BIRMINGHAM CITY COMMISSION AGENDA
FEBRUARY 27, 2023
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

- The City recommends members of the public wear a mask if they have been exposed to COVID-19 or have a respiratory illness. City staff, City Commission and all board and committee members must wear a mask if they have been exposed to COVID-19 or actively have a respiratory illness. The City continues to provide KN-95 respirators and triple-layered masks for attendees.
- The City Commission thanks all members of the public who attended the February 15, 2023 City Manager Candidate Meet and Greet and for all of the feedback submitted on http://engage.bhamgov.org. City staff is currently in the process of compiling the reports on staff and public feedback as well as extensive reference checks, background checks, and investigations on all three candidates. The City Commission intends to review this information in March and work through the final steps of the City Manager Selection Process as we approach spring.

APPOINTMENTS

A. Appointment to the Parks and Recreation Board
   1. Pam Graham

To appoint _____ to the Parks and Recreation Board as a regular member to serve a three-year term to expire March 13, 2026.

To appoint _____ to the Parks and Recreation Board as an alternate member to serve a three-year term to expire March 13, 2026.

B. Appointment to the Public Arts Board
   1. Pam Graham

To appoint _____ to the Public Arts Board as a regular member to serve the remainder of a three-year term to expire January 28, 2026.

To appoint _____ to the Public Arts Board as an alternate member to serve the remainder of a three-year term to expire January 28, 2026.

To appoint _____ to the Public Arts Board as an alternate member to serve the remainder of a three-year term to expire January 28, 2025.

C. Appointment to the Cablecasting Board
   1. Deanna Brown

To appoint _____to the Cablecasting Board as a regular member to serve a three-year term expiring March 30, 2026, effective April 1, 2023.

To appoint _____ to the Cablecasting Board as a regular member to serve the remainder of a three-year term expiring March 30, 2024.

To appoint _____ to the Cablecasting Board as an alternate member to serve the remainder of a three-year term expiring March 30, 2025.

D. Appointment of Student Representatives as non-voting members to Birmingham Boards for the 2023 calendar year

   1. Ian Weinberg, Historic District Commission / Design Review Board
   2. Sophie Hanawalt, Multi-Modal Transportation Board
   3. Angie Sharma, Multi-Modal Transportation Board
   4. Alex Motea, Museum Board
   5. Alexandria Schaufler, Museum Board
   6. Kate Glasier, Parks & Recreation Board
   7. Archie Reynolds, Parks & Recreation Board
   8. Asher Kaftan, Planning Board
   9. Matthew Wiegand, Planning Board
   10. Luca DeSanto, Public Arts Board
   11. Andrew McClean, Public Arts Board

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 special meeting minutes of February 8, 2023.

B. Resolution to approve the City Commission special meeting minutes of February 9, 2023.

C. Resolution to approve the City Commission workshop meeting minutes of February 13, 2023.

D. Resolution to approve the City Commission regular meeting minutes of February 13, 2023.

E. Resolution to approve the Special City Commission meeting minutes of February 15, 2023.

F. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 15, 2023 in the amount of $1,412,606.06.

G. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 22, 2023 in the amount of $835,571.51.

H. Resolution to enact a traffic control order for Park Street north of Oakland allowing permitted parking only on the east side of the street, to post "no parking signs" on the west side of the street and to direct the police department to enforce such an order.

I. Resolution to approve Contract No. 23-5001, Control Section TAU 63000, Job Number 23A0194 by and between the Michigan Department of Transportation and the City of Birmingham. In addition, authorize the City Engineer to sign the agreement on behalf of the City.

J. Resolution to approve the construction project budget and award the 2023 Quarton Lake Estates Phase 2 Project - Westwood, Raynale, and Oak Street #1-23 (P) to FDM Contracting, Inc. in the amount of $1,062,984.25. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Major Street Fund	202.0-449.001-981.0100	$81,505.46	$8,150.55	$89,656.01
Local Street Fund	203.0-449.001-981.0100	$128,234.19	$12,823.42	$141,057.61
Sewer Fund	590.0-537.000-981.0100	$460,485.16	$46,048.52	$506,533.68
Water Fund	591.0-544.000-981.0100	$392,759.44	$39,275.94	$432,035.38
Total Construction Costs		$1,062,984.25	$106,298.43	$1,169,282.68

K. Resolution to approve the construction project budget and award the 2022-2023 Cape Seal Program #6-22 (P) to Highway Maintenance and Construction in the amount of $436,387.10. In addition, to authorized the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for this project will be charged to the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	$436,387.10	$43,638.71	$480,025.81

AND

To approve the appropriation and amendment of the fiscal year 2022/2023 budget as follows:

Local Street Fund:

Revenues:		
203.0-000.000-400.0000	Draw from Fund Balance	$160,030.00
Total Revenue		$160,030.00
Expenditures:		
203.0-449.001-981.0100	Public Improvement	$160,030.00
Total Expenses		$160,030.00

L. Resolution to approve the purchase of root control services, as quoted by Duke's Root Control, Inc. for the 2023 Sewer Root Control Program, in the amount not to exceed $99,465.67. Funds for this purchase are available in the Sewer Fund, Other Contractual Services, account number 590.0-538.000-811.0000.

M. Resolution to approve the 2023-2024 Annual Flower Purchase from Croswell Greenhouse Inc. in the amount not to exceed $22,032.25 for 2023 and $23,133.86 for 2024. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for the Annual Flower Purchase has been budgeted for in the General Fund – Property Maintenance – Operating Supplies account #101.0-441.003-729.0000.

N. Resolution to approve the appropriation and amendment to the Michigan Indigent Defense Fund for the fiscal year 2022-2023 as follows:

Revenues:		
State Grant Revenue	260.0-698.000-571.0000	$365,150.00
Local Contributions	260.0-698.000-590.0000	$17,600.00
Total Revenues		$382,750.00
Expenditures:		
Supplies	260.0-698.000-729.0000	$500.00
Other Charges-Attorneys	260.0-698.000-801.0400	$373,550.00
Other Charges-Experts	260.0-698.000-803.0200	$7,500.00
Other Charges-Training	260.0-698.000-957.0100	$1,200.00
Total Expenditures		$382,750

O. Resolution to approve an increase to the City's credit card limit to $35,000.

P. Resolution to approve a special event permit as requested by the Birmingham Shopping District to hold the Day on the Town on July 29, 2023, 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.

Q. Resolution to approve a special event permit as requested by the Birmingham Shopping District to hold the Birmingham Farmers Market on May 7, 2023 – October 29, 2023 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.

R. Resolution to approve a special event permit as requested by the Birmingham Department of Public Services to hold the In the Park Concert Series on Wednesdays from June 14, 2023 to August 16, 2023 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.

S. Resolution to recognize the following nine student representatives for their service in 2022 on Birmingham boards and committees and award each student a certificate in appreciation for their civic involvement:

Historic District Commission / Design Review Board	Meghan Murray Charlie Vercellone
Multi-Modal Transportation Board	Isabela Betanzos Ben Rosenfield
Museum Board	Jordan Snyder
Planning Board	MacKinzie Clein Andrew Fuller
Parks & Recreation Board	Zachary Miketa Matthew Windsor

VI. UNFINISHED BUSINESS

A. Public Hearing for 300 S. Old Woodward – RH – Special Land Use Permit Amendment, Final Site Plan & Design Review

1. Resolution to approve the Special Land Use Permit Amendment, Final Site Plan and Design Review application for 300 S. Old Woodward – RH. In addition, to authorize the Mayor and City Clerk to sign the Amended Contract for an Economic Development Liquor License on behalf of the City.

B. Public Hearing to amend Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide clear and enforceable outdoor dining standards

1. Resolution to table consideration of the ordinance amendments to Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide staff with time to adjust the proposed language and address the concerns of the City Commission.

VII. NEW BUSINESS

A. Resolution to approve the renewal of liquor licenses for the 2023 licensing period for the following establishments holding a Class B, Class C, or Microbrewery Liquor License that are in compliance with Chapter 10, Alcoholic Liquors of the City Code:

- Adachi
- All Seasons Senior Living (Hospitality of Birmingham)
- Bella Piatti, LLC
- Birmingham Pub
- Birmingham Theater
- Brooklyn Pizza
- Churchills Bistro
- Community House
- Dick O'Dows
- Elie's Mediterranean
- EM
- Emagine Palladium
- Fleming's Prime Steakhouse
- Forest Grill 2, LLC
- Griffin Claw Brewing Company
- Hazel Ravines & Downtown
- Hyde Park Steak House

- La Strada Italian Kitchen and Bar
- Lincoln Hills Golf Course
- Luxe Bar and Grille
- Mare Mediterranean
- Market North End
- Phoenicia Restaurant
- Salvatore Scallopini
- Sidecar/Slice/Shift
- Social Kitchen and Bar LLC
- Springdale Golf Course
- Streetside Seafood
- Sushi Japan
- Tallulah Wine Bar & Bistro
- The Daxton Hotel
- The Morrie Birmingham, LLC
- Townhouse Kitchen & Bar LLC
- Townsend
- Whistlestop
- Zana

And

To make a motion adopting a resolution to set public hearings on Monday, March 27, 2023 to consider whether the City Commission shall file objections with the Michigan Liquor Control Commission for the renewal of licenses held by the following establishments that are in violation of Chapter 10, Alcoholic Liquors of the City Code:

- 220 Merrill
- Casa Pernoi
- Papa Joe's/Bistro Joe's
- Toast
- Whole Foods

And

Further, to direct the City Manager to notify the owners and operators of licensed establishments for which a public hearing is set via first class certified mail, to inform them of the public hearing date set for the March 27, 2023 7:30 p.m. City Commission meeting, and inform them that they may submit any written material for consideration by the City Commission prior to or at the public hearing, that the licensee or counsel of licensee may appear at the hearing in person or via zoom, and that the licensee or counsel of licensee may present witnesses or written evidence for City Commission consideration at the public hearing.

B. 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.

C. Commission discussion on items from a prior meeting

VIII. REMOVED FROM CONSENT AGENDA

IX. COMMUNICATIONS

X. REPORTS

A. Commissioner Reports
   1. Notice of intention to appoint to the Multi Modal Transportation Board
B. Commissioner Comments
C. Advisory Boards, Committees, Commissions' Reports and Agendas

D. Legislation
E. City Staff
   1. 2nd Quarter Investment Reports
   2. 2nd Quarter Financial Reports
   3. Train Emergency Response and Safety Staff Report
   4. City Manager's Report
   5. City Manager Selection Next Steps - Save the Date

INFORMATION ONLY

XI. 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) 644-5115 (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 PARKS AND RECREATION BOARD

At the regular meeting of Monday, February 27, 2023, the Birmingham City Commission intends to appoint to the Parks and Recreation Board three regular members and one alternate member to serve three year terms expiring on March 13, 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, February 22, 2023. 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.

Responsibilities

The Parks & Recreation Board consists of seven members and two alternate members who serve for three-year terms without compensation. The goal of the board is to promote a recreation program and a park development program for the City of Birmingham. The Board shall recommend to the City Commission for adoption such rules and regulations pertaining to the conduct and use of parks and public grounds as are necessary to administer the same and to protect public property and the safety, health, morals, and welfare of the public.

The meetings are held the first Tuesday of the month at 6:30 P.M.

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.

Applicant(s) Presented for City Commission Consideration:

Applicant Name	**Criteria** Members must be electors (registered voters) of the City of Birmingham.	**Qualifications**
Pam Graham	Registered Elector	Current P&RB Regular Member, Retired Automotive Engineer, South Poppleton Park Neighborhood Association President

The following members have terms expiring and have chosen not to apply to serve another term. We thank them for their time and service on the board.

Name	Position and Tenure
Kyle Goulding	Alternate, 2022-2023
Ross Kaplan	Regular member, 2007 - 2023
Eleanor Noble	Regular member, 2017-2023

SUGGESTED ACTION:

To appoint _____ to the Parks and Recreation Board as a regular member to serve a three-year term to expire March 13, 2026.

To appoint _____ to the Parks and Recreation Board as a regular member to serve a three-year term to expire March 13, 2026.

To appoint _____ to the Parks and Recreation Board as a regular member to serve a three-year term to expire March 13, 2026.

To appoint _____ to the Parks and Recreation Board as an alternate member to serve a three-year term to expire March 13, 2026.

PARKS AND RECREATION BOARD

Article II, Section 78

Objectives: The Parks and Recreation Board shall promote a recreation program and a park development program for the City. The Board shall recommend to the city commission for adoption such rules and regulations pertaining to the conduct and use of parks and public grounds as are necessary to administer the same and to protect public property and the safety, health, morals, and welfare of the public.

Seven regular members, Three-year Terms, Appointed by the City Commission
Two alternate members, Three-year Terms, Appointed by the City Commission
Members must be electors of the City of Birmingham
Meetings held the first Tuesday of each month at 6:30 PM.

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Carmona 887 Lakeview Ave.	**Heather**	(248) 867-1346 *htcarmona@sbcglobal.net*	3/12/2018 Registered Voter	3/13/2024
Collins 958 Pleasant	**Susan**	(248) 761-6873 *sbdcollins@comcast.net*	3/9/2020 Registered Voter	3/13/2024
Goulding 455 Smith Ave.	**Kyle**	(810) 241-1979 *kngmba@gmail.com*	3/28/2022 Alternate	3/13/2023
Graham 884 Knox	**Pam**	(248) 408-6277 *pamcracker@gmail.com*	1/13/2020 Registered Voter	3/13/2023

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Kaplan 635 Oak	**Ross**	(248) 645-6526 *rkaplan@neumannsmith.com*	10/22/2007 Registered Voter in Birmingham	3/13/2023
Lipp 2682 Buckingham	**Anne**	(248) 225-0136 *aecubera@gmail.com*	11/23/2020 Registered voter in Birmingham	3/13/2025
Noble 1160 Lake Park Dr.	**Eleanor**	(248) 417-7777 *elliecnoble@hotmail.com*	7/10/2017 Registered Voter in Birmingham	3/13/2023
Rusche 358 Henley St.	**John**	(248) 731-7068 (248) 219-8114 *jprusche@aol.com*	9/6/2018 Registered Voter in Birmingham (was Alt)	3/13/2024
Sweeney 160 Larchlea Ave	**Steve**	(248) 875-9973 *stevesweeney22@yahoo.com*	3/28/2022 Alternate	3/13/2025

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: Parks and Recreation Board **Year:** 2023
Members Required for Quorum: 4

MEMBER NAME	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	SPEC MTG	SPEC MTG	Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS																	
Heather Carmona	P	P													2	0	100%
Susan Collins	P	P													2	0	100%
Anne Lipp	P	P													2	0	100%
Pam Graham	P	P													2	0	100%
Ross Kaplan	P	P													2	0	100%
Eleanor Noble	A	P													1	1	50%
John Rusche	P	P													2	0	100%
STUDENTS																	
Matthew Windsor	P	P													2	0	100%
Zachary Miketa	P	A													1	1	50%
ALTERNATES																	
Steve Sweeney		P															
Kyle Goulding	P																
Present or Available	**9**	**9**	**7**	0	0	0	0	0	0	0	0	0	0	0			

KEY:
A = Member absent
P = Member present or available
CP = Member available, but meeting canceled for lack of quorum
CA = Member not available and meeting was canceled for lack of quorum
NA = Member not appointed at that time
NM = No meeting scheduled that month
CM = Meeting canceled for lack of business items

Department Head Signature

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: **Parks and Recreation Board** **Year:** **2022**
Members Required for Quorum: **4**

MEMBER NAME	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	SPEC MTG	SPEC MTG	Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS																	
Heather Carmona	P	P	P	P	P	A	P	P	P	P	P	P			11	1	92%
Susan Collins	P	P	P	P	P	P	P	P	P	A	P	P			11	1	92%
Anne Lipp			P	P	P	P	P	P	P	P	P	P			10	0	100%
Pam Graham	P	P	P	A	P	A	P	A	P	P	P	P			9	3	75%
Ross Kaplan	P	P	A	P	P	P	P	P	P	A	P	P			10	2	83%
Eleanor Noble	A	P	P	P	A	P	A	A	P	P	P	P			8	4	67%
John Rusche	P	P	P	P	P	P	P	P	P	P	P	P			12	0	100%
STUDENTS																	
Matthew Windsor	NA	NA	NA	P	P	P	P	A	P	A	A	P			6	3	67%
Zachary Miketa	NA	NA	NA	P	P	P	P	A	A	A	A	P			5	4	56%
ALTERNATES																	
Steve Sweeney					P	P		P		P							
Kyle Goulding				P		P	P	P		P							
Present or Available	**5**	**6**	**7**	**9**	**9**	**9**	**9**	**7**	**8**	**7**	**7**	**9**	0	0			

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NA = Member not appointed at that time
NM = No meeting scheduled that month
CM = Meeting canceled for lack of business items

Department Head Signature

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: **Parks and Recreation Board** **Year:** **2021**

Members Required for Quorum: **4**

MEMBER NAME	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	SPEC MTG	SPEC MTG	Total Mtgs. Att.	Total Absent	Percent Attended Available	
REGULAR MEMBERS																		
Heather Carmona	P	P	P	P	P	P	P	P	P	P	P	P			12	0	100%	
Susan Collins	P	P	P	P	P	P	A	P	P	A	P	P			10	2	83%	
Dominick Pulis	P	P	P	P	P	P	P	P	P	P	A	P			11	1	92%	
Pam Graham	P	P	P	P	P	P	P	P	P	P	P	P			12	0	100%	
Ross Kaplan	A	P	P	P	P	P	P	P	A	A	P	P			9	3	75%	
Eleanor Noble	P	P	P	P	P	P	A	P	P	P	P	P			11	1	92%	
John Rusche	P	A	P	P	P	P	P	P	P	P	P	P			11	1	92%	
STUDENTS																		
R.J. Carrel (Groves)	NA	NA	P	P	P	P	P	P	A	P	A	P			8	2	80%	
Alison Chapnick (Groves)	NA	NA	P	P	P	A	P	A	P	P	P	A			7	3	70%	
Kyle Sayers (Seaholm)	NA	NA	A	A	P	A	A	A	P	A	A	A			2	8	20%	
ALTERNATES																		
Jeffrey LaBelle															0	0	100%	Willl be filled in February, 2022
Anne Lippe	P	P					P		P	P	P							
Present or Available	**6**	**6**	**9**	**9**	**10**	**8**	**7**	**8**	**8**	**7**	**7**	**8**	0	0				

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Department Head Signature

January 2021-Ross Kaplan arrived at 6:31 pm

CITY BOARD/COMMITTEE ATTENDANCE RECORD

Name of Board: Parks and Recreation Board **Year:** 2020

Members Required for Quorum: 4

MEMBER NAME	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	SPEC MTG	SPEC MTG	Total Mtgs. Att.	Total Absent	Percent Attended Available
REGULAR MEMBERS																	
Heather Carmona	P	P	P	NM	NM	P	P	P	P	P	P	P			10	0	100%
Susan Collins				NM	NM	P		P	P	P	P	P			6	0	100%
Dominick Pulis	P	P	P	NM	NM	P	P	P	P	P	P	P			10	0	100%
Pam Graham	P	P	P	NM	NM	P	P	P	P	P	P	P			10	0	100%
Ross Kaplan	A	P	A	NM	NM	P	P	P	P	P	P	P			8	2	80%
John Meehan	P	A	A														
Eleanor Noble		P	P	NM	NM	P	P	P	P	P	P	P			9	0	100%
John Rusche	P	P	P	NM	NM	P	P	P	P	P	P	P			10	0	100%
William Wiebrecht	P	P	A	NM	NM	A									2	2	50%
STUDENTS																	
James Hayden Watkinson (student)			P	NM	NM	P	P		P		A				4	1	80%
Mallory Windsor (student)			P	NM	NM	P	P	P	P		P				6	0	100%
ALTERNATES																	
Jeffrey LaBelle				NM	NM		P		P						2	0	100%
Anne Lippe	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	P					
Present or Available	**6**	**7**	**7**	0	0	**9**	**9**	**8**	**10**	**7**	**8**	**7**	0	0			

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Department Head Signature

BIRMINGHAM
A WALKABLE CITY

OFFICE USE ONLY
Meets Requirements? Yes No

Will Attend / Unable to Attend

APPLICATION FOR CITY BOARD OR COMMITTEE

Thank you for your interest in serving on a Board or Committee. The purpose of this form is to provide the City Commission with basic information about applicants considered for appointment. NOTE: Completed applications are included in the City Commission agenda packets. The information included on this form is open to the public. All Board and Committee members are subject to the provisions of the Ethics Ordinance (Chapter 2, Article IX of the City Code).

Information on various Boards and Committees and a list of current openings can be found on the City website at www.bhamgov.org/boardopportunities.

(Please print clearly)

Board/Committee of Interest ___**Parks and Recreation**_____

Specific Category/Vacancy on Board _**Regular Member**_____ (see back of this form for information)

Name ____**Pam Graham**_____ Phone _____248 408 6277_____

Residential Address _**884 Knox**_____ Email *___pamcracker@gmail.com_____

Residential City, Zip __Birmingham, 48009_____ Length of Residence _____25 year_____

Business Address _____ Occupation ____retired_____

Business City, Zip _____

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

I have served on the Parks and Recreation Board since 2019. I am currently serving as Vice Chair of the board and I am eager to continue my service. I believe that the board provides valuable oversight and advocacy for Birmingham citizens.

I am proud the citizens supported a park bond and that the city completed Ice Arena and Adams Parks renovations during my terms of service. There are bond funds for additional projects including playgrounds and pickleball courts and the city needs to move on these projects as quickly as possible. I am a strong supporter of our trail system and improving use and access to the trails. While bonds are an attractive and available source of funding for park improvements, we must find a way to prioritize park improvements and maintenance in the general budget.

The 2040 plan draft recommends enhancements to our parks and must be considered as we define long range plans for the department.

I believe my board experience is important during this time of city staff transition.

List your related employment experience _____

I had a 29 year career as an automotive engineer. I worked on safety, environmental compliance, problem solving and technical training. I have found these experiences give me a different perspective on parks issues.

List your related community activities _____

South Poppleton Park Neighborhood Association, President. Volunteer Belle Isle Oudolf Garden. Member

Troy Garden Club. Past volunteer Birmingham Schools, Birmingham Unitarian Church. City of Birmingham Poll worker.

List your related educational experience _____

Birmingham Citizens Academy. BS Engineering MIT. MS Engineering Northwestern University.

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 direoct 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_____

_____ _____1/18/2023_____

Signature of Applicant Date

Return the completed and signed application form to: City of Birmingham, City Clerk's Office, 151 Martin, Birmingham, MI 48009 or by email to clerksoffice@bhamgov.org or by fax to 248.530.1080. Updated 3/24/2021

*By providing your email to the City, you agree to receive news & notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

BIRMINGHAM
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Christina Woods <cwoods@bhamgov.org>

Parks and Recreation Board Position Expiring 3/13/23 ELEANOR NOBLE

Ellie Noble <elliecnoble@hotmail.com> Thu, Feb 9, 2023 at 10:48 AM
To: "clerksoffice@bhamgov.org" <clerksoffice@bhamgov.org>

To Whom It May Concern:

After some deliberating, I won't be re-applying for my position on the Board of Parks and Recreation in Birmingham. I started as an alternate in 2017 and had the privilege of being part of the Master Plan for the parks, Public Engagement, The Ice Arena renovation, and Adams Park transition to name just a few accomplishments. And the City of Birmingham traversed the Covid pandemic with efficiency throughout those years.

I hope to see you fellow citizens of this fine community in the parks, perhaps pushing some swings or trying to keep up with a run-a-way toddler on the climbing structures, walking our trails, swinging a dusty old golf club at Springdale or Lincoln Hills. And our family will definitely be using the new pickleball courts!

Thank you for the opportunity to have served on this board. It was a pleasure.

Warm regards,
Ellie Noble

BIRMINGHAM
A WALKABLE CITY

Christina Woods <cwoods@bhamgov.org>

Birmingham Parks & Recreation Board

Ross Kaplan <rkaplan@neumannsmith.com> Mon, Feb 13, 2023 at 1:29 PM
To: Kelly Dolland <clerksoffice@bhamgov.org>
Cc: Heather Carmona <htcarmona@sbcglobal.net>, "Cfolk@bhamgov.org" <cfolk@bhamgov.org>, "Claird@bhamgov.org" <claird@bhamgov.org>

Kelly,

After 16 years on the Birmingham Parks & Rec Board, I don't plan on renewing my term. I believe its time to have some new voices on the board for moving Birmingham forward. It has been a fantastic opportunity and experience helping shape Booth Park Community Build and being on the board for so many years.

Thanks,

Ross Kaplan
Director of Information Technology / Project Manager, Associate
P 248.302.4679 | **E** rkaplan@neumannsmith.com

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[Quoted text hidden]

Christina Woods <cwoods@bhamgov.org>

City of Birmingham Parks and Recreation Board

Kyle Goulding <kngmba@gmail.com> Mon, Feb 20, 2023 at 9:05 AM
To: Kelly Dolland <clerksoffice@bhamgov.org>

Hi Kelly,

Thanks for sending. At this time, I'll decline continuing on the board.

I believe the next board meeting will be March 7. Since my term ends on March 13, should I plan on attending that meeting?

Thanks,

Kyle
[Quoted text hidden]

ARTICLE II. PARKS AND RECREATION BOARD[1]

Sec. 78-26. Created; composition.

There is hereby created a parks and recreation board consisting of the city manager and the director of public services or their designated representatives as nonvoting ex-officio members, and seven members, who are electors in the city, appointed by the city commission.

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

(Code 1963, § 3.21; Ord. No. 2233, 5-22-17)

Sec. 78-27. Terms of members; vacancies.

The initial members of the parks and recreation board shall be appointed for the following terms: Two for one year, two for two years, and three for three years. Thereafter, all such appointments, except to fill vacancies, shall be for a term of three years. All appointments for the purpose of filling vacancies occurring otherwise than by expiration of term of office, shall be for the unexpired term.

(Code 1963, § 3.21)

Sec. 78-28. Organization.

Within 15 days after the appointment of members to the original parks and recreation board and within 15 days after the making of annual appointments to the board, the members of the board shall meet in regular session and elect from the members a chairman who shall be the presiding officer of the board, and a vice-chairman who shall serve in the absence of the chairman. A secretary who shall keep and maintain the minutes and records of the board shall also be elected. The secretary need not be a member of the board. The terms of office for such officers shall be one year and until their successors have been elected, and there shall be no limitation upon successive elections of the same person to any office. The ex-officio members of the board may not act as chairman or vice-chairman but may act as secretary.

(Code 1963, § 3.22)

[1]Cross reference(s)—Boards and commissions, § 2-171 et seq.

Sec. 78-29. Compensation.

All members of the parks and recreation board, except ex-officio members, shall serve without compensation.

(Code 1963, § 3.23)

Sec. 78-30. Meetings and quorum.

The parks and recreation board shall set a time for a regular meeting at least once each month and shall determine the manner in which special meetings may be noticed and held. The chairman may cancel a meeting if there is no matter requiring consideration by the board. A quorum for the transaction of business at the regular and special meetings shall be five members, at least one of whom shall be an ex-officio member or his designated representative.

(Code 1963, § 3.24; Ord. No. 2022, 2-22-10)

Sec. 78-31. Objectives and duties.

The parks and recreation board shall promote a recreation program and a park development program for the city. In carrying out these objectives it shall:

(1) Serve as a forum for the consideration of policy matters related to the operation of a park and recreation program.

(2) Advise the public with regard to the policies established by the city commission relating to the park and recreation program.

(3) Serve in advisory capacity to the city commission in regard to all matters affecting parks and recreation which are referred to it by the city commission.

(4) Recommend to the city commission a recreation program, fee schedules, and the adoption of a long-range program for the development of park areas and facilities.

(5) Recommend to the city commission hours of operation and allocation of facility use.

(Code 1963, § 3.25)

Sec. 78-32. Regulations.

The parks and recreation board shall recommend to the city commission for adoption such rules and regulations pertaining to the conduct and use of parks and public grounds as are necessary to administer the same and to protect public property and the safety, health, morals, and welfare of the public. The violation of any such duly adopted rule or regulation by any party shall be deemed to constitute a violation of this section.

(Code 1963, § 3.26)

Sec. 78-33. Scope of authority.

The parks and recreation board is a nonadministrative board serving solely in an advisory capacity. In that capacity, the board may make recommendations to the city commission but may not assume any legislative or

administrative authority in the operation of any city department, park, or recreation facility except as specifically provided in this article.

(Code 1963, § 3.27)

Secs. 78-34—78-55. Reserved.

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NOTICE OF INTENTION TO APPOINT TO PUBLIC ARTS BOARD

At the regular meeting of Monday, February 27, 2023 the Birmingham City Commission intends to appoint to the Public Arts Board for open positions: One regular member to serve the remainder of a three-year term to expire January 28, 2026, one alternate member to serve the remainder of a three-year term to expire January 28, 2026, and one alternate member to serve the remainder of a three-year term to expire January 28, 2025.

In so far as possible, the members shall represent a major cultural institution, a registered architect of the State of Michigan, an artist, an art historian, and an art consultant. Members may also be members of the Historic District Commission, Design Review Board, the Parks and Recreation Board, or the Planning Board. At least four members of the Board shall be residents of the City of Birmingham.

The objectives of the Public Arts Board are to enrich the City's civic and cultural heritage; to promote a rich, diverse, and stimulating cultural environment in order to enrich the lives of the City's residents, business owners, employees, and all visitors; and to establish an environment where differing points of view are fostered, expected, and celebrated by providing the opportunity for such expression through the display of public art.

Interested citizens may apply for this position by submitting an application available from the city clerk's office. Applications for consideration at this meeting must be submitted to the city clerk's office on or before noon on Wednesday, February 22, 2023. These applications will appear in the public agenda for the regular meeting at which time the commission will discuss recommendations, and may make nominations and vote on the appointments.

Applicant(s) Presented For City Commission Consideration:

Applicant Name	**Criteria** At least four members must be a resident of the City of Birmingham	**Qualifications** Members shall, in so far as possible, represent a major cultural institution, a registered architect of the State of Michigan, an artist, an art historian, and an art consultant. Members may also be members of the Historic District Commission, Design Review Board, the Parks and Recreation Board, or the Planning Board.
Pam Graham	Registered Elector	Current P&RB Regular Member, Retired Automotive Engineer, South Poppleton Park Neighborhood Association President

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.

SUGGESTED ACTION:
To appoint _____ to the Public Arts Board as a regular member to serve the remainder of a three-year term to expire January 28, 2026.
To appoint _____ to the Public Arts Board as an alternate member to serve the remainder of a three-year term to expire January 28, 2026.
To appoint _____ to the Public Arts Board as an alternate member to serve the remainder of a three-year term to expire January 28, 2025.

PUBLIC ARTS BOARD

City Code - Chapter 78, Article V
Terms - 3 years
7 regular members - At least 4 members shall be residents of the City of Birmingham. The remaining members may or may not be residents of Birmingham. In so far as possible, the members shall represent a major cultural institution, a registered architect of the State of Michigan, an artist, an art historian, and an art consultant. Members may also be members of the Historic District Commission, Design Review Board, the Parks and Recreation Board, or the Planning Board.
2 alternate members - must meet one of the already established criteria for regular members
Objectives -

- to enrich the City's civic and cultural heritage;
- to promote a rich, diverse, and stimulating cultural environment in order to enrich the lives of the City's residents, business owners, employees, and all visitors;
- to establish an environment where differing points of view are fostered, expected, and celebrated by providing the opportunity for such expression through the display of public art.

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Eddleston 892 Purdy Birmingham 48009	**Jason**	(248) 703-3808 *jason28e@yahoo.com*	12/5/2016 Resident Member	1/28/2025
Heller 176 Linden Birmingham 48009	**Barbara**	(248) 540-1310 (313) 833-7834 *bheller@dia.org*	1/28/2002 Resident Member	1/28/2024
Neville 1516 E. Melton Birmingham 48009	**Monica**	(248) 321-1776 *monica.neville1@gmail.com*	2/27/2017 Resident Member	1/28/2024
Ritchie 1455 South Eton Birmingham 48009	**Anne**	(248) 635-1765 *anneritchie7@yahoo.com*	9/12/2016 Resident Member	1/28/2025

Last Name Home Address	First Name	Home Business E-Mail	Appointed	Term Expires
Schulak 567 Aspen Rd Birmingham 48009	**Jane**	(248)219-0847 *jane@schulak.com*	1/24/2022 Resident Member	1/28/2025
Vacant			Alternate Member	1/28/2025
Vacant			Regular member	1/28/2026
Vacant			Alternate Member	1/28/2026
VanGelderen 3795 Loch Bend Commerce Twp. 48382	**Annie**	(248) 408-6132 *annievangelderen@bbartcenter.org*	1/13/2020 Artist/Major Cultural Institution	1/28/2026

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OFFICE USE ONLY
Meets Requirements? Yes No

Will Attend / Unable to Attend

APPLICATION FOR CITY BOARD OR COMMITTEE

Thank you for your interest in serving on a Board or Committee. The purpose of this form is to provide the City Commission with basic information about applicants considered for appointment. NOTE: Completed applications are included in the City Commission agenda packets. The information included on this form is open to the public. All Board and Committee members are subject to the provisions of the Ethics Ordinance (Chapter 2, Article IX of the City Code).

Information on various Boards and Committees and a list of current openings can be found on the City website at www.bhamgov.org/boardopportunities.

(Please print clearly)

Board/Committee of Interest ___**Public Arts Board**_____

Specific Category/Vacancy on Board _ **Alternate Member**_____ (see back of this form for information)

Name ____**Pam Graham**_____ Phone _____248 408 6277_____

Residential Address _**884 Knox**_____ Email *___pamcracker@gmail.com_____

Residential City, Zip __Birmingham, 48009_____ Length of Residence _____25 year_____

Business Address _____ Occupation ____retired_____

Business City, Zip _____

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

I have served on the Parks and Recreation Board since 2019. I am interested to serve on both the Park and Public Arts boards to encourage collaboration between the boards. The city will improve several parks and playgrounds in the coming years. I am aware that the Public Arts Board has a call for sculptural art and many sculptures are placed in public spaces. I am interested to discuss feasibility of a call for interactive art for playground installations.

List your related employment experience _____

- **I had a 29 year career as an automotive engineer.**
- **Pollworker, City of Birmingham**
- **Ceramics Instructor, Clawson Clay Guild**

List your related community activities _____

Board Member, Michigan Ceramic Art Association. President, South Poppleton Park Neighborhood Association. Volunteer, Belle Isle Oudolf Garden. Member, Troy Garden Club. Past volunteer, Birmingham Schools, Birmingham Unitarian Church.

List your related educational experience _____

Birmingham Citizens Academy. BS Engineering MIT. MS Engineering Northwestern University.

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 direoct 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_____

_____ _____1/18/2023_____

Signature of Applicant Date

Return the completed and signed application form to: City of Birmingham, City Clerk's Office, 151 Martin, Birmingham, MI 48009 or by email to clerksoffice@bhamgov.org or by fax to 248.530.1080. Updated 3/24/2021

*By providing your email to the City, you agree to receive news & notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

ARTICLE V. - PUBLIC ARTS BOARD

Footnotes:
*--- (**4**) ---*
***Editor's note—** Ord. No. 1773, adopted December 17, 2001, enacted provisions intended for use as §§ 78-100—78-112. To preserve the style of this Code, and at the discretion of the editor, said provisions have been redesignated as §§ 78-101—78-113.*

Sec. 78-101. - Definitions.

Art, civic means visual art pertaining to a person, place or event relating to or belonging to a city or municipality.

Art, public means one or more pieces of civic, visual or performance art designed specifically for ownership by the public or display on property owned by the public.

Art, visual means the conscious production or arrangement of colors, forms or other elements in a manner that affects the human senses in a graphic or plastic medium.

Competition means a process established by the public arts board to review specific art work(s) for a specific site, for the purposes of making a recommendation to the public arts board.

Jury means an ad hoc committee or individual appointed by the public arts board to review specific art work(s) for the purposes of making a recommendation to the public arts board.

Performance art means works of art that create a situation and are conducted for a duration determined by the artist and/or spectator.

Rules of procedure means a written description of the board's mission statement, objectives, organization of meetings, membership, terms of service, procedure for the election of officers, and procedures for the review of public art work.

(Ord. No. 1773, 12-17-01)

Sec. 78-102. - Created.

There is hereby created a public arts board for the city. The public arts board is a locally organized board and is not established by any enabling legislation of the state.

(Ord. No. 1773, 12-17-01)

Sec. 78-103. - Composition and terms of members.

The public arts board shall be appointed by the city commission and consists of the city manager and his/her designated representative(s) as nonvoting ex-officio members and seven voting members.

At least four members of the public arts board shall be residents of the city. The remaining members and ex-officio members may or may not be residents of the city.

In so far as possible, the members shall represent a major cultural institution such as Cranbrook Academy and/or the Detroit Institute of Arts, the Birmingham/Bloomfield Arts Council (BBAC), a registered architect of the state, an artist, an art historian and an art consultant. Members of the public arts board may also be members of the design review board, the historic district commission, the parks and recreation board, or the planning board.

The initial members of the public arts board shall be appointed for the following terms: Two for one year, two for two years and three for three years. Thereafter, all such appointments, except to fill vacancies, shall be for a term of three years.

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

(Ord. No. 1773, 12-17-01; Ord. No. 1884, 7-24-06; Ord. No. 2234, 5-22-17)

Sec. 78-104. - Vacancies.

All appointments for the purpose of filling vacancies occurring otherwise than by expiration of term of office, shall be for the remainder of the term of office.

(Ord. No. 1773, 12-17-01)

Sec. 78-105. - Compensation.

The members of the public arts board shall serve as such without compensation.

(Ord. No. 1773, 12-17-01)

Sec. 78-106. - Removal.

Members of the public arts board may, after a public hearing, may be removed without cause by a majority vote of the city commission.

(Ord. No. 1773, 12-17-01)

Sec. 78-107. - Organization and election of officers.

The public arts board shall, from its appointed members, annually elect a chairperson and vice-chairperson whose terms of office shall be fixed by the rules of procedure of the public arts board. The chairperson shall preside over the public arts board and shall have the right to vote. The vice-chairperson shall, in absence, or disability of the chairperson perform the duties of the chairperson and shall have the right to vote. The city manager or his or her authorized representative shall act as secretary of the public arts board, and maintain a record of all of its proceedings.

The public arts board shall, at its first meeting establish the rules of procedure for conducting its business.

(Ord. No. 1773, 12-17-01)

Sec. 78-108. - Meetings and quorum.

The public arts board shall set a time and place for a regular meeting which will be held at least four times annually and shall determine the manner in which special meetings may noticed and held.

All meetings of the public arts board shall be open to the public. Any person or his duly constituted representative shall be entitled to appear and be heard on any matter applicable to the business at hand before the public arts board makes its recommendation to the city commission.

At least four members of the public arts board shall constitute a quorum for the transaction of its business.

The proceedings of each meeting of the public arts board, shall be recorded by the city manager or his or her authorized representative, acting as secretary.

(Ord. No. 1773, 12-17-01)

Sec. 78-109. - Assistance.

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

(Ord. No. 1773, 12-17-01)

Sec. 78-110. - Objectives.

To enrich the city's civic and cultural heritage, the public arts board is established to provide a level of expertise and objectivity to recommend to the city commission works of art to become the property of or for display upon property owned by the city.

To promote a rich, diverse, and stimulating cultural environment in order to enrich the lives of the city's residents, business owners, employees and visitors and to enhance the city's image both nationally and internationally.

To establish an environment where differing points of view are fostered, expected and celebrated by providing the opportunity for such expression through the display of public art.

(Ord. No. 1773, 12-17-01)

Sec. 78-111. - Duties.

The public arts board shall establish rules of procedure to describe the board's mission statement, objectives, organization of meetings, membership, terms of service, procedure for the election of officers, and procedures for the review of public art work. See section 78-106.

With the exception of art works to be placed in museums or art galleries, the public arts board shall have the responsibility to review all works of art to become the property of or placed upon property owned by the city. See section 78-109.

The public arts board shall have the responsibility to review publicly owned property for the purposes of consideration for the display of public art. The public arts board shall recommend to the city commission the establishment of general guidelines for site selection, maintenance program(s) for ensuring the structural integrity and aesthetic quality of the site and any work of art, including the removal of any work of art.

The public arts board shall have the responsibility to pursue sources of public funding for arts and cultural education, design competitions, special events etc., that may be necessary to advance the objectives of the public arts board. See section 78-109. In fulfilling such duties, the public arts board may seek assistance from city staff, and others for the completion of applications for grants, scholarships and other sources of public funding, including the administration of such funds. See section 78-108. The city may also accept private donations and gifts to advance the goals, objectives and duties of the public arts board. The city manager shall be responsible for the administration of any funds, account or endowments created to accept such gifts or donations and to administer any honorariums or other expenses incurred for the activities of the public arts board including but not limited to juries and design competitions.

It shall also be the responsibility of the public arts board to increase public awareness and promote education of the importance of public art as an enrichment of the quality of life for the residents, business owners, employees and visitors to the city.

The public arts board shall prepare an annual report of its activities, accomplishments and a description of how the public arts board has attempted to achieve its objectives. See section 78-109. This report shall be presented to the city commission.

(Ord. No. 1773, 12-17-01)

Sec. 78-112. - Review of public art.

The public arts board, within its rules of procedure, as set forth in section 78-106, shall establish its vision statement and processes for the review of public art works. The public arts board may also appoint a jury or hold design competitions for the selection and review of public art works. See section 78-108.

The public arts board shall make a recommendation regarding the proposed public art work to the city commission. However, a positive recommendation shall not be required to advance the proposed artwork for review by the city commission.

In the event that a display and/or installation of civic, public or visual art is proposed on a site that is within the jurisdiction of another board of this city, it shall be reviewed by and reported on by such board before it is presented to the city commission.

(Ord. No. 1773, 12-17-01)

Sec. 78-113. - Scope of authority.

The public arts board may select and appoint a jury or hold a competition for the review of any public art project as provided for in sections 78-106 and 78-111. The jury or competition held for any public art project shall serve the public arts board as an ad hoc committee for the duration of the project only.

The public arts board is a non-administrative board serving to make recommendations to the city commission but may not assume any legislative or administrative authority in the operation of any city department or publicly owned property, except as specifically provided in this article.

(Ord. No. 1773, 12-17-01)

BIRMINGHAM
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NOTICE OF INTENTION TO APPOINT TO THE CABLECASTING BOARD

At the regular meeting of Monday, February 27, 2023 the Birmingham City Commission intends to appoint to fill a vacancy in the Cablecasting Board. Applicants must be residents of the City of Birmingham. Available positions are:

- Two regular members to serve three-year terms expiring March 30, 2026, Effective April 1, 2023
- One regular member to serve the remainder of a three-year term expiring March 30, 2024
- One alternate member to serve the remainder of a three-year term expiring March 30, 2025.

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, February 22, 2023. 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.

Duties of the Cablecasting Board

1) Advise the municipalities on matters relating to cable communications;
2) Monitor the franchisee's compliance with the franchise agreement and the cable communications ordinance;
3) Conduct performance reviews as outlined in Chapter 30, Article VII of the city code;
4) Act as liaison between the franchisee and the public; hear complaints from the public and seek their resolution from the franchisee;
5) Advise the various municipalities on rate adjustments and services according to the procedure outlined in Chapter 30; Article VI
6) Advise the municipalities on renewal, extension or termination of a franchise;
7) Appropriate those moneys deposited in an account in the name of the cablecasting board by the member communities;
8) Oversee the operation of the education, governmental and public access channels;
9) Apprise the municipalities of new developments in cable communications technology;
10) Hear and decide all matters or requests by the operator (Comcast Cablevision);
11) 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;
12) Hear and decide all matters in the franchise agreement which would require the operator to expend moneys up to fifty thousand dollars;
13) Enter into contracts as authorized by resolutions of the member municipalities;
14) Administer contracts entered into by the board and terminate such contracts.

Applicant(s) Presented For City Commission Consideration:

Applicant Name	**Criteria** Must be a resident of Birmingham	**Qualifications**
Deanna Brown	Birmingham Resident	Experience in project management and ecommerce business owner

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.

SUGGESTED ACTION:
To appoint _____to the Cablecasting Board as a regular member to serve a three-year term expiring March 30, 2026, effective April 1, 2023.

To appoint _____ to the Cablecasting Board as a regular member to serve the remainder of a three-year term expiring March 30, 2024.

To appoint _____ to the Cablecasting Board as an alternate member to serve the remainder of a three-year term expiring March 30, 2025.

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	3/30/2024
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	3/30/2024
Fenberg 908 Chesterfield	**Michael**	(248) 310-7373 *michael.fenberg@bakertilly.com*	3/13/2017 Birmingham resident	3/30/2023 ***Not continuing after term ends***
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	First Name	Home Business E-Mail	Appointed	Term Expires
Home Address				
Vacant				3/20/2025
			ALTERNATE	
Vacant				3/30/2024
			Birmingham resident	
Vacant				3/30/2026
			Birmingham resident - Effective 4/1/2023	
Vacant				3/30/2026
			Birmingham resident - Effective 4/1/2023	
Whittington	**Robert**	(248) 593-8641	1/24/2022	3/30/2023
512 E. Southlawn			Birmingham resident	
		rwhittington@directgolfsales.com	***Not continuing after term ends***	

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

BIRMINGHAM
A WALKABLE CITY

OFFICE USE ONLY
Meets Requirements? Yes No

Will Attend / Unable to Attend

APPLICATION FOR CITY BOARD OR COMMITTEE

Thank you for your interest in serving on a Board or Committee. The purpose of this form is to provide the City Commission with basic information about applicants considered for appointment. NOTE: Completed applications are included in the City Commission agenda packets. The information included on this form is open to the public. All Board and Committee members are subject to the provisions of the Ethics Ordinance (Chapter 2, Article IX of the City Code).

Information on various Boards and Committees and a list of current openings can be found on the City website at www.bhamgov.org/boardopportunities.

(Please print clearly)

Board/Committee of Interest Birmingham Area Cable Board

Specific Category/Vacancy on Board _____ (see back of this form for information)

Name Deanna Brown

Phone 248-705-8371

Residential Address 662 Wallace St

Email * deannadbrown@comcast.net

Residential City, Zip Birmingham, MI 48009

Length of Residence 7 years

Business Address _____

Occupation ecommerce business owner

Business City, Zip _____

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

Birmingham resident for over 20 years. My professional experience as project manager and ecommerce business developer has given me a strong skill set of organization, action and attention to detail.

List your related employment experience Founder/CEO of Orginal 4(current), Vice President of Motor Rail Delivery 2015-2020

List your related community activities 3 year President Seaholm Volleyball Boosters 4 year Chair Birmingham Covington School Blast (fundraiser)

List your related educational experience B.S. Wayne State University

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

Signature of Applicant

Date 2.10.23

Return the completed and signed application form to: City of Birmingham, City Clerk's Office, 151 Martin, Birmingham, MI 48009 or by email to clerksoffice@bhamgov.org or by fax to 248.530.1080.

Updated 3/24/2021

By providing your email to the City, you agree to receive news & notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

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
A WALKABLE CITY

MEMORANDUM

City Manager's Office

DATE: February 20, 2023

TO: Thomas M. Markus, City Manager

FROM: Melissa Fairbairn, Assistant City Manager

SUBJECT: 2023 Student Appointments to City Boards and Committees

INTRODUCTION:
The following students are being recommended by Birmingham Public Schools for appointment to their respective board by the City Commission for the 2023 calendar year. The students will receive agenda packets and are able to participate in all discussions, but will serve as non-voting members of the boards to which they are appointed.

Student	Board
Ian Weinberg	Historic District Committee / Design Review Board
Sophie Hanawalt	Multi-Modal Transportation Board
Angie Sharma	Multi-Modal Transportation Board
Alex Motea	Museum Board
Alexandria Schaufler	Museum Board
Kate Glasier	Parks and Recreation Board
Archie Reynolds	Parks and Recreation Board
Asher Kaftan	Planning Board
Matthew Wiegand	Planning Board
Luca DeSanto	Public Arts Board
Andrew McLean	Public Arts Board

BACKGROUND:
In 1996, the City Commission approved a Birmingham Public Schools (BPS) program placing student representatives who are residents of the City on City boards and commissions. This program was designed to establish an educational partnership that has been very successful since its inception.

For the 2023 board representative cohort, interested students who wished to apply for a board or committee position met with a Seaholm faculty member to discuss the program. Students who met the requirements submitted their application materials to the City Manager's Office to be matched with a board that aligned with the students' interests.

Student board representatives who attend 80% of their board meetings will be recognized at a City Commission meeting in February 2024.

LEGAL REVIEW:
N/A

FISCAL IMPACT:
N/A

PUBLIC COMMUNICATIONS:
N/A

SUMMARY:
Eleven qualified Seaholm High School students have submitted applications for appointment as student representatives on city boards for consideration by the City Commission during the February 27, 2023.

ATTACHMENTS:
- Student applications and essays

SUGGESTED COMMISSION ACTION:
To appoint the following students as non-voting members for the calendar year 2023.

HDC-DRB	Ian Weinberg
Multi-Modal Transportation Board	Sophie Hanawalt Angie Sharma
Museum Board	Alex Motea Alexandria Schaufler
Parks & Recreation Board	Kate Glasier Archie Reynolds
Planning Board	Asher Kaftan Matthew Wiegand
Public Arts Board	Luca DeSanto Andrew McClean

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Ian Weinberg Grade: 11 Age: 17

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Planning Board
2. Historic District Commission and Design Review Board
3. Parks and Recreation Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

Founder and president of the Seaholm Investing Club, Spanish National Honors Society, Jewish Culture Club, National Honors Society, Investing class, Advertising class, DECCA, wrote an article about employment for the school newspaper.

Please list your involvement in non-school activities:

I wrote a book about investing early. I will be self-publishing it on Amazon and donating the profits to Youth Tank Detroit. I am on the JARC teen council. I am on the Youth Tank Detroit board. I volunteered for Bowers Farm as a Steward during the summer camp. I volunteered a total of 60 hours for the farm. I graduated from The University Of Pennsylvania's Wharton School Entrepreneurship summer program, NYSE exchange camp where my group and I won the stock picking competition,

What personal skills and characteristics do you possess that would make you a good representative?

Another characteristic that defines me is that I am very hard-working. When I have a goal, I will do whatever it takes to complete that goal. An example of this would be that I am currently trying to keep up my good grades and raise my ACT score. So my life right now consists of school, eating, one hour at the gym, clubs- activities, obligations, and studying for the rest of the day. And I am fine with that because I believe that if you work hard that you can achieve anything. Another big characteristic of my life is having a good attitude and being optimistic. I have learned that life is going to be hard sometimes. But no matter what happens, you can only control yourself. So, I try the best I can to always have a good attitude and be optimistic.

How would you be able to schedule your time to function effectively as a student representative?

I have a lot of things on my plate as I am a junior in high school which is an ever-important year. Even though I am in multiple different clubs, activities, and obligations, I still attend every single one regularly. I do this by writing everything down in my calendar when I am informed of the date. Thus, I know the obligations I have for the week or day. I want to add that I will attend every board meeting unless I have a significant conflict of interest.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes Yes! No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

David Weinberg 1/22/23

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

My roots have been in Birmingham, Michigan, since birth. As I have grown older, I have come to appreciate the many worthwhile things that Birmingham offers to its residents, both young and old. First of all, it has always been a friendly and safe place to raise a family or establish a business in. My family of five have found ourselves to be very lucky to live in this city. One of the main reasons why we are able to is because of my dad's business headquartered in Birmingham. David, my father, with one of his best friends, has located his business in the heart of downtown Birmingham. They decided that Birmingham would be the perfect place to move their digital advertising company into. They have never regretted their move from Troy to Birmingham. My parents, grandparents, and I all enjoy the central commerce of the city. However, it is not just downtown that makes Birmingham so special, but also the safe neighborhoods, the many parks, and the great schools.

I want to be on the board because nothing is perfect, and I feel that there could be things done to improve Birmingham even more. I think that the fact that Birming has a youth board says a lot about this city and its leaders. You would think that the people in charge would not be interested in the oppinions of high school students, most of whom can not even vote. However, this is not the case with the board system here. I am most definitely going to try and take advantage of this opportunity to get a taste of how local government works if choosen.

I think I am qualified for these positions for many different reasons. Let's start with my academic track record. I consider myself a rigorous student, as I try to be the best student I can be. Going into my senior year, I will have taken five A.P. classes along with multiple honors classes. Despite the difficulty of my courses, my unweighted high school GPA is 3.889. My activities list also shows the person I am. I have been on the J.V. tennis team throughout high school. I, also, founded the Seaholm Investing club in pursuit of spreading my interest in the stock market and business to potential young investors. In addition, I have written one article for the school newspaper, and I have many more planned. I am a proud member of the Jewish culture club, the National Honors Society and the Spanish National Honors society. Outside of school, I have written a book about investing for young people. I will be self-publishing it on Amazon and donating the profits to a charity, Youth Tank Detroit. This is a startup incubator for Detroit students. With my partnership with Youth Tank Detroit, I have found myself on their board. I am also on the teen council of JARC. My business

interests have led me into 2 summer programs that I have attended. They are a NYSE camp and a Wharton summer program. Lastly, I have tried to give back to the local community. I find a great deal of joy in playing with little kids. So, I volunteered for the Bowers Farm summer camp, where I worked as a steward and raked up some 64 hours of community service.

I greatly appreciate the opportunity to be considered for this board position in the city I love so much.

ROBERT J. YUSKO

ryusko@birmingham.k12.mi.us

[redacted]

1/21/2023

To Whom It May Concern,

I am extremely happy to provide my recommendation for Ian Weinberg for Birmingham Student Representative. I have been Ian's Investment's teacher and Investment Club advisor at Birmingham Seaholm High School for the past two years. During this time Ian has become a standout member of our community and has become an integral part of my classroom.

One of the defining characteristics of Ian is his exceptional passion and talent for the field of investments. This passion has propelled him to excel in my investments course, as well as to establish the Seaholm Investments Club.

In my course, Ian delved deeper into the details of stocks, bonds, index funds, and mutual funds, and gained a comprehensive understanding of how to use this knowledge to construct a well-rounded portfolio in accordance with current market trends. He displayed a keen interest in the market and was an active participant in our virtual stock market competition, demonstrating a clear aptitude for the subject matter.

Furthermore, Ian's passion for investing has also led him to found the Seaholm Investments Club, where he serves as a mentor to his peers. He teaches them about investing, brings in financial speakers, and organizes competitions to further their education and understanding of the subject. This showcases his leadership skills and his dedication to helping others to achieve success in the field.

Ian's dedication to the field of investments extends beyond the classroom and the Seaholm Investments Club. He has also written his own book, "Invest Early to Grow Your Wealth," in collaboration with the Youth Think Tank Detroit, an incubator for young entrepreneurs in Detroit. Through this book, Ian aimed to convey his belief that too many people delay investing or do not invest at all. He wanted to create a resource that would empower young people to take control of their financial future by educating them on the importance of investing early and the opportunities that it presents.

This book is a testament to Ian's drive, passion and commitment to the field of investing. He not only wants to learn and excel in it himself, but also wants to share his knowledge and inspire others to do the same. It's a true representation of his desire to make a positive impact in the community and his ability to think outside the box.

Ian also competes in the Business Club DECA. Specifically, he and his partner participated in the Financial Services competition, where they were tasked with presenting a financial situation in front of a panel of judges. Their performance was so outstanding that they advanced to the state competition.

Participating in this competition not only allowed Ian to showcase his knowledge and skills in the field of finance, but it also provided him with valuable experience in teamwork. He learned the importance of collaboration and effective communication in order to be successful with his partner. This experience will undoubtedly serve him well in the future, as he will need to work closely with business partners and clients in order to achieve success in his career.

Overall, Ian's dedication to finance and investing, and his ability to excel in various areas such as class, club, and competition, speaks to his versatility, hardworking, and determination. He's a highly motivated student that will do great in any avenue he chooses.

Ian is an outstanding candidate for the position the Student Representative on the City Board and Commissions Program. Should you have any questions I would be more than happy to answer any email or call.

Sincerely,

Robert J. Yusko

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Sophie Hanawalt Grade: 11th Age: 16

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Parks and recreation board
2. Planning board
3. Multi-modal transportation board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

I currently serve as editor in chief of the Seaholm Highlander (our newspaper), and I would love the opportunity to learn more about local government, in turn boosting my journalism career. I have preliminary experience with certain proceedings from close studying of the school board for our budget series, and working on The Highlander has definitely pushed me to look at local government with an inquisitive eye. I'm a co-captain of the cross country team, so I'm quite familiar with Birmingham's parks. My passion for running comes with a love of all things outdoors, which is why Parks and Recreation is my top choice. I am also in flex, a 4-year honors English and history program with civic engagement as one of our cornerstones.

Please list your involvement in non-school activities:

Over the summer, I underwent the training to form a chapter of March for Our Lives, the national youth organization to end gun violence, and that will finally be up and running within the next couple of weeks. I've been organizing with mfol for a little while, excited to shift to a leadership role with my chapter. I also volunteer with some friends at nursing homes, playing music for the residents on my violin. Interacting with seniors has led me to a greater understanding of the community as a whole.

What personal skills and characteristics do you possess that would make you a good representative?

I am a very driven and passionate person, and I care a lot about the work I do. Flex has taught me to be a good listener, using critical thinking skills to take on a more well-rounded worldview. I'm very curious, and my enjoyment of research means I'm more than happy to put in some extra work. I'm quite extroverted, and I enjoy meeting and working with new people, especially in group settings.

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative?

I have a lot on my plate at school, but I've learned over the past couple years to prioritize what I care about. My running practices and club meetings end well before the 6:30/7 pm meeting times, and I will ensure I can make every meeting. I write my whole schedule down in my little black planner, ensuring I know where I need to be and when.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes check No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

1/25/2023

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

Sophie Hanawalt
Junior Representative Program Application

If you asked me freshman year if I'd like to serve on a city board, I probably would have said no. I also would've told you that I wanted to be a biomedical engineer.

When I was in kindergarten, my mom gave me a book about 50 women who changed the world. It lit a spark inside me, and I set out to become just like my 50 new role models, my little brain never stopping to consider whether it was in reach. I believed in myself, determined to follow my dreams.

When it became clear I was good at math and science, I was quickly whisked away to the world of stem, no matter how much I loved to read. My room held stacks of science books, I designed machines with CAD at school, made robots, and learned how to code. I was convinced the way I'd leave my mark on the world was through science. But my interests never seemed to stay for long. First I obsessed over becoming a veterinarian, then a marine biologist, then an environmental engineer, then a zoologist, the list goes on and on. I started to run out of places to look, but I told myself I'd find the right area of engineering and love it, because it was completely ingrained in my head that the humanities offered no pathway to change.

When I got to high school, I slowly started to flip my perception of change upside down. I joined The Highlander, our newspaper, on a whim, thinking I'd write about climate change. I did, but not for long. I can't describe the feeling that accompanied publishing my first article, except that I found my calling. No line of code could ever light a spark in me like journalism does. Even though I've continued with advanced science courses, I'm slowly becoming more comfortable with abandoning my status as a *woman in stem* in lieu of writing. I've slowly started to see that change can take many forms, and while I'm not sure where journalism will take me, I'm excited to learn more about city government while engaging in my community.

I'm applying to this board with little experience in politics, other than my perspective as an activist and a strong background in community service. However, the opportunity to learn more about local government through serving on any board would be incredible. Not only would it provide a space for me to grow my speaking and research skills, it would also inform my journalism career, my newfound experience allowing me to bring greater understanding and empathy to my reporting, especially when I'm covering politics.

As we get older, we're told to adopt a more realistic outlook, and come to the realization that we'll never *actually* change the world. While my definition of change has shifted over time, broadening to include smaller steps and coming to the realization that change won't always be widely known nor universally appreciated, I haven't lost that spark. I spent my early years on the slides at poppleton park, and now I watch my little brothers do the same. This community has given me so much, and I believe the best kind of change starts closest to home.

If chosen, I promise to look at everything with an open mind, do my research, participate in discussion to the best of my ability, weaving in my perspective and unique experiences, and above all else, come to every session ready to learn something new.

Seaholm High School

Kyle Hall, Principal • 248.203.3702 • Fax: 248.203.3706• khall@birmingham.k12.mi.us
2436 West Lincoln Street, Birmingham, MI 48009

January 25, 2023

To Whom It May Concern:

It is my genuine pleasure to write this letter of recommendation on behalf of Sophie Hanawalt, a truly outstanding member of the Seaholm High School community. I have had the pleasure of working with Sophie throughout her time in the Flex Program, which is a four-year, honors-level, interdisciplinary program here at Seaholm High School. In the time that I have known her, I have been consistently impressed with the way she's able to balance her strong academic performance with her extracurricular commitments. She has consistently set herself apart from her peers with her maturity and thoughtful leadership, and I strongly believe she would be a great choice for a Student Representative position.

One of the main pillars of the Flex Program is community, and at every turn Sophie has sought out ways to lead by example and strengthen the Flex community. Any time that Sophie has approached the Flex teachers to discuss a problem or an idea, she has always done so in a solution-oriented way, and with the support and respect of her classmates. This year Sophie also embraced a more formal leadership role in the Flex Program when she co-taught a student-led seminar class. As the mentor of the student-led seminar, I had many conversations with Sophie as she planned, and then executed, this course of study, and I was very impressed with her thoughtful approach, strength of organization, and professionalism. I sat in on a few of these seminars and was struck by the way that she successfully facilitated a civil dialogue about some very challenging topics (this was during our unit on the Middle East). She conducted the discussion in a way that empowered her peers to safely share their honest thoughts and opinions and to respectfully question each other to deepen their understanding. At the end of the term, the students in her seminar completed feedback surveys and, unsurprisingly, her peers overwhelmingly praised her thoughtful leadership.

I believe that these same traits that have made her such a standout student at Seaholm would also serve her well as a Student Representative. She has proven herself to be mature and responsible, and to very thoughtfully consider her commitments to ensure they are getting her full attention. I could not give a higher recommendation. If you have any other questions, please feel free to contact me at JGonzales@birmingham.k12.mi.us

Sincerely,

Jeff Gonzales
Flex Program & English Teacher

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: _____**Angie Sharma**_____ Grade: ___**11**_____
Age: ___**17**____

Address: [redacted] _____

Zip Code: _**48009**_____ Email: [redacted] _____

Telephone: [redacted] _____School:__**Seaholm**_ _____

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Planning Board_____

2. Parks and Recreation Board_____

3. Multi-Modal Transportation Board_____

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

_**National Honor Society**_____

_**National Student Leadership Conference**_____

_**Birmingham United Women's Lacrosse**_____

_____

Please list your involvement in non-school activities:

_**Volunteer – Baldwin Public Library and Birmingham Museum**_____

_**Red Cross Certified Lifeguard & Babysitter (First Aid/CPR)**_____

_**Monarch Club Lacrosse**_____

_____

What personal skills and characteristics do you possess that would make you a good representative?

I am an active listener and feel comfortable participating in discussions on topics that I may be passionate or curious about. I ask questions to increase my understanding of new or unfamiliar topics. I believe in teamwork and creativity to solve problems and bring about improvements.

_____

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative?

The opportunity to serve as a representative for my community and ambassador for my school is important to me. If selected for this important position, I would ensure my after-school schedule demonstrates the personal significance of this commitment, and the value of such an experience.

_____

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices? Yes___**X**_____ No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

_____ ____January 30, 2023_____

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

1/2023

Application Essay

Angie Sharma

January 30, 2023

Personal Leadership

Ruth Bader Ginsburg famously said, "Fight for the things that you care about, but do it in a way that will lead others to join you." RBG, as she is known, served as a role model for selfless leadership as an advocate and activist for social justice. She dedicated her career and life's work to leading positive change and inspired a movement of future young leaders to think and act beyond themselves. Despite challenge and the risk of failure, success is possible with persistence and conviction, and the courage to remain grounded to one's set of values and beliefs. Throughout her life, RBG proved that being a leader starts with being a good person, first and foremost.

As a high school student and long-time resident of Birmingham, I aspire to contribute to change that will help others. There is always room for improvement, or to turn something good into something great. I am fortunate to live in a community that attracts all different types of people, and therefore has the opportunity for continued inclusion. As a candidate for this role, when making decisions, I would do my best to represent different perspectives to benefit the needs and desires of our diverse and successful community. Being a representative for my age group would allow for new voices and ideas to be heard and considered. Solving problems with creative solutions is a passion of mine and being in a position to collaborate with others brings the promise of a brighter future.

I strongly believe that student leaders must be capable of valuing the strengths of others to understand that sustained change is impossible to achieve alone. Coming together to combine resources builds community and fosters care and concern for one another. It can feel like a lot of effort for small actions, but change is possible when leading others to join the cause. The challenges of leadership can quickly become the reward when remembering to lead with gratitude. In this way, leadership through service is always worth the effort. After all, as RBG also said, "Real change, enduring change, happens one step at a time."

Seaholm High School

Kyle Hall, *Principal* • 248.203.3700 • Fax: 248.203.3706 • KHall@birmingham.k12.mi.us
2436 West Lincoln Road, Birmingham, MI 48009

January 27, 2023

To Whom It May Concern,

It is with great pleasure that I recommend my student, Angie Sharma. Angie is a devoted, meticulous, compassionate leader. She has done a marvelous job navigating high school, managing her extracurricular activities, earning high grades, nurturing healthy relationships and doing so with a sense of maturity and poise. I am honored to write this recommendation letter for Angie Sharma for a position on the Birmingham Youth Council.

When Angie and I meet to discuss course selections, personal issues, or to balance her schedule, she is always very considerate, generous, upbeat and proactive. Angie has a heartfelt, inviting, outgoing personality that helps her rise above the rest. She has such a common sense, calm, mature way about her. She will be extremely successful in any endeavor she takes on.

Angie has all the qualities of a dependable, responsible, empathetic student leader. She has hours of community service both in and outside of school. She is a leader in many of those activities. Angie works hard to achieve at a high level. She is extremely respected by her peers, faculty and staff.

Based on her academic record, her exceptional character and her outstanding personal qualities, Angie Sharma has earned my highest level of recommendation.

Sincerely,

Walter Romano, Professional School Counselor
Seaholm High School
2436 W. Lincoln St.
Birmingham, MI 48009
[redacted]

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Alex Motea Grade: 11th Age: 16

Address: [redacted]

Zip Code: 48009 Email [redacted]

Telephon[redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Museum Board
2. Multi-Modal Transportation Board
3. Historic District Commission & Design Review Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

School activities that I have participated in which would qualify me are the following:
• NHS • Spanish Honors Society • Marching Band • DECA
• Varsity Tennis • Accounting class

Please list your involvement in non-school activities:

• Church choir • Church bake sales • Ski Racing Team
• Swim Team • Year-round tennis

What personal skills and characteristics do you possess that would make you a good representative?

Personal skills and characteristics that I possess that would make me a good representative are: leadership, responsibility, adaptibility, integrity, management, and communication abilities.

1/2023

3D

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative?

I would be able to schedule my time to function effectively as a student representative by allocating several time blocks to complete work as a student representative

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes ✓ No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

Marina Note — January 23, 2023

Parent(s) Signature(s) — **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

Over the years, I have adored keeping up to date with local news, and improvements in our community. I have lived in Birmingham for eight years, and have watched our cozy town grow in numerous ways. As a student representative, I believe that the knowledge that I gained from school of how a community should function will very much benefit the City of Birmingham.

To begin, as a student representative, I will actively participate in our meetings, and bring new ideas to the table. I will take note of what other members say in order to understand what scenario our group is tackling. In addition, I will use my previous knowledge for the task at hand, and do further research in order to create the best solution. My further research will involve looking at neighboring cities who have faced similar problems, and see what went well and what went wrong with their solutions. Although other cities can be successful with one solution, our task might need a different answer in order to complete it, taking into consideration that every community is unique. In conclusion, my knowledge and willingness to help my community will be very beneficial for any committee that I may be a part of.

NATIONALLY RECOGNIZED FOR
EXCELLENCE IN EDUCATION

BIRMINGHAM SEAHOLM HIGH SCHOOL
2436 WEST LINCOLN – BIRMINGHAM, MI 48009
248-203-3700 FAX 248-203-3706

January 20, 2023

Dear Sir or Madam:

It gives me pleasure to write to you on behalf of Alex Motea, a student at Birmingham Seaholm High School. I was Alex's Precalculus teacher last school year and his current AP Calculus AB teacher and am privileged to get to know Alex during this time. Alex is a very diligent student and a hard worker; a great addition to any classroom. He consistently works to improve his mathematical understandings through assignments that are always done thoroughly and meticulously.

When I think about Alex, what stands out most vividly to me is his passion to get involved and influence his school and community. If you speak to Alex, he will eloquently and enthusiastically share his passion for the city he lives in and the school he attends. While some students get involved in community service to satisfy requirements, Alex seeks out opportunities to help others because he feels it is important and he takes great pride in bringing joy and opportunities to others. He is inclusive and strives to hear from a diverse group of students.

I feel he would be a great asset to the city of Birmingham in decision making for he has always been a leader in the classroom and outside of the classroom. Alex is very thoughtful in his work and in how he relates to students and adults. I believe he would be a great representative of not only Seaholm High School, but also all of Birmingham as well. I have no reservations in saying Alex Motea will be a fantastic addition to the board for the city of Birmingham.

Regards,

Shannon Feliciano
Seaholm Mathematics Teacher

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: [redacted] Alexandria Schaufler Grade: 11 Age: 16

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Museum Board

2.

3.

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

I have taken AP US History and helped my Mom with activies at the DAR. I also plan to minor in history in college and education.

Please list your involvement in non-school activities:

- I work at Holiday Market
- President of a Geography club
- I study and tutor

What personal skills and characteristics do you possess that would make you a good representative?

I love history, am organized, and hard working!

1/2023

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative?

I would budget my time so I had time to help with projects or activities at the museum.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes X No _____

- Parks + Rec.
- Art Board

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

Kristine Beauchamp 1/10/23

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

Student Representative Essay

Alexandria Schaufler

1/25/23

My name is Alexandria Schaufler, I'm 16 and a junior at Seaholm. I would like to be considered as a student representative for the museum board. I feel very fortunate to be surrounded by US history where I live (especially with the museums). I'm also familiar with Greenwood cemetery and I helped my mom with her D.A.R work; putting flags out for the veterans during Memorial Day. I've always been interested in history since elementary school. I plan on going to college to study history along with education, so I'll be able to teach it. Last year, I took APUSH which furthered my interest in US history. Recently, I've been working at Holiday Market and being president of the geography club at Seaholm. I love history and I hope to make a difference in my community with it!

To Whom It May Concern,

It is with great pleasure that I recommend Alexandria Shaufler for a position on the Birmingham Museum Board. I have Alexandria in my Advanced Placement Psychology class and she is polished, well spoken, bright with exceptional manners. Alexandria is extremely responsible and mature and has great insight on matters. I think she would be an outstanding student board member for the Museum. Please do not hesitate to contact me if I can provide any additional information to support her being on the board.

Kind regards,

Rochelle Rogers, Ed.S.

Seaholm High School

Social Studies Dept. Chair

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Kate Glasier Grade: 11th Age: 17

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Parks and Recreation Board
2. Planning Board
3. Multi-Modal Transportation Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

I have participated in many extracurricular activities, including the volleyball and tennis teams, Art and Soul Club, Interact Club and field day. I was a chair for the banner committee and have organized an Adopt-A-Family Collection for Lighthouse. I have taken specific courses that I believe qualify me for the student representative position, including AP Economics, Accounting and Radio Speech.

Please list your involvement in non-school activities:

- I have played Club volleyball for the last 5 years during the school year and participate in overnight training programs over the Summer.
- Last Summer I worked full time in a local Downtown Birmingham business.
- I have a babysitting job after school three days a week where I pick up kids from school and take care of them until 6pm
- I am a member of BETY, Beth EL Temple Youth Group. We organize and participate in multiple social and service activities.

What personal skills and characteristics do you possess that would make you a good representative?

I am hardworking, responsible and organized. I have a positive attitude and get along well with others. I am very interested in learning new things and enjoy providing my feedback. I think these skills, along with my passion for our community would make me a good representative.

1/2023

3D

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative?

My role as student representative would take top priority. The meeting times do not conflict with my current job or my volleyball practices. I would use the weekends for any work the position might require. I understand the commitment required and always prioritize school and job commitments over social activities.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes ✓ **No** _____

***Parent(s) Permission*:**

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

Christine Glasier 1-30-23

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by Monday, January 30th, 2023.

Student Representative on City Boards and Commissions – Essay
Applicant: Kate Glasier

I believe that I would make a great student representative on a board or commission for the City of Birmingham. I have lived in Birmingham my entire life. I have grown up playing in the parks, taking field trips to the museums, visiting art fairs and other activities in Shain Park, shopping in town and enjoying restaurants. The annual tree lighting and Summer movie nights have been an important part of my family's traditions. When I reached the age that I was old enough to get a job I was determined to work for a local business instead of going outside of the city to job search. It is very important to me as a member of this community that Birmingham continues to thrive and remains a safe and vibrant place for families to grow for years to come.

I am a hardworking student and very dedicated to both academics and extracurricular activities. In my class work, I challenge myself by taking honors and AP courses and I also make sure to take a variety of different elective classes in order to expose myself to new topics and skills. I am passionate about learning new things. I am also involved in several extracurricular activities both within the school and outside of school. It is important to me to have experiences both within and outside my school community. It is also a priority of mine to give back to the community and I do so through the Interact Club and Art and Soul Club at school and also by volunteering with my Temple. In addition, I started working last year and feel that this opportunity has taught me so much about responsibility and accountability. I was amazed by the overwhelming feeling of accomplishment and personal growth that this experience brought me. I like being busy, learning new things and challenging myself. I believe I do a good job staying organized, prioritizing, and ensuring I have a balance in my life.

I am confident that I would be a great addition to a board or commission for the City of Birmingham. As a student representative, I would contribute by providing a teenager's prospective to the discussions. This role would also give me the opportunity to learn more about leadership, government, and the city I am so passionate about. I would be so humbled to be chosen as a student representative, and in that role, be able to give back to the community that has given me so much.

Dear Selection Committee,

I am writing to highly recommend Kate Glasier for the position of Student Representative on a board or commission for the City of Birmingham. As a mentor of Kate's, I have had the pleasure of working with her for the past several years and can confidently say that she would be an asset to your program.

Kate has a strong work ethic and is dedicated to her commitments. She is hard working and puts 100% effort into whatever it is she is focused on. Kate's sincere commitment to community service is very apparent and quite impressive. Through the years, she has developed excellent communication skills and she demonstrates the ability to work well with a diverse group of people.

In addition, Kate is not afraid to take on new challenges and roles. She has consistently demonstrated a high level of responsibility and maturity, and I am confident that she will represent the interests of students effectively on a city board.

I strongly endorse Kate Glasier for the position of student representative and believe that she will make a positive and valuable contribution to the community. I am confident that she will be an exemplary representative for the students and the community at large.

Sincerely,

Kimberly Dicks

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Archie Reynolds Grade:11th Age: 16 Address: [redacted],

Birmingham Michigan Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Ernest W. Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Parks And Recreation Board

2. Advisory Parking Committee

3. Multi-Modal transportation Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

I have taken AP Microeconomics and AP Macroeconomics, which would help in understanding the economic impact of the board's decisions. AP Language and Composition which allows me to understand legislations and documents more thoroughly, along with understanding more universal issues in the community. Pre Calculus, which would help me in understanding the logistics of the board's decisions, and helping with more mathematical deliberations the board may come across. I am also a member of the National Honor Society. In terms of school activities, I have played tennis for the Seaholm Junior Varsity A team for the past 3 years, and co-founded the Curling (as in the ice sport) club at Seaholm. As a part of the Seaholm esports team, I have also been the Captain of the Varsity 'Valorant' team, which ranked 18th in the nation at one point. These activities demonstrate my ability to communicate effectively, work hard, and collaborate with others to find success.

Please list your involvement in non-school activities:

Over the summer I worked at 'Dairy Mat', an ice cream shop on Woodward in Birmingham, usually working 3-4 times a week on 5 hour shifts. I also have a small business, buying and selling trading cards for a profit, operating mainly online.

What personal skills and characteristics do you possess that would make you a good representative?

I am kind to everyone, work tirelessly once my mind is set on something, and am able to come to compromises effectively. All skill sets which would allow me to make great headway on a board, whether helping others establish policy, or allowing them to speak freely.

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative? I often finish my homework quickly, which allows me to have plenty of free time to work towards goals the board may have, reading up on proposed changes in the community, and helping others in the community around me.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes____X_____ No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

_____Merrilee Reynolds_____ Parent(s) Signature(s) Date

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

I'm sure there will be plenty of applicants with a plethora of extra curricular activities, a perfect GPA, or a mother Teresa esque community service transcript. These qualities can be quite beneficial, and often help these individuals get accepted into some of the most prestigious universities and colleges in the country. But the things you can't see on a paper, document, or application are the un-tangibles. The emotions, ideals, and personality are these intangible qualities, which are coincidentally the things that set me apart from other applicants, and the reason I should be accepted to a position on the board as a part of the junior initiative program.

Starting from a young age, I had always felt strongly towards overseeing others in an effort to make it more fair for everybody. When I was 5 I was called the ‘park police’ by my family with the way I would direct the flow of play at playgrounds. In my elementary years, I would often complain or even go as far as to throw tantrums over unfair events, whether it affected me or not. As middle school came and went, and highschool began, I kept those same feelings towards fairness, which led me towards an interest in politics. I knew that equitable treatment hadnt always been present in the past, especially during eras such as world war two and the nineteen sixties, and I knew that had to change. With movements such as feminism and lgbtq rights becoming mainstream over the past few years, I have seen myself become more and more interested as topics of fairness have come up. I know that if I were to be selected to be on the committee, then I would make sure to protect fairness for everyone in the Birmingham community, to make it a better place.

However, fairness isn't the only topic I'm concerned with. For one, Birmingham has seen its fair share of issues involving schools. With some members of the community speaking up about issues and faults they find within schools, and others vehemently defending the district. Making sure that members of the community know that their voice matters regarding schools is an issue paramount to the success and cohesion of Birmingham residents. With knowledge about my surroundings, and an ability to come to agreements and understandings with my peers, selecting me would be the best choice the committee could make, and a choice I believe to be necessary.

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Asher Kaftan Grade: 11 Age: 16

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Planning Board
2. Parks and Recreation Board
3. Historic District Commission or Design Review Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

President of Jewish Culture Club, Vice-President and Co-founder of Seaholm Investments Club, Member of Seaholm Spanish Honors Society and National Honors Society, Seaholm JV cross country, Co-founder of financial column in the Seaholm Highlander newspaper, Seaholm History club, founder and former president of Seaholm Turning Point USA chapter, 3.98 unweighted GPA

Please list your involvement in non-school activities:

JARC Teen Action Council, formerly on the Birmingham Library Board, Youth Federation of Temple Israel, Sales Associate at Gazelle Sports, Internship with Kevin Rinke's gubernatorial campaign.

What personal skills and characteristics do you possess that would make you a good representative?

Focus, diligence accountability, timeliness, hard-worker, loyalty, passionate

How would you be able to schedule your time to function effectively as a student representative?

I will check all future meeting days and put them in my calendar, as most board meet are on Wednesday evening I will make sure those times are free for me. Furthermore, I will set aside time between meetings to prepare for the next meeting and review notes from the previous meeting.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes X No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

Marla Kaftan 1/25/23

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

Asher Kaftan
January 14th, 2023
Birmingham Board Application Essay

Dear Board Selection Committee,

I have lived in Birmingham for 15 of my 16 years. Throughout these years, I have watched Birmingham become the bustling suburban town I love today. While residents watched cranes and excavators tear down old buildings and construct new ones, I recognized that the City of Birmingham Boards were busy planning, developing, and approving project after project. Among those working behind the scenes included the Planning board, the Parks and Recreation board, and the Historic District board. I would be excited and humbled to participate in the activities of any of these boards. My experience in leadership roles includes President of the Jewish Culture Club at Seaholm High School and membership in the Teen Action Council of JARC, a nonprofit which provides housing to those who are developmentally disabled. These experiences would make me a productive and accountable board member. My passion for the city will help me flourish in these leadership environments which work to advance the goals of the community. I have great interest in understanding the functions and operations of the City of Birmingham. I look forward to participating on one of these boards, where I feel I could provide value and learn more about my community.

1/25/23

To Whom it may concern,

I am writing to recommend Asher Kaftan for a position on one of the Birmingham City Boards for High School Juniors.

Having known Asher for over a year as his supervisor and mentor at Gazelle Sports Birmingham I am certain that he will thrive as a board member due to his commitment to hard work and excellence! Asher is a very talented young man with a positive outlook on the world with phenomenal work ethics.

During his time working for Gazelle Sports, he has always impressed me with his responsibility to his academic studies, his job, family and community. Asher is always willing to help others achieve excellence as he's the definition of a team player. Therefore I am confidently able to recommend Asher based on this experience.

I would also be more than happy to provide further details about Asher if needed. I can be contacted directly via phone: [redacted] or my email address: adalton@gazellesports.com

Sincerely

Aleksandra Dalton

Gazelle Sports Detroit Regional Manager

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Matthew Wiegand Grade: 11 Age: 16

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Planning Board
2. Advisory Parking Committee
3. Multi-Modal Transportation Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

*Seaholm Investing Club and Investing class

*Computer Tech (Excel, Word, and Powerpoint)

*Business Foundations and AP Economics

*National Honor Society and Leadership Class

Please list your involvement in non-school activities:

*Lawrence Tech University Transportation Design Camp

*Lawn Service Business

* Little Traverse Sailors

What personal skills and characteristics do you possess that would make you a good representative?

I am a critical thinker, and I like to weigh the pros and cons, thinking about both sides of an argument. I like to ensure the best decisions are made by thinking things through thoughtfully.

1/2023

How would you be able to schedule your time to function effectively as a student representative?

If I committ to something, I will follow through. I would sacrifice other activities, make a schedule, and prioritize my time as a student representative.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes X No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

Christian Wiegand 1/21/2023

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

Matthew Wiegand
Seaholm High School Junior

Ever since I was young I have been a car guy. I took a Transportation Design Camp at Lawrence Technological University and learned how to draw cars in perspective, and render the sketches. I plan to take what I learned and apply it to CCS for a precollege Transportation Design Camp. So, when I was choosing which of the City of Birmingham Boards I might like best, I chose ones that reflect transportation and design, two of my interests. Now, instead of just looking at the design of cars, I'm looking to expand my interest in how cities like mine, plan around cars and other transportation.

I should be chosen as a student representative because I am self-motivated and responsible. I started my own Lawn Care Business. It wasn't always easy getting up early on the weekends and keeping track of payments, but I did, and it taught me how to be disciplined and how to communicate with my neighbors in Birmingham. I set up Venmo to make payments easier for them, and that attracted new customers. One day I got a flyer for another lawn service with lower prices than mine, so I lowered my prices, and gained some more customers. This demonstrates I am flexible and can adapt to new information. These are skills I can use at the City of Birmingham Board meetings because we will be looking at new information and solving problems in the community.

While I've had many successful experiences, there have been cases in which I have fallen short of my goals, but I have learned from those times as well. I live to play Basketball. I love the competition and putting in hard work to play in the games. There is always something I'm working to improve. When I tried out for the team I, unfortunately, didn't make it. It was a real wake-up call for me that I needed to work even harder than I already was. After I was cut from the team, I asked the coach if there was anything I could do in the program to help increase my chances of making the team next year. He told me I could be the Team Manager. My responsibilities include helping to pick up the balls after practice and taking stats during the game. I even had the chance to play in a couple of games where I scored a three-pointer! This shows that I persevere and have a good work ethic.

Thank you for considering my application to the City of Birmingham Boards. Some of the skills I learned throughout my high school experience are to take initiative, respond to changing circumstances, and work as hard as I can. These are skills I could use as a student representative on one of the City of Birmingham Boards. I am excited for the opportunity to potentially work with you on a board that relates to my transportation and design interests.

ROBERT J. YUSKO

ryusko@birmingham.k12.mi.us

[redacted]

1/22/2023

To Whom it May Concern,

I am writing to highly recommend Matthew Wiegand for a position on either the Planning Board, Advisory Parking Committee, or Multi-Model Board. As a student who has been a dedicated member of the cross country, basketball, and track teams for every season, Matthew Wiegand has demonstrated a strong work ethic and a commitment to excellence. He has excelled in his athletic achievements, and has also shown a strong interest in transportation and city planning.

In addition to his athletic achievements, Matthew has also been an active member of the Seaholm Investing Club, where he held the position of Secretary. In this role, he was responsible for making announcements for attendance, taking record of minutes, and contributing to a presentation. This experience has given him a deeper understanding of how organizations function, and has honed his leadership skills. Furthermore, Matthew has also demonstrated strong leadership skills as the Basketball Team Manager. In this role, he was responsible for taking stats in games, leading in practice, putting away equipment, and helped to review videos to analyze what went well or what to improve on next game.

Matthew has also attended the Lawrence Technological University Transportation Design Camp, which further solidified his interest in cars and transportation. This experience has given him a deeper understanding of the industry and has provided him with valuable knowledge and skills that would be useful in a position on the Planning Board, Advisory Parking Committee, or Multi-Model Board.

Furthermore, Matthew has also shown a strong motivation, discipline, and customer service skills from the lawn service business he runs. He also has leadership class experience and Business classes which would support him in this position. He has always been interested in car design and that is why he chose the boards that were related to transportation.

Overall, I believe that Matthew would be an excellent candidate for a position on the Planning Board, Advisory Parking Committee, or Multi-Model Board. He has the skills, knowledge, and experience needed to excel in this role and would be a valuable asset to the City Boards and Commission. He is a hardworking, dedicated, and highly motivated individual who will put his all into this position.

Sincerely,

Robert Yusko
Seaholm Computer Science / Investments Teacher

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Luca DeSanto Grade: 11 Age: 16. Address: [redacted] Zip Code: 48009

Email: [redacted] Telephone: [redacted] School: Ernest W. Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Parks and Recreation Board

2. Public Arts Board

3. Multi-Modal Transportation Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

- Varsity Wrestling
- Varsity Football
- Symphony Band
- Marching Band
- National Honors Society
- Spanish Honors Society
- DECA (Competitive Business Club)
- Model United Nations

Please list your involvement in non-school activities:

- Volunteer at the Birmingham Santa House

What personal skills and characteristics do you possess that would make you a good representative?

- Leadership - I am able to lead and delegate large groups of people.
- Creativity - I would present extremely creative solutions to difficult problems the board would face.

1/2023

3D

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

- Communication - I am able to communicate effectively with different types of people, making connections with them as well as creating productive ideas.

How would you be able to schedule your time to function effectively as a student representative?

The main conflict with functioning effectively is my after school commitments, specifically sports. So, to combat this, I would email my coaches to tell them I am part of the city council, and that I must go to each and every meeting. Essentially, I'd prioritize the city council over any other commitment I'd have. I selected the Parks and Recreation Board as my first choice because I am certain that I would have no school conflicts during the first Tuesday of every month at 6:30.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes ✓ No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

_____ _____

Parent(s) Signature(s) Date 1-30-23

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

In life, phrases like “The government does nothing!” or “The roads need to be fixed!” are extremely common. But, in what ways does the government actually affect its citizens? Or, better question, what *level* of government actually affects its citizens? The federal level? No, it’s too focused on the bigger picture: foreign affairs and inflation don’t directly affect an average American's life. How about the state level? While the state may decide things like the wellbeing of the roads, gas prices, and broad laws, these don’t directly affect the life of citizens in specific towns and communities. These towns and communities have needs and wants that can only be fulfilled by the third level of government—local.

Local government is what *actually* affects the wellbeing of its citizens’ lives. From the roads people drive on to the parks they play in, it’s all decided by the local government. I have always ached to see this process at work, to see the decisions that directly affect my life. I have *also* always wanted to see how *I* can affect the gears of local government, and make my and my community’s lives even better. This is the reason I should be chosen. My curiosity of how the government of Birmingham works mixed with an ambition to make it better shows that I am a perfect candidate for any board or commission. Even above this, the government exists to serve the people. In other words, leaders exist to serve their community. I would love to learn how to be a good leader, and to serve my community well. After all, living in a positive community positively affects all that live within it.

I have several ideas on how to make the way Birmingham works even better. For example, a board could send out a survey to Birmingham residents to gauge what they want to see better in the city. It’s the people that make up a city, after all. On this note, I believe that taxes paid to the City of Birmingham should be efficiently used to improve the city, and that any bloat these taxes go to should be cut. I want my city to be as perfectly planned as it can possibly be,

and I believe my resolve to make this happen shows why I should be chosen as a candidate to a board or commision.

30 January 2023

To whom it may concern-

I am pleased to provide this letter of recommendation for Luca DeSanto, a junior in the Seaholm Band Program. Luca is a gifted individual who has been a pleasure to teach these years. He will continue to achieve great things at Seaholm and beyond!

In the three years I have known Luca I have been constantly impressed by his compassion, maturity, leadership skills, and kindness. Whether he is leading our saxophone section in the marching band, sitting in symphony band, or working diligently as a member of jazz band, Luca is an exceptional young man who goes above and beyond the duties of a "normal" high school student. He is an incredible asset to me and an excellent role model for students.

For these reasons I strongly recommend that you consider Luca Desanto for Students on City Council. . If you have any questions, please do not hesitate to contact me at 248-203-3794 or by email at tcibor@birmingham.k12.mi.us

Sincerely Yours,

Tim Cibor
Director of Bands
Seaholm High School

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

Name: Andrew McLean Grade: 11 Age: 16

Address: [redacted]

Zip Code: 48009 Email: [redacted]

Telephone: [redacted] School: Seaholm High School

On the attached listing of city boards and commissions, please rank your order of preference for appointment from 1 to 3 (1 being the highest and 3 being the lowest):

1. Parks and Recreation Board
2. Museum Board
3. Multi-modal Transportation Board

What school activities and/or classes have you participated in which would qualify you to sit on the board or commission which you have chosen?

I am an active member in the Diversity Club, Interact Club, Spanish Honor Society, Presidential Service Award (Gold), Swimming, Waterpolo, Science Olympiad, and National Honor Society.

Please list your involvement in non-school activities:

I intern at a Law Office during the Summer. I also like to give back to the community by volunteering my time whenever possible, including helping at the Birmingham Santa House, Ringing the bell for The Salvation Army, and packing meals for Kids Coalition

What personal skills and characteristics do you possess that would make you a good representative?

I am a leader, hard worker, and good listener. I take direction well and complete each task to the best of my abilities.

STUDENT REPRESENTATIVES ON CITY BOARDS AND COMMISSIONS

How would you be able to schedule your time to function effectively as a student representative?

Due to attending multiple extracurricular activities, I am accustomed to balancing the multiple demands of my time.

Would you be interested in being considered for any other boards if you are not selected for any of your top three choices?

Yes X No _____

Parent(s) Permission:

I give my permission for my son/daughter to seek the position of a representative to a city board or commission.

1/16/2023

Parent(s) Signature(s) **Date**

Include an essay (typed) to convince the selection committee that you should be chosen as a student representative to a board or commission. If selected, your essay will be a part of your introduction to your board or commission.

Please include one letter of recommendation from an adult who knows you at school and who knows your activities outside of school.

Email application, essay and letter of recommendation to Melissa Fairbairn, mfairbairn@bhgov.org by **Monday, January 30th, 2023**.

Dear Selection Committee,

I am writing to express my interest in serving as a student representative on the committee. As a student who loves education and is committed to making a positive impact, I am confident that I have the qualifications to be an effective and dedicated representative.

First, I am an excellent communicator. I understand the importance of listening to others and communicating ideas coherently. I am confident that I can effectively assist this body and communicate the perspective of a Seaholm student.

Second, I am very organized and structured. I have demonstrated my ability to balance multiple responsibilities, including academics, extracurricular activities, and helping out my community. I have devoted hundreds of hours to the city of Birmingham, helping the place I call home. Overall, I am confident that I can effectively manage my time and prioritize my responsibilities as a student representative.

Lastly, I am very committed to improving the educational experience for all students. I advocate for student needs and work well with others to find solutions. I believe that my perspective as a student, combined with my ability to work with others, would be priceless to the committee as it works to address the challenges facing our community today.

In conclusion, I believe that I have the skills, qualifications, and passion for making a meaningful contribution as a student representative on the committee. I would be honored to have the opportunity to serve in this role and work alongside other dedicated and passionate individuals to make a positive impact on the world.

Thank you for considering my application. I look forward to hearing from you.

Sincerely,
Andrew McLean

David E. Jerome, Attorney
DJerome@jeromemclean.com

Daniel D. McLean, Attorney
DMcLean@jeromemclean.com

Beth Schumacher, Paralegal
BSchumacher@jeromemclean.com

LAW OFFICES OF JEROME & McLEAN

115 N. Center St., Suite 203
P.O. Box 220
Northville, MI 48167-0220

Tel (248) 348-4433
Fax (248) 348-7364

January 30, 2023

Birmingham City Boards or Commissions
151 Martin Street
Birmingham, MI 48009

Dear Sir or Madam:

I have come to know Andrew McLean very well over the years. Andrew is a dedicated young man who excels in the classroom, is involved in numerous school activities, and has lettered for three years in swimming and participated on the water polo state team.

I believe Andrew's dedication to service in the community is his best attribute.

At Seaholm High School, Andrew is an 'A' student. Beyond grades, Andrew's well-rounded background is notable. He competes for Seaholm in the field of ornithology in Science Olympiad, serves on Spanish Honor Society, Rotary Interact Club, and is active in Water Polo and Swimming.

Andrew's commitment to school is overshadowed by his commitment to the community. I am aware of his involvement and service to the Salvation Army, Focus Hope, Lighthouse, Rotary Interact, and Santa's House in Birmingham. Andrew was awarded the Presidential Service Award in 2021 and has accumulated the volunteer hours for another such award for 2022.

Andrew does frequently encourage his friends to come out and join him. However, he serves with humility and demonstrates a commitment to improve the community around him. I am not the only one to say we are all excited about this young man's future.

I would recommend Andrew McLean to serve the City of Birmingham in any capacity in which he is required. If you have any questions, please do not hesitate to reach out to me at [redacted].

Very Truly Yours,

David E. Jerome

Birmingham City Commission Minutes
February 8, 2023
Department of Public Service Building, 851 S. Eton St
4:30 p.m.
Vimeo Link: https://vimeo.com/797132791

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
Mayor Pro Tem McLain
Commissioner Baller
Commissioner Boutros
Commissioner Haig
Commissioner Host
Commissioner Schafer

Absent: None

Staff: City Manager Markus; City Clerk Bingham, Assistant City Manager Ecker, Human Resources Manager Lambert, City Attorney Kucharek

III. PUBLIC COMMENT

IV. DISCUSSION ITEMS

Mayor Longe provided introductory comments. She noted that Mr. Lahanas accepted a position in Northville, Michigan and that Mr. Tungate reconsidered his interest in the position.

A. Interview Candidate Jana Ecker

In reply to Commissioner questions, ACM Ecker explained:

- Her general career experience has been in urban planning and working as an attorney. Since becoming Assistant City Manager, she has attended at least one meeting of every City board and commission, and spent more time engaging with the City's various departments in order to learn more;
- Her priorities in the first six to 12 months would be:
  - Establishing a senior leadership team in order to promote institutional memory, collaboration, and training;
  - Meeting with each Commissioner one-on-one to open a direct line of communication;
  - Meeting with different neighborhood groups;
  - Working with MDOT to improve safety on Woodward, including the upcoming improvements to the intersection of Woodward, Brown, and Forest;
  - Incorporating multi-modal impacts into more of the City's decisions and providing the Multi-Modal Transportation Board with a tool to conduct that analysis;
  - Developing a plan for Birmingham's seniors and for NEXT;

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    - Developing a sustainability plan, purchasing the City's first electric vehicle, and installing electric vehicle charging stations;
    - A succession plan for the Finance Department; and,
    - An RFP for a digital budgeting platform to increase transparency;
- A City Manager within a council-manager municipal government format is expected to hire and manage Staff, to implement policy as directed by the City Commission, and to represent the City's interests in working with outside groups;
- Some challenges the next City Manager could encounter include: budgetary constraints, handling the impacts of severe weather, and differing opinions in the community about Birmingham's rate of growth and development;
- She would ensure that department heads are meeting their City-wide goals and objectives by:
    - Continuing weekly Staff meetings;
    - Having an open-door policy;
    - Encouraging collaboration among department heads;
    - Holding meetings that focus on projects that would benefit from interdepartmental and inter-board perspectives; and,
    - Having monthly one-on-one meetings with department heads to ensure that progress is being made towards the yearly goals;
- When she implemented a new contract tracking system so that all departments were following the same process, some Staff initially found it confusing and did not understand the need for a new process. She developed checklists with the City Attorney for Staff to make sure the processes were followed, and communicated with Staff to explain the necessity of the change;
- She has extensive experience in preparing budgets, requests for proposals, and service contracts from both her years in Planning and her years as an attorney;
- The Museum helps people create and maintain their connections with Birmingham, helps strengthen the social fabric of the community, and helps members of the public see how people in the past helped shape Birmingham;
- The Library also helps strengthen the social fabric of the community by providing people with a place to congregate and learn;
- A strength of hers is finding a way to organize a complex situation;
- For weaknesses, she sometimes finds it challenging to maintain a work-life balance, and sometimes finds that some people can be frustrated with the persistence she brings to accomplishing important tasks;
- In order to communicate effectively about potentially difficult municipal events, she would begin by demonstrating empathy and compassion for the challenges people may be experiencing. She would then listen to those impacted, inform them about the available resources and options, and then would provide advocacy and services for dealing with those issues. She would communicate both one-on-one and to the community as a whole using the City's various means of communication to do so;
- Her philosophies and approaches to the City Manager position would include openness, optimism, encouragement of collaboration, inclusivity, supportiveness, being solution-oriented, being enthusiastic about working with others, listening, and playing to people's strengths;
- Her philosophies and approaches in terms of project management would include looking at the overall picture, breaking it down into manageable steps, coming up with a plan, engaging stakeholders;
- She is skilled at organizing people, delegating tasks, organizing priorities and organizing how her time is spent;
- She has extensive knowledge of: the community, municipal government, the City's Staff, Birmingham's standards, and how to implement them;
- She has strong relationships within the community;

- Working in municipal government during the Covid-19 pandemic emphasized the importance of being open, creative, flexible, and willing to try different approaches to meet residents' needs. It also emphasized the importance of remembering that people may be facing challenges in their personal lives, and paying attention to the human and social aspects should remain a priority;
- She learned that trialing certain solutions for a short period of time is the best ways to see if the solution would work;
- She has an immense passion for public service and intends to spend the rest of her career in the field. She has high ethical standards and high integrity standards both for herself and for her Staff;
- She would offer an excellent transition from CM Markus because she worked extensively with him and because she understands the City's relationships, culture, people and issues;
- Even though she sometimes struggles with work-life balance, she is always able to accomplish the tasks in her work life that she sets out to accomplish;
- She has many years before she wishes to retire and would be happy to spend the rest of her career in Birmingham; and,
- Working in Birmingham has been fulfilling and a pleasure despite the challenges, because she enjoys the challenges public service brings.

XI. ADJOURN

Mayor Longe adjourned the meeting at 5:24 p.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

Birmingham City Commission Minutes
February 9, 2023
Department of Public Service Building, 851 S. Eton St
4:30 p.m.
Vimeo Link: https://vimeo.com/797574925

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
Mayor Pro Tem McLain
Commissioner Baller
Commissioner Boutros
Commissioner Haig
Commissioner Host
Commissioner Schafer

Absent: None

Staff: City Manager Markus; City Clerk Bingham, Human Resources Manager Lambert, City Attorney Kucharek

III. PUBLIC COMMENT

IV. DISCUSSION ITEMS

Mayor Longe provided introductory comments.

CA Kucharek also provided guidance to the Commission, recommending that written responses to the verbal questions being asked by the Commissioners not be given any weight. She recommended this in order to preserve equity between the candidates since written answers to these questions were not sought by the Commission and not all candidates provided written answers.

A. Interview Candidate Troy Bell

In reply to Commissioner questions, Mr. Bell explained:

- His parents were both public servants, which set the foundation for his and his siblings' careers in public service. His passion lies with public service;
- Birmingham is attractive to him because of its community, schools, the City's organization, and the opportunities the City Manager role offers;
- He has a diverse career background including law enforcement, public works, information technology, and educational leadership, and has worked in many different parts of the country;
- He has a diverse educational background and was presently pursuing his PhD;
- He would be capable of implementing the succession planning the City has already done, and would also be capable of taking a different approach to succession planning which would include mentoring Staff, being open and engaging, and making decisions with his leadership team in mind;

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- His priority once hired as City Manager would be to learn more about Birmingham first in order to determine how best to lead the City;
- He perceived safety and security, infrastructure, and the location of the senior center to be three topics he would get involved in early on;
- He would focus both on improving processes and making sure 'the trains run on time';
- He has spent his career working within a council-manager government format. The Commission outlines goals and objectives, and the City Manager guides the organization in achieving those goals and objectives. He would emphasize the importance of aligning the City's goals with its strategic and master plans;
- Challenges in the position could include aligning the City with the 2040 Master Plan in order to create certainty in the City, addressing safety and security and making sure the Police Department is well-accommodated, finding an appropriate location for the senior center;
- He would ensure that department heads are meeting their City-wide goals and objectives by focusing on consistent process improvement, creating consensus and collaboration, and doing some strategic planning. He would invest in the well-being and success of City Staff in order to ensure that the City achieves its broader goals;
- His research on the City included the 2040 Plan, the process of locating the senior center, the need for maintaining safety and security, the need to streamline processes, the importance of parks, recreation, programming, and arts to the City, and the need to increase transparency between the City and its residents. He would hope, once hired, to meet with Commissioners, community leaders, and residents in general to learn more about the City;
- He had a situation where Staff had to enforce an unpopular, but extant, ordinance. Once he explained the benefits of enforcing the ordinance, which included limiting blight and increasing revenue, Staff became more comfortable with enforcing the ordinance;
- He had experience managing the budget for an Everglades Restoration Program, a Miscellaneous Pump Station Project, and a deep well injection project. As part of those projects position he also managed requests for proposals and service contracts;
- Museums and libraries are part of a community's culture. Both institutions should be reviewed for how they are integrating digital services to meet the needs of the community. It would also be beneficial to look at other ways that the Library could expand its services, such as potentially renting out bicycles or other items;
- One of his strengths is a compassionate leadership style that is open, engaging, and approachable;
- Two of his challenges include recognizing that some people may need guidance and time before they are able to meet the high standards he sets, and needing to spend more time speaking French and Spanish;
- In order to communicate effectively about potentially difficult municipal events, he would begin by educating people about what has occurred, what the consequences are, and what resources are available;
- His philosophies and approaches to the City Manager position would include making sure that processes and procedures are optimized, making sure that there is collaboration amongst teams, and maintaining balance. He would prioritize clear communication of a project's timeline and goals throughout the given project's duration;
- Working in municipal government during the Covid-19 pandemic emphasized the importance of being capable of pivoting to keep the organization operating;
- He is attracted to public service out of a desire to use his skills, abilities, and assets to try and make a difference;
- The diversity of his experience demonstrates both his capacity and his suitability for the City Manager position;
- His family is important to him, and is enthusiastic about the prospect of moving to Birmingham;

- Although his PhD relates to the experiences of marginalized communities, knowing more about the resources necessary for a community to thrive can help inform his work in Birmingham;
- He did not anticipate that writing his dissertation would interfere with his work as a City Manager, stating that the research phase was the most difficult part and already complete;
- The budgets he has managed range from $17 million to $1.03 billion; and,
- He would hope to be in his next position for a minimum of eight years so his youngest child could complete high school. He hopes to complete his PhD and to continue to write and publish. If he were to retire in the future, he would hope to be in an adjunct role at a university.

The Mayor noted that Mr. Bell's name has been in the press, and asked if he would like to comment.

Mr. Bell stated that something being in print does not make it true. He said that while he would appreciate the opportunity to correct misinformation in the press, he believed choosing not to do so was an ethical matter. He said he chose to work in Muskegon Heights because the opportunity aligned with his PhD research and was close to where his wife grew up.

B. Interview Candidate Blaine Wing

In reply to Commissioner questions, Mr. Wing explained:

- His career has been in public service, largely in municipalities in Illinois and in Rochester, Michigan. In addition to his other graduate degrees, he was presently studying for a certificate in Diversity, Equity, and Inclusion from Northwestern University;
- To prepare for the interview he read the draft 2040 Plan, website, budgets, manager's reports, newsletters, looked at the 3D rendering of the City, and visited some of the shops in Birmingham;
- In the first ninety days of the position, he would set up regular communication with the Commission, publish a manager's report on Fridays, establish regular meetings with Staff and then schedule meetings with other related organizations such as the County. Within the first six months to a year he would focus on aligning the City's Planning with the 2040 Plan, continue the lead service abatement project, get the funding for pensions and healthcare completed, continue the capital improvement plans, and fill staffing positions;
- His last six positions were within a council-manager government format, has been a member of the International City/County Management Association (ICMA) since 2000, and was the President of the Assistant ICMA in 2009 and represented Illinois at the National Conference Committee in California in 2009;
- Staffing would likely be one of the greatest challenges in the position, which reflects a national trend;
- He would ensure department heads are meeting the Commission's goals by setting the titles in the budget appropriately and then having monthly meetings with those Staff members. He would maintain open communication with the department heads. He has used software in two of his previous positions to track department heads' progress towards goals;
- He introduced the idea of having local governments enter into a consortium for healthcare expenditures. He communicated that doing so would reduce insurance costs without reducing benefits. Some members joined, and while there was some resistance, the consortium was able to settle on a compromise position that still realized significant savings;
- He has had experience creating budgets, helped Rochester, MI maintain its triple A bond rating, and has worked extensively with requests for proposals, and service contracts;
- Libraries and Museums are very important, are instrumental in placemaking and play an important part in the community;
- One of his strengths is his adaptability and ability to communicate well with a variety of people in various contexts;

- His challenges include needing to volunteer a bit less so he has more family time and needing to remember to speak a bit less and listen more;
- In communicating about potentially difficult municipal events, he would activate an Emergency Command Center as appropriate, making sure individuals facing difficulties are taken care of, working with public safety, communicating with residents directly to collaborate and get needs met. He listens to individual issues, demonstrates empathy, and attempts to address each concern. He would also use the website and other digital communications to keep residents informed;
- His overall approach to City Management is to gather as much information as possible, regularly touch base throughout processes, ensure the processes are adhering to schedules, and also to trust Staff's expertise. For large projects he would bring in a Finance or Assistant Finance Director to make sure the financing is in order;
- During Covid-19 he drew from international, national, and local resources and guidance, and utilized his National Incident Management training. He created Staff pods early on to minimize in-person staffing and had options for virtual meetings and work from home set up in March 2020. He worked with non-profits to check on older residents and other under-resourced members of the community;
- He has a number of certifications in addition to his graduate degree as laid out in his resume;
- He enjoys working with technology and uses it to benefit the communities he works for;
- He did regular monthly meet-and-greets with the Rochester Older Persons Commission (OPC) to get to know the residents and answer questions. He promoted and participated in the various OPC programs, and saw working with the OPC as an important and strategic partnership; and,
- In order to perform recruitment, some of his techniques include: communicating through his career and professional networks, training middle management in their skill sets so they might be prepared to become department heads in the future, encouraging all Staff to pursue further education because of the benefits to the community, and partnering with local resources to create discounts for City Staff.

In reply to Mr. Wing, the Mayor stated that the federal funds granted for the lead line service abatement program should be sufficient to complete the lead line servicing in the community. The Commissioners provided a brief summary of the challenges they see presently facing the community, and summarized the characteristics they would like the next City Manager to have.

C. City Commission Discussion of Nomination of Three Candidates, distribution of Candidate Selection Forms, and Tally Count of Candidates Moving Forward

In reply to Commission questions, CM Markus and CA Kucharek advised the Commission that they had discretion to advance all three candidates, or fewer; that they should discuss the candidates' positive aspects; and that criminal background checks, credit background checks, and reference checks would be conducted.

Commissioner Baller stated that when the previous City Manager departed the City, one of the present candidates was one of the people that occurred to him as a possible candidate for the position at that time. He noted that a candidate's familiarity with Birmingham is an important consideration.

The Mayor noted that the results for Birmingham's City Manager search were similar to those conducted by search firms. She said she had been following municipal City Manager searches since Birmingham commenced its own search, and noted that Grand Haven, which used a search firm, had 43 replies, and Birmingham received 46 replies. She noted that other local City Manager searches ended up with some of the same finalists that Birmingham ended up with and even hired from the same group. She explained that City Manager searches are challenging presently, with some City Managers having retired during and after the Covid-19 pandemic. She noted that some municipalities use temporary staffing to fill the positions or

hire people without a City Management background. She said she felt fortunate to have a highly qualified internal candidate and two other qualified external candidates.

Mr. Host spoke about the importance of the public attending the upcoming meet-and-greet with the final candidates. He said he saw positive attributes in both Messrs. Bell and Wing.

MPT McLain said she favored all three candidates moving forward so that the public had an opportunity to interact with the candidates.

Commissioner Schafer said that all three candidates seemed well-qualified, and noted that Birmingham was fortunate to have one candidate that had demonstrated a long-term commitment to the community.

CC Bingham then tallied the Commission's votes on the candidates, stating that Mr. Bell had four votes, Ms. Ecker had seven votes, and Mr. Wing had five votes. Since all three candidates had at least four votes each, all three candidates were advanced to the next round.

Candidate	Votes
Bell	(4) Commissioner Haig, Commissioner Host, MPT McLain, Commissioner Schafer
Ecker	(7) Commissioner Baller, Commissioner Boutros, Commissioner Haig, Commissioner Host, Mayor Longe, MPT McLain, Commissioner Schafer
Wing	(5) Commissioner Boutros, Commissioner Haig, Commissioner Host, MPT McLain, Commissioner Schafer

XI. ADJOURN

Mayor Longe adjourned the meeting at 7:05 p.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

Birmingham City Commission
Special Meeting Minutes - Workshop
Monday, February 13, 2023
6:30 p.m.
Vimeo Link: https://vimeo.com/797542695

Workshop Session

This will be considered a workshop session of the City Commission. No formal actions will be taken. The purpose of this workshop is to participate in a discussion regarding Marijuana Ordinances.

I. Call to Order

Therese Longe, Mayor

II. Roll Call

City Clerk Bingham called the roll.

Present: Mayor Longe
Mayor Pro Tem McLain
Commissioner Baller
Commissioner Haig
Commissioner Host
Commissioner Schafer

Absent: Commissioner Boutros

Staff: City Manager Markus; City Clerk Bingham, Assistant City Manager Ecker, City Attorney Kucharek

III. Presentation & Discussion

CA Kucharek and CM Markus presented the topic.

In reply to Commission inquiry, CA Kucharek explained:

- Marijuana could not be sold in non-marijuana businesses because of regulations;
- The exterior design would be regulated according to Birmingham's zoning ordinances;
- It would be inadvisable to require a certain dollar amount of investment in the community, but the City could ask business applicants to describe how much they would be willing to invest in the community. The City could also regulate those commitments like a SLUP to ensure adherence;
- The City could enact ordinances that allow for reasonable control over the time, manner, and place of the business;
- The City could likely require a landlord to sign off on a tenant's business;
- She would have to consider whether the City could require an investment of a certain percentage of the City's annual budget as of the year of the application;

- If the City had an opt-in ordinance, it would require a referendum petition to change it;
- Campaigns to allow marijuana businesses in municipalities are often very persuasive;
- The City would be allowed to charge $5,000 per year per applicant to maintain compliance; and,
- The City could possibly limit its ordinance to certain types of marijuana-related businesses, such as security or transportation.

Commissioner Baller said it would be helpful if Staff provided the Commission with the regulations that govern marijuana business. He also asked whether Engage Birmingham might be a useful way of engaging the community on the topic.

Commissioner Host thanked Staff for preparing this workshop, noting the benefits of being proactive on this and other matters.

IV. Public Comment

Pam Voss Paige, owner of commercial property at 112-118 S. Old Woodward, asked the Commission to avoid marijuana businesses in the City as much as possible and shared her concerns about youth marijuana use.

CM Markus reiterated that while the City has opted-out, a business owner could still attempt to open a store in the City. The options available to the Commission include limiting the areas where it could be located.

V. Adjourn

Mayor Longe adjourned the meeting at 7:32 p.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

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Birmingham City Commission Minutes
February 13, 2023
Municipal Building, 151 Martin
7:30 p.m.
Vimeo Link: https://vimeo.com/797542695

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
Mayor Pro Tem McLain
Commissioner Baller
Commissioner Haig
Commissioner Host
Commissioner Schafer

Absent: Commissioner Boutros

Staff: City Manager Markus; City Clerk Bingham, Operations and Event Manager Brook, BSD Director Sheppard-Decius, Planning Director Dupuis, Assistant City Manager Ecker, City Attorney Kucharek

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

Announcements

- The City recommends members of the public wear a mask if they have been exposed to COVID-19 or have a respiratory illness. City staff, City Commission and all board and committee members must wear a mask if they have been exposed to COVID-19 or actively have a respiratory illness. The City continues to provide KN-95 respirators and triple-layered masks for attendees.
- The City of Birmingham, along with the nation, recognizes Black History Month in February. We celebrate the legacy of Black Americans whose power to lead, to overcome and to expand the meaning and practice of American democracy has helped our nation become a more fair and just society. The city continues to make significant progress in understanding the important history of Black families in early Birmingham, and remains committed to seeking opportunities to share the whole story of our community in the future.
- The Birmingham Police Department participated in a polar plunge fundraiser for the Special Olympics of Michigan that took place on February 4, 2023. Numerous members of the Police Department, two employees from the Clerk's Office and Mayor Pro-Tem Elaine McLain jumped into the icy waters of Walled Lake and raised over $13,000 for the cause. Our Birmingham team was the third-highest grossing agency involved.
- The public meet and greet event will be this Wednesday, February 15, 2023 from 7:00 p.m. to 8:30 p.m. at Baldwin Public Library downstairs in the Rotary Room. The meet-and-greet was designated a Special Meeting of the Commission pursuant to Sections Six and Seven of the City's Charter. The

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Mayor and City Manager provided further information about the gathering. The City Manager Candidates are:

Troy Bell, former City Manager of Muskegon Heights, Michigan
Jana Ecker, Assistant City Manager of Birmingham, Michigan
Blaine Wing, Interim Village Manager of Sparta, Michigan

Following the Meet and Greet we encourage the public to give feedback on our candidates by visiting http://engage.bhamgov.org.

Appointments

02-015-23 Appointment to the Birmingham Area Cable Board

Donovan Shand was unable to attend for an interview. The Mayor noted that Mr. Shand was presently a regular member of the Cable Board.

MOTION: Nomination by MPT McLain:
To appoint Mr. Shand to the Cablecasting Board as a regular member to serve a three-year term expiring March 30, 2026.

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

Nays, None

02-016-23 Appointment to the Board of Zoning Appeals

The Commission interviewed Carl Kona for the position.

MOTION: Nomination by Commissioner Host:
To appoint Mr. Kona as an alternate member to the Board of Zoning Appeals to serve a three-year term to expire February 18, 2026.

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

Nays, None

CC Bingham swore in Mr. Kona.

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

V. CONSENT AGENDA

02-017-23 Consent Agenda

The following items were pulled from the Consent Agenda:
Commissioner Baller: Item J – Special Event Application: Birmingham Movie Nights

MOTION: Motion by Commissioner Baller, seconded by Commissioner Haig:
To approve the Consent Agenda excluding Item J.

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

Nays, None

A. Resolution to approve the revised City Commission meeting minutes of January 9, 2023.

B. Resolution to approve the City Commission Long Range Planning meeting minutes of January 21, 2023.

C. Resolution to approve the City Commission meeting minutes of January 23, 2023.

D. Resolution to approve the warrant list, including Automated Clearing House payments, dated January 25, 2023, in the amount of $2,219,383.97.

E. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 1, 2023 in the amount of $459,227.17.

F. Resolution to approve the warrant list, including Automated Clearing House payments, dated February 8, 2023 in the amount of $2,940,323.27.

G. Resolution to approve the construction project budget and award the two (2) 500,000 Gallon Radial Arm Tanks Exterior Overcoat and Miscellaneous Repairs #2-22 (W) to Fedewa Inc. in the amount of $482,699.00. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the city. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Water Fund	591.0-543.000-981.0100- Derby	$209,699.00	$20,969.90	$230,668.90
Water Fund	591.0-543.000-981.0100 - Hunter	$273,000.00	$27,300.00	$300,300.00
	Total Costs	$482,699.00	$48,269.90	$530,968.90

H. Resolution to set a public hearing date of March 13, 2023 to consider the Special Land Use Permit, Final Site Plan and Design Review application for 34350 Woodward Ave & 909-911 Haynes Street – Fred Lavery Porsche.

I. Resolution to approve the purchase of a trailer attenuator from Truck & Trailer Specialties, Inc., located at 900 Grand Oaks Drive, Howell, MI 48843, through the MiDeal Cooperative Purchase Agreement #071B7700086, in the amount not to exceed $32,275, in addition to authorize the

Mayor and City Clerk to sign the agreement on behalf on the City. Funding for this purchase has been budgeted in the FY 2022-2023 Auto Equipment Fund account #661.0-441.006.971.0100.

K. Resolution to accept the resignation of Steven Kalczynski from the Advisory Parking Committee, to thank him for his service and to direct the City Clerk to begin the process of filling the vacancy.

L. Resolution to accept the resignation of Patrick Rock from the Martha Baldwin Park Board, to thank him for his service and to direct the City Clerk to begin the process of filling the vacancy.

02-018-23 (Item J) Special Event Application: Birmingham Movie Nights

Commissioner Baller commented on the Commission's interest in special events.

In reply to inquiry from Commissioner Baller, BSDD Sheppard-Decius and OEM Brook provided more information about the series.

Commissioner Schafer noted that having food at the series would be more successful if the advertising noted food would be available.

CM Markus provided brief insight into the funding and motivation for the series.

MOTION: Motion by Commissioner Baller, seconded by MPT McLain:
To adopt a resolution to approve a special event permit as requested by the Birmingham Shopping District to hold Birmingham Movie Nights on June 9, July 14, August 11, and September 8, 2023, 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.

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

Nays, None

VI. UNFINISHED BUSINESS

02-019-23 Code of Conduct

CA Kucharek and CM Markus presented the item.

Commissioner Haig recommended the Commission discuss the proposed Code of conduct once there was no pending matters before the Ethics Board.

In reply to the Mayor, CA Kucharek said she had no concerns about the Commission discussing the Code of Conduct while there was a pending matter before the Ethics Board because Code of Conduct and Ethics Ordinance matters were separate.

In reply to Commissioner Haig, CM Markus confirmed that this item was being returned to the Commission presently because the revisions from the last discussion of the item had been completed.

Commissioner Baller raised a number of concerns regarding the proposed Code of Conduct, including that the Code should be specific and that the City has many other sets of rules that already govern Commissioners' conduct. He recommended that anything new proposed by the Code of Conduct be added to another one of the City's documents instead of creating a new document with a new enforcement mechanism.

Commissioner Schafer said the proposed Code seemed intuitive to her and that it could be reduced to a few key points. She said if the Code needed to be codified so everyone would adhere to it, then she was willing to do that.

CM Markus spoke to some of the benefits of having a Code. CA Kucharek noted that there were a number of sections in the Code that do not appear elsewhere. She noted that while the present Commission may agree with the Code and find it intuitive, it was still appropriate to document agreed-upon expectations for future Commissioners.

The Mayor suggested that the Commissioners submit their notes on the Code to the City Manager for review and future discussion. It was decided that Commissioners could submit any relevant comments within 14 days directly to CM Markus.

Commissioner Host agreed that would be appropriate.

MPT McLain spoke in favor of creating a Code that the Commission would agree upon, stating that a more streamlined document could be appropriate if consensus was reached on that. She emphasized the importance of having a Code to guide behavior in a number of situations, including elections, and supported the development of a Code in a timely fashion.

MOTION: Motion by MPT McLain, seconded by Commissioner Haig:
To set a workshop at a time to be determined by the City Manager, with a requirement that Commissioners' written comments be submitted to the City Manager within 14 days.

CM Markus noted he would also share the Commissioners' comments with the City Attorney.

<u>Public Comment</u>

David Bloom spoke in favor of public participation at the upcoming workshop on this matter. He named a few concerns with the document, and said the document could likely be simplified. He said he would provide CM Markus and CA Kucharek with some sample language he thought might be useful.

The Mayor said Mr. Bloom's references could be provided to the Commissioners as part of the workshop.

CM Markus and CA Kucharek provided some further guidance on drafting a Code and what would be discussed at a relevant workshop.

There was brief discussion about whether the Code would qualify as a legal document.

In reply to Commissioner Baller, CA Kucharek said she would provide a copy of the proposed Code with sections unique to the Code highlighted.

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

Nays, None

VII. NEW BUSINESS

02-020-23 Public Hearing for 300 S. Old Woodward – RH – Special Land Use Permit Amendment, Final Site Plan & Design Review

The Mayor opened the public hearing at 8:55 p.m.

PD Dupuis briefly explained the request to postpone.

Seeing no public comment, the Mayor closed the public hearing at 8:58 p.m.

MOTION: Motion by Commissioner Baller, seconded by Commissioner Schafer:
To postpone the public hearing and consideration of the Special Land Use Permit Amendment, Final Site Plan and Design Review application for 300 S. Old Woodward – RH – to February 27, 2023.

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

Nays, None

02-021-23 Public Hearing to amend Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide clear and enforceable outdoor dining standards

The Mayor opened the public hearing at 8:59 p.m..

PD Dupuis presented the item.

Seeing no public comment, the Mayor closed the public hearing at 9:02 p.m.

PD Dupuis, CA Kucharek, and CM Markus answered informational questions from the Commission.

Commissioner Baller recommended the Commission consider whether they wanted to be more permissive with legal non-conforming uses or more stringent with them.

The Mayor noted that some of the establishments in question would already be through their amortization period for their investments in outdoor non-conforming items.

Commissioner Baller asked whether there was a potential discrepancy between Article 4, Section 4.44(B)(5)(ii) and Article 4, Section 4.44(B)(5)(iii). He recommended that the City consider not requiring furniture to be brought in overnight in the winter months unless the furniture remains unused for an excess period of time.

It was noted that defining an excess period of time and enforcing that determination would be difficult for Staff.

Commissioner Baller recommended that 'limited' be removed from Article 4, Section 4.44(C)(5). He recommended that some exceptions be made for umbrella advertising Article 4, Section 4.44(C)(8)(i).

Commissioners Baller, Haig, Schafer, Host and MPT McLain said they were in favor of amortization.

Commissioner Schafer stated that the recommended ordinance amendments had been worked on for two years. She said that establishments were on notice about potential changes.

The Mayor said the solution for the furnishing zone was appropriate. She asked Staff how amortization might be included.

CM Markus said Staff could return with recommendations. He recommended the Commission consider a hybrid between amortization and a sunset clause which could prescribe the earliest date by which the changes must occur and the latest date, with a range dictated by the amortization schedule in between.

In reply to Commissioner Haig, PD Dupuis confirmed that all required reviews for outdoor dining would be conducted to ensure that all codes and zoning requirements will be met.

CM Markus advised the Commission to aim for a very good ordinance, with the understanding that ordinances nearly always require future revisions as a normal part of the process.

MOTION: Motion by Commissioner Baller, seconded by Commissioner Schafer:
To direct Staff to redraft the Outdoor Dining ordinance with the changes suggested and to postpone to February 27, 2023.

CA Kucharek summarized the changes as including the removal of Article 4, Section 4.44(B)(5)(iii), the inclusion of a reference to utilities in Article 4, Section 4.44(B)(3), the addition that 'inspections shall include but are not limited to' those referenced in Article 4, Section 4.44(C)(11), the removal of Article 4, Section 4.44(D)(1) and Article 4, Section 4.44(D)(2), and to introduce an amortization schedule that could prescribe the earliest date by which the changes must occur and the latest date, with a range dictated by the amortization schedule in between.

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

Nays, None

Commission Items for Future Discussion

02-022-23 Marijuana Ordinance

MOTION: Motion by Commissioner Host, seconded by MPT McLain:
To direct Staff to present a proposed marijuana ordinance at the next reasonable agenda.

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

Nays, None

Commission Discussion On Items From A Prior Meeting

Mayor Longe explained her advocacy for the establishment of an Ad Hoc Senior Services Committee.

CM Markus recommended the Commission table consideration of the formation of the Committee for the time being.

Mayor Longe agreed to do so, stating that she may raise the topic again in the future.

02-023-23 Resolution to meet in closed session to discuss the potential purchase of land pursuant to MCL§ 15.268 Sec. 8 (d) of the Open Meetings Act

MOTION: Motion by Commissioner Host, MPT McLain:
To meet in closed session to discuss the potential purchase of land pursuant to MCL§ 15.268 Sec. 8 (d) of the Open Meetings Act.

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

Nays, None

The Commission went into closed session at 10:12 p.m.

The Commission returned from closed session at 11:03 p.m.

VIII. REMOVED FROM CONSENT AGENDA

IX. COMMUNICATIONS

X. REPORTS

A. Commissioner Reports

1. Notice of intention to appoint to the Architectural Review Committee
2. Notice of intention to appoint to the Planning Board
3. Notice of intention to appoint to the Advisory Parking Committee
4. Notice of intention to appoint to the Martha Baldwin Park Board
5. Notice of intention to appoint to the Ad Hoc Environmental Sustainability Board

The Mayor emphasized the new Ad Hoc Environmental Sustainability Board and encouraged members of the public to apply.

In reply to Commissioner Baller, CM Markus said he would speak to Staff to ensure that board opportunities were being publicized widely.

B. Commissioner Comments

MPT McLain reported on the Polar Plunge, noting that it had already raised $1 million for the Special Olympics, and mentioned the Clerk's Office Staff's participation. She recommended that Commissioners watch the MML's recent 'Live at the League' because it focused on funding for middle-income housing. She also shared an interest in developing a day of service program for Martin Luther King, Jr. Day in Birmingham, and invited interested parties to collaborate with her on that.

C. Advisory Boards, Committees, Commissions' Reports and Agendas
D. Legislation
E. City Staff
    1. Ongoing Communication with MDOT

ACM Ecker presented the topic. She noted that Ferndale Mayor Pianna put the slideshow together and was instrumental in the dialogue.

The Mayor and the City Manager noted that ACM Ecker contributed much to the success of the dialogue with MDOT thus far.

Commissioner Baller noted that face-to-face meetings with MDOT seemed to be important in advancing MDOT's understanding of Birmingham's needs.

    2. BSD 2022 Year in Review
    3. Opiate Report

CA Kucharek presented the item.

INFORMATION ONLY

XI. ADJOURN

Mayor Longe adjourned the meeting at 11:05 p.m.

Alexandria Bingham, City Clerk

Laura Eichenhorn, City Transcriptionist

Birmingham City Commission Special Meeting Minutes
City Manager Candidate Meet and Greet
February 15, 2023
Baldwin Public Library, 300 W. Merrill
7:00 P.M.

I. ATTENDANCE

City Commissioners who attended all or part of the event:

Mayor Longe
Mayor Pro Tem McLain
Commissioner Baller
Commissioner Boutros
Commissioner Host

City Commissioners Absent:

Commissioner Haig
Commissioner Schafer

Staff present for all or part of the event:

City Manager Markus, Assistant City Manager Fairbairn, City Clerk Bingham, Human Resources Manager Lambert, City Attorney Kucharek, Information Technology Manager Brunk, Library Director Craft, Finance Director Gerber, Building Official Johnson, Senior Planner Cowan, Department of Public Services Director Zielinski

II. PRESENTATION

- Opening Comments from Mayor Therese Longe
- Guidance from City Attorney Kucharek
- Introduction of Candidates from Human Resources Manager Lambert
- 5-minute introductions by each of the following City Manager Candidates
  - Troy Bell, former City Manager of Muskegon Heights, Michigan
  - Jana Ecker, Assistant City Manager of Birmingham, Michigan
  - Blaine Wing, Interim Village Manager of Sparta, Michigan

III. COMMUNITY ENGAGEMENT

Members of the public were invited to engage with the City Manager Candidates. City Commission members did not engage in interviews of the candidates, rather they enjoyed a social gathering.

Approximately 12 members of the public attended all or part of the Meet and Greet session.

IV. ADJOURN

Mayor Longe thanked the public and candidates for their participation. The Meet and Greet session adjourned at 8:30 p.m.

DRAFT

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
290588		BDREFUND	ADDIXION LLC	1,000.00
290589		003708	AIRGAS USA, LLC	284.36
290590	*	TAXMISC	ALISA A PESKIN-SHEPHERD REVOC TRUST	802.42
290591	*	009372	ALLIED FIRE SALES & SERVICE	67.55
290592	*	009393	AMANDA MCBRIDE	300.00
290593		000167	ANDERSON ECKSTEIN WESTRICK INC	830.50
290594	*	TAXMISC	ANDREW & GRETCHEN HAYES	118.83
290595		009202	AQUARIUM DESIGN INC	240.00
290596		MISC	ASCENSION PROVIDENCE HOSPITAL	1,758.06
290597		MISC	ATTIA GROUP LLC	1,250.00
290597	*	MISC	ATTIA GROUP LLC	500.00
290598	*	000843	BAKER & TAYLOR BOOKS	15.35
290599		MISC	BALBES CUSTOM BUILDERS INC	500.00
290600		BDREFUND	BARNETT BUILDING LLC	500.00
290601		003012	BATTERIES PLUS BULBS	198.60
290602		000524	BIRMINGHAM LOCKSMITH INC	17.97
290603		008355	BIRMINGHAM PUBLIC SCHOOLS	231.66
290604		BDREFUND	BOB STERN BUILDING CO	200.00
290605		003526	BOUND TREE MEDICAL, LLC	116.00
290606		003907	CADILLAC ASPHALT, LLC	7,722.00
290607		009597	CAROL BACAK-EGBO	200.00
290608		009562	EGLE	3,000.00
290609	*	000444	CDW GOVERNMENT INC	145.93
290610		BDREFUND	CEDAR WORKS INC	200.00
290611	*	000902	CENGAGE LEARNING INC	107.16
290612		000605	CINTAS CORPORATION	211.76
290613	*	MISC	CITY OF ROCHESTER HILLS	240.19
290614	*	009540	CIVICPLUS, LLC	1,815.02
290615		009167	COL'S FAMILY RESTAURANT	323.80
290616		BDREFUND	COLE BUSINESS CENTER III LLC	100.00
290617		008512	COOL THREADS EMBROIDERY	393.94
290618		009544	CRB CRANE & SERVICE COMPANY, INC.	600.00
290619	*	009145	CREATIVE COLLABORATIONS	3,800.00
290620		BDREFUND	CREGGER SERVICES INC	179.66
290621		MISC	D.C. POOLS LLC	100.00
290622		009024	THE D.M. BURR GROUP	4,819.00
290623		009529	DAVEY RESOURCE GROUP, INC.	2,275.00
290624	*	TAXMISC	DAVID & MARISA RUBY	12,833.48
290625	*	000177	DELWOOD SUPPLY	60.22
290626		008559	DETROIT BATTERY COMPANY LLC	54.95
290627		007498	RONALD L. DIX	51.09
290628		BDREFUND	DM HOMES OF METRO DETROIT LLC	722.20

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
290629		009583	DOUG MANIGOLD	241.00
290630	*	000179	DTE ENERGY	179.05
290631	*	000179	DTE ENERGY	307.54
290632	*	000179	DTE ENERGY	27.77
290633	*	000179	DTE ENERGY	1,006.77
290634	*	000179	DTE ENERGY	222.04
290635	*	000179	DTE ENERGY	201.29
290636	*	002460	EASTERN MICHIGAN UNIVERSITY	3,500.00
290637		000493	ED RINKE CHEVROLET BUICK GMC	524.99
290638		000196	EJ USA, INC.	337.50
290639		BDREFUND	FEDERAL PAVING INC	100.00
290640		BDREFUND	FERLITO CONSTRUCTION	100.00
290641	*	MISC	FERLITO CONSTRUCTION	100.00
290642	*	007016	FRIENDS OF BIRMINGHAM MUSEUM	802.29
290643	*	MISC	GAIL GAISER	41.00
290644		MISC	GALWAY CONSTRUCTION	200.00
290645		BDREFUND	GREAT LAKES CUSTOM BUILDER LLC	12,400.00
290646		000249	GUARDIAN ALARM	263.58
290647		BDREFUND	HAGGERTY, JOHN R	600.00
290648		MISC	HEBERT, GEORGE	100.00
290649	*	001956	HOME DEPOT CREDIT SERVICES	763.79
290650	*	MISC	HOME INSPECTION PLUS INC	100.00
290651	*	MISC	HOWARD, MARILYN	100.00
290652	*	MISC