birmingham I plan to age here and always be involved with NEXT.

Thank you for taking the time to read this!

Take a mindful moment to Breathe and to feel your presence! Shine on!!!

Caryn Ciagne Schwartz
Concierge Wellness Coach
CC Yoga
3125059642
https://doterra.com/US/en/site/caryngallagher

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Therese Longe <tlonge@bhamgov.org> Fri, Mar 21, 2025 at 6:21 PM
To: Jana Ecker <Jecker@bhamgov.org>, Alex Bingham <abingham@bhamgov.org>

[Quoted text hidden]

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

New NEXT Building

'Carol Marshall' via City Commission <city-commission@bhamgov.org> Fri, Mar 21, 2025 at 4:23 PM
Reply-To: Carol Marshall <cmrshll4@yahoo.com>
To: "city-commission@bhamgov.org" <city-commission@bhamgov.org>

To Whom It May Concern,

I would like to express my concerns relative to the future NEXT building, explaining what is important to me and other NEXT Senior Citizens whom I have had this discussion! First, I would like to mention why I joined NEXT. Being a retired Senior Citizen meant I needed a new life and to stay “young," as much as I could control. Thus, I needed activities, learning experiences, new friends as well as “stepping out of the box” to keep my body and brain active. I was extremely impressed with NEXT.

The lectures are diversified, interesting, well organized, always providing a learning experience. I enjoy the Women’s Conversation Group, sharing various topics. Current Events has broadened my knowledge of politics and other issues occurring in today’s world. It has motivated me to broaden my knowledge on a multitude of topics. And trips to the DSO and other tours/trips are added enjoyments. The special events with food, entertainment, and music, especially outside, are fun and another way to socialize. I hope these same social events will be available at the new building and in an outside area, weather permitting.

Even though I am not a frequent card player, several NEXT members enjoy this activity on a daily experience which offers mental stimulation and social interaction.

I really enjoy our library which has a multitude of all types of books. And to borrow a book without a due date or having to check out is advantageous for me, being a slow reader. This option has encouraged me to read more and learn more.

The computer is another asset which I very much appreciate, and I use often! There are several computers and no problem with any kind of "wait!".

I enjoy the comradeship of the various individuals I have met. It puts a smile on my face as soon as I walk into NEXT seeing people playing cards and/or socializing and then being greeted! I think this type of area is of utmost importance. Even after attending a class or “whatever” some of us mingle afterwards in this area/lobby to socialize. And hopefully, the future NEXT facility will have this same type of lobby and ONLY for Senior Citizens. Thus, I suggest and hope there will be a separate entrance for Senior Citizens.

Our current nursery is separate from the Senior Center. It is imperative that the YMCA facility does not have children who have access to the Senior Citizen area(s). I have learned from several Sr. Citizens at NEXT who have been in the YMCA that they have almost fallen or collided with children there. “Children are children” and do not understand the importance of being careful around older adults relative to falling or “other”. Added to this could be a liability issue if an accident should occur.

Our current parking situation with the two parking lots is convenient and never a problem for a parking space. This is an important issue for having not only enough spaces as well as closeness to the entrance, a necessity for those with walking challenges.

I have attended events at several other Senior Centers/Community Centers, e.g., BT, Royal Oak, Troy, OPC Rochester, Waterford. There is no comparison to NEXT! Additionally, the office is in a convenient location with an open-door policy, and personnel are extremely helpful and friendly! I have not always found this in other centers.

Senior Citizens have different wants and needs than those not yet at that age. Though nice to have younger friends, it is important Senior Citizens have a facility that is only for Senior Citizens, individuals whom they can relate, socialize with, and learn from. They also do not need to feel compelled to compete with younger individuals, especially with fitness activities.

Suicide and mental illness are higher in older adults due to loss, grief, and loneliness per NIH and Cleveland Clinic. An accommodating Senior Center meeting the needs of older adults can, hopefully, negate another statistic.

We need our Senior Citizens! Most senior citizens have worked hard, sacrificed, suffered challenges and losses, and continue to be contributors to our economy and society. Don’t they deserve to be respected, have their needs provided, and not be treated as “throw aways”, second class citizens, etc. Each and every person will eventually be a Senior Citizen!

Sincerely,
Carol A. Marshall

--
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BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

BIRMINGHAM NEXT

1 message

Cciagne <cciagne@yahoo.com> Fri, Mar 21, 2025 at 5:48 PM
To: Abingham@bhamgov.org

Hello, I am a wellness instructor sharing a variety of classes with NEXT members five days/week. Within our classes we have built beautiful connection and community. On the coldest of days getting out and showing up is half the battle for my students and they leave feeling “better”.
As I enter NEXT daily I see the buzz of activity and the myriad of offerings in services and programs. The office staff and volunteers are committed and very accommodating and helpful.

Please continue to support the needs of the aging community and work w NEXT in their vision to provide a suitable building/environment. As a 58 year old living in Birmingham I plan to age here and always be involved with NEXT.

Thank you for taking the time to read this!

Take a mindful moment to Breathe and to feel your presence! Shine on!!!

Caryn Ciagne Schwartz
Concierge Wellness Coach
CC Yoga
3125059642
https://doterra.com/US/en/site/caryngallagher

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Fwd: Tour of just opened Traverse City Senior Center

1 message

Jana Ecker <Jecker@bhamgov.org> Mon, Mar 24, 2025 at 6:27 PM
To: Alex Bingham <abingham@bhamgov.org>

For next CC agenda packet...

Jana L. Ecker
City Manager
Birmingham, MI
(248) 530-1811

---------- Forwarded message ---------
From: **Stuart Jeffares** <stuartjeffares@gmail.com>
Date: Mon, Mar 24, 2025 at 6:07 PM
Subject: Tour of just opened Traverse City Senior Center
To: Marcia Wilkinson <sawilkinson@comcast.net>, <cbraun@birmingham.k12.mi.us>, Gordon Rinschler <Glr101s@aol.com>, George & Susan Dilgard <gdilgard@hotmail.com>, Bert Koseck <koseckarch@gmail.com>, Jason & Mary Emerine <je@seiberkeast.com>, Therese Longe <tmquattro@gmail.com>, Clinton Baller <clinton@baller4bham.com>, Jana Ecker <jecker@bhamgov.org>

While we can't replicate the waterfront location, the design focus on the Seniors was impressive. The community has a YMCA but they serve a different clientele and support themselves without local government or taxpayer assistance. I'm guessing they will have 6-8 pickleball courts in the Spring (not striped yet) along with many Shuffle Board courts and a cool picnic area. Very warm inviting safe space. We got asked to join in on a game of billiards on our walkthrough and many folks said hello. I pray we can come to our senses and deliver on our decades long promise to our senior community and let other organizations work out their issues on their own...not our (taxpayers) problem. Photos attached

https://photos.app.goo.gl/rgYEFmjW5es4RHBW6



BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

(no subject)

1 message

Gwen Norwood <gnorwood@gmail.com> Mon, Mar 24, 2025 at 6:14 PM
To: City-commission@bhamgov.org

NEXT--YMCA. We all need this program it helps our lives move forward it helps us grow so think of us and grow with us.
And once again thank you very much

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To view this discussion visit https://groups.google.com/a/bhamgov.org/d/msgid/city-commission/CALH_DL2_Y36td%3DnCt5j3UYDKRVPh00ZqQydBFUN2PUDM129rfw%40mail.gmail.com.

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Next and YMCA

2 messages

Gwen Norwood <gnorwood@gmail.com> Mon, Mar 24, 2025 at 6:45 PM
To: City-commission@bhamgov.org

I love going to next it helps me and all the others consider us when you make your decision help us grow thank you

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Therese Longe <tlonge@bhamgov.org> Mon, Mar 24, 2025 at 6:47 PM
To: Jana Ecker <Jecker@bhamgov.org>, Alex Bingham <abingham@bhamgov.org>

[Quoted text hidden]

BIRMINGHAM
A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

NEXT senior center planning

1 message

'richard ehrlich' via City Commission <city-commission@bhamgov.org> Tue, Mar 25, 2025 at 4:51 PM
Reply-To: richard ehrlich <ricardodexter@yahoo.com>
To: "city-commission@bhamgov.org" <city-commission@bhamgov.org>, "Jecker@bhamgov.org" <jecker@bhamgov.org>
Cc: Cris Braun <cbraun@birmingham.k12.mi.us>, Kathleen Tillson <ktillson@birmingham.k12.mi.us>, Carol Marshall <cmrshll4@yahoo.com>

Greetings,

Wanted to share some thoughts on the importance of understanding senior suggestions for the planned community center

The needs of NEXT, the YMCA and the general population are in some areas different

I would strongly suggest a separate NEXT entrance with sufficient parking close by. Young children are difficult to control and could pose safety issues for seniors when walking to activities.

The current NEXT staff are excellent, welcoming and provide a variety of quality programming. They are highly visible and interact very well with members. In my opinion the set up is far superior to others in the area.

The new NEXT should be a "unit" within the new complex interacting with seniors that would promote continued top quality service and face to face communication. Some facilities will be shared like the gym, but to the extent possible the NEXT activities should be as close as possible to the entrance.

A popular and well run NEXT facility would be a major asset to the City of Birmingham. Seniors might chose to remain in an area where they feel welcome, rather than selling and moving away.

I encourage you to listen to NEXT inputs.

A badly planned and run community center could end up serving no constituency well.

With thanks,

Richard Ehrlich

PS. Carol Marshall sent you the message below on her views which I feel are important:

I would like to express my concerns relative to the future NEXT building, explaining what is important to me and other NEXT Senior Citizens whom I have had this discussion! First, I would like to mention why I joined NEXT. Being a retired Senior Citizen meant I needed a new life and to stay “young”, as much as I could control. Thus, I needed activities, learning experiences, new friends as well as “stepping out of the box” to keep my body and brain active. I was extremely impressed with NEXT.

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We need our Senior Citizens! Most senior citizens have worked hard, sacrificed, suffered challenges and losses, and continue to be contributors to our economy and society. Don’t they deserve to be respected, have their needs provided, and not be treated as “throw aways”, second class citizens, etc. Each and every person will eventually be a Senior Citizen!

Sincerely,
Carol A. Marshall

--
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Alex Bingham <abingham@bhamgov.org>

BCSC Test Fit presentation 3/19/25

2 messages

'Kristy Barrett' via City Commission <city-commission@bhamgov.org> Tue, Apr 1, 2025 at 3:40 PM
Reply-To: Kristy Barrett <kristybarrett1@yahoo.com>
To: "city-commission@bhamgov.org" <city-commission@bhamgov.org>
Cc: "clerksoffice@bhamgov.org" <clerksoffice@bhamgov.org>

City Commissioners, during the BCSC ad hoc meeting 3/19/26 there were many questions from members about what spaces were dedicated to Next, the YMCA and the community. There is no doubt a concern about the actual growing size of this project but also the costs and space efficiency.

Attached is a sheet of all the spaces presented on the spreadsheet to the BCSC for the Test Fit discussion. This same information was presented at the CC meeting 3/24/25. Our understanding is there was further refinement without a sq ft change. This is simply a different way to look at the information from a non-architect standpoint.

A group met this weekend where part of our discussion was about the BCSC. Following this spreadsheet of sq/ft areas are questions and concerns about space utilization.

We hope this may assist the next CC discussion about spaces, space utilizaiton and most importantly efficient usage of ALL spaces. Hopefully, all committees can agree to decrease this ever growing project and the costs to only Birmingham property owners.

Please include with the CC packet

Kristy Barrett

--
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TestFit 031925 comments.pdf
193K

Alex Bingham <abingham@bhamgov.org> Tue, Apr 1, 2025 at 4:01 PM
To: Kristy Barrett <kristybarrett1@yahoo.com>
Cc: Clerks Office <ClerksOffice@bhamgov.org>

Received, thank you.
[Quoted text hidden]

--
Alexandria D. Bingham, MPA, CMC, MiPMC
City Clerk
City of Birmingham
151 Martin Street
Birmingham, MI 48009
(248) 530-1802 Office Direct
(248) 530-1080 Fax
Important Note to Residents
Let's connect! Join the Citywide Email System to receive important City updates and critical information specific to your neighborhood at www.bhamgov.org/citywideemail.

Based on spreadsheet presented at BCSC

Test Fit 03-19-25 (revised schematic but no sq/ft spreadsheet)

		(Original)		3/19/25 (Option 1)	
	Grossing Factor (GSF)	1.3		1.45	
		Unit ASF	GSF	Test Fit 1	plus+GSF
	NXT Admin (145sf x 3)	700	910	435	631
	NXT workstations (8 staff)			195	283
	Hoteling			24	35
	NXT Lobby/Livingroom (carpet)	1,200	1,560	1,244	1,804
	NXT Café	150	195	150	218
	NXT File Rm	100	130	0	0
	DME closet	150	195	127	184
	NXT Smalll Welln	120	156	127	184
	NXT large Welln	350	455	0	0
	NXT Fitness area			850	1,233
1	**NXT total**			**3,152**	**4,570**
	YMC Admin(145sf + 125sf)	540	702	270	392
	YMC workstations (5 staff)			195	283
	YMC hoteling			24	35
	YMC Fitness Direct (wellness area)			0	0
	Child Watch			1,175	1,704
	YMC Lobby	900	1,170	850	1,233
2	**YMC Total**			**2,514**	**3,645**
	P/R Admin	228	296	120	174
	P/R workstations (3 staff)			117	170
3	**P/R Total**			**237**	**344**
	Reception Area			165	239
	Share conference			120	174

	Workroom/mail	120	174
	Kitchenette	34	49
4	**Shared Total**	**439**	**637**
5	**P/R, NXT, YMC Admin Total (includes NX Fitness)**	**6,342**	**9,196**
	Pool w storage	5,981	8,672
	Y Aquatic/lifeguard	100	145
	Locker Room	2,400	3,480
	Gym w storage	7,655	11,100
	Y Wellness (machines)	5,016	7,273
	Kitchen w storage (670sf + 100sf)	770	1,117
6	**Dedicated Activity**	**21,922**	**31,787**
7	**MP 1** w storage (988sf +140) *Art; kitchen center; can be divided 2 x 494 sf*	1,128	1,636
8	**MP 2** w storage (900sf + 240) - ***carpeted*** *NXT speakers;concerts; tech programs* *Opens to MPR 3 for total 1,800 sf room* *(currently NXT has this programmed until 9 PM M-Th)*	1,140	1,653
9	**MPR 3** no storage (900sf) - ***carpeted*** *NXT speakers; concerts; large group* *Can be divided into 2 x 450 ft small rooms* *(currently NXT has this programmed unitl 9 PM (Tue-Thurs)*	900	1,305
10	**MPR 4** w storage (2055sf + 175) *Large fitness classes; some large NXT speakers/concerts* *(NXT has plans for Lunch Social/Speaker 12-5 PM every Mon)*	2,230	3,234
11	**MPR 5** w storage (880sf + 240) *Small fitness groups*	1,120	1,624

12	**MPR 6** no storage (880sf) *Can be divided to 2 x 440 sf* *(NXT has planned programs 9-5 PM: pingpong, jazz band, choir)*	900	1,305
13	**MPR x 6 rooms**	**7,418**	**10,756**
14	**Total Bldg Spaces**	**35,682**	**51,739**

15	***Notes Flexibility: Open or Divided Rooms***		
	MP1 can divide into 2 x 494 sf	**988**	**1,433**
	MPR 2 + 3 open together- carpeted	**1,800**	**2,610**
	MPR 6 can divide to 2 x 440	**880**	**1,276**
16	***Living Room + MPR 3 - carpeted*** *(eliminate MPR 2 save 1,636 sf)*	**2,294**	**3,326**
17	***Hospitality-ish Spaces sf Total*** *(Livingroom: 1,244 + Café: 150 + MPR 2: 1,140 + MPR 3: 900sf)* ***(Are these areas the intended "premises" for exclusive use by NXT?)***	**3,434**	**4,979**
	Include NXT fitness room 850 sq ft in "premises"	4,284	6,212

Questions/concerns/Community Feedback

Need actual NXT program logistics as baseline

How many hours per week are NXT 8 workstation volunteers on site?

Could spaces be shared on different days and eliminate sf or increase conf room to seat 10-12?

Livingroom needs to be program space for NXT and included with combined MPR 2 + MPR 3 = 3,434 sq ft

Does the YMC have ample office space (10 FTEs v NX 2)

Does P/R need more office - what have now?
Under what circumstance and how often are all MPR used at the same time?
Need to look at ways to decrease idle spaces (space = $$$)
CC A Longe states there will be zero unused space; does this mean no locking the NXT spaces for community use
Where is this space for Community Hub to gather? Moms, teens etc who need a place to gather
Is 4,979 sf of hospitality-ish carpeted spaces needed? What % of operating hrs will these spaces be occupied?

Other

Why discussing Bond when have not finalized space
Can't finalize space wo current NX program logistics
Bond should not move forward until all details final: Interlocal Agreements; financials; funding; size; cost
Need cost of the bond (pricipal and Interest) TOTAL included in Bond language (prefer November)
Stop City marketing until all agreed by CC: don't know yet that facility will be free
Next should define their operating times (most Senior Centers close 4 PM)
Next hours will determine available community hub and rental spaces
Would be helpful to know capacity of each MPR for different activities: tables/activities, lecture setup, yoga, zumba.....
(These are to be Multi-Purpose Rooms - should have understanding of capacity for different puposes)
MPR should be available as study rooms, tutoring space and small group meetings
What fitness equipment does NXT have now; how many use it; what additional equipment is NXT planning for?
The NXT fitness area is 850sf and almost the size of a MPR = info needed
Space only programmed 4.5 days a week; large space? What about outdoor equipment?
When YMC has summer camps mostly outside but do some programming inside; now use the swim door
The current plan is to have kitchen and NXT living room in this area of possible entrance; what concerns?
There is one cooridor to access all areas (including stairs and elevator) for all patrons - is this an issue w mobility concerns
Current Hospitality-ish rooms directly across from YMC Wellness - could this be a noise issue?
Kitchen of 770 sf (1,117 gsf) is NOT needed. Make it <300sf for Meals/wheels and small event catering (15 x 20 ft is a large kitchen)
Culinary demonstrations or programming for youth, mom/daughter baking etc can happen at TCH
If City plans to let anybody come in and use the facility, how does this effect security? How will this be monitored; Y has all liabilty

Anyone can join NXT and have access to the facility; How are these members screened and accounted for in bldg? Community members as v
Large area needs for fitness could be in the gym (zumba, dance, cardio dance)

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Department of Public Service

DATE: April 7, 2025

TO: Jana L. Ecker, City Manager

FROM: Scott D. Zielinski, DPS Director

SUBJECT: Pesticides

INTRODUCTION:

The City of Birmingham has been working for some time to limit the use of chemical products for pesticides (herbicides and insecticides). The City makes every effort to be sustainable and environmentally conscious when working in our preservation and park areas. Our goal is to encourage the growth of native plant species in these areas to help reduce the need for pesticides, as well as prevent invasive species from taking over in our parks and open environment spaces. This report reviews the City's use of pesticides and steps to limit its use and improve sustainability.

The best way to examine the City's use of pesticides is to look at what has been done in the past, what the City is currently doing and where the City is moving in the future.

HISTORICAL PESTICIDE USAGE:

The City has historically tried to eliminate invasive pest plants by hand when possible. Unfortunately, some invasive plant species such as Phragmites, Buckthorn, Japanese Knotweed and others can proliferate when physical removal is not used in conjunction with pesticides. Historically, pesticide use on the City's golf courses was more prevalent than in City parks and open areas, as there are high expectations associated with golf courses being pest and weed-free.

CURRENT PESTICIDE USAGE

The City is continually evaluating environmental practices and looking for ways to better perform in a more sustainable manor in order to have a more positive impact on City properties. As previously stated, the City has historically used herbicides and insecticides, but now limits these chemical treatments to control disease, such as West Nile insecticide treatments of mosquitos in storm water collection points or when invasive species are found in quantities that are too

expansive for hand removal. The amount of herbicide used on turf grasses at parks has steadily declined over the last decade as historically unwanted weeds in grass have become more acceptable in cultural practice.

The City relies on an Integrated Pest Management (IPM) system in landscaping and maintenance areas. In this system, biological and cultural practices are used to prevent invasive pest plants from establishing themselves. The City carefully selects and plants approved vegetation in an effort to naturally prevent weeds from growing in planned planting areas, such as downtown planters and flowerbeds. Additionally, the City uses natural dye free mulch to discourage weed growth in planned planting areas.

In 2024, Parks and Recreation staff did not use any insecticides. It is the practice of the City to only use insecticides in a limited and controlled manor and only when absolutely necessary. For example, when a group of trees or shrubs on City property are infested with an insect that would result in the death of the tree or shrub if not treated.

As the use of some pesticides is unavoidable at times, all City staff who use pesticides are certified applicators through the Michigan Department of Agriculture and Rural Development (MDARD) for safety standards. City staff work not only to protect themselves by taking precautionary measures for their own personal safety, but also to limit the impact to the surrounding environment by applying pesticides at an appropriate rate in order to prevent herbicides and unwanted phosphorus from entering the watershed. The City has also embraced the practice of controlled burns where appropriate. Additionally, the City now makes a conscientious effort to work with subcontractors to limit their use of pesticides to spot treatments and encourage hand pulling of weeds when possible.

The City golf courses have historically used a range of fertilizers, fungicides, herbicides and insecticides. However, City staff is in the process of reviewing the areas and methods of use to further limit the use of pesticides as the City investigates less invasive ways to handle invasive plants.

SUSTAINABILITY MOVING FORWARD REGARDING PESTICIDES:

The City continues to grow our sustainable and environmentally friendly practices in our preservation and parks areas. The City's goal is to encourage the growth of native species of plants. As previously noted, the City tries to eliminate invasive species through non-chemical methods such as controlled plantings, prescribed burns, hand removals and other natural measures. Unfortunately, some invasive species are not always discovered in amounts that can be effectively eliminated by staff without limited specific pesticide use.

This year, in an attempt to further limit use of fertilizers, fungicides, herbicides and insecticides at the City's golf courses, test locations have been set up to evaluate alternative options. City staff are examining switching to synthetic surfaces in areas such as tee-boxes or greens and will be conducting feasibility studies for increasing "all natural" elements into the courses that would require no use of chemicals.

The City is continuing to review methods for using non-pesticide methods for weed removal in areas such as sidewalk cracks. These methods include controlled burning, vinegar/salt water

mixes and other various natural remedies. An example of this would be the prescribed burn that was completed on March 26, 2025 to help eliminate invasive pest plants in Barnum Park and Quarton Lake. City staff also continues to identify more locations to modify into natural/native species zones that will be free of pesticides in these locations.

SUMMARY:

The DPS and the City are committed to the continued reduction of the use of pesticides. The City looks forward to being a leader in environmental sustainability. DPS staff will work with the City's Environmental Sustainability Committee to address new and better ways of addressing the reduction in pesticide use.

GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

MARLON I. BROWN, DPA
DIRECTOR

PLEASE SHARE THIS INFORMATION WITH BUILDING PLAN REVIEW AND INSPECTION STAFF AS THIS NOTICE IS BEING MAILED TO LOCAL UNIT OF GOVERNMENT CLERKS ONLY.

NOTICE TO CLERKS

Pursuant to Section 6 of the Stille-DeRossett-Hale Single State Construction Code, 1972 PA 230, MCL 125.1506, the Department promulgated rules for the Michigan Part 4 Building, Michigan Rehabilitation, and Part 10a Michigan Commercial Energy Rules. These rules are revised to update the Michigan codes to adopt the 2021 International Building Code (IBC), the 2021 International Existing Building Code (IEBC), and the 2021 International Energy Conservation Code (IECC). The Michigan Part 4 Building and Michigan Rehabilitation codes are effective statewide April 9, 2025. The Part 10a Michigan Commercial Energy Rules are effective statewide April 22, 2025. Every unit of government with code administration and enforcement responsibility for the above-mentioned rules must enforce these new rules.

PLEASE NOTE:

The promulgated rules mentioned are **only** those rules affected during the recent Michigan amendment process and do not include all rules contained in the Michigan Part 4 Building, Michigan Rehabilitation, and Michigan Part 10a Commercial Energy amendments. As Michigan also adopts by reference rules from the 2021 IBC, 2021 IEBC, and 2021 IECC, it is the responsibility of the code-enforcing agency to assure the **complete codes** are purchased for use by inspection staff and a copy is available for inspection by the public.

The bureau has coordinated sales of the 2021 Michigan code books with the International Code Council (ICC). A web link has been added to the bureau's website at https://www.michigan.gov/lara/bureau-list/bcc/rules-acts/codes/code-books, to allow customers to purchase the code books directly from ICC at a cost of $169.00 for the Michigan Building Code, $91.00 for the Michigan Rehabilitation Code, and $36.00 for the Michigan Commercial Energy Code. Rules can be downloaded for free from the bureau's website at https://www.michigan.gov/lara/bureau-list/bcc/rules-acts/rules/currently-open.

Questions regarding the updated rules or this notice may be directed to LARA-BCC-RULES@Michigan.gov.

INFORMATION ONLY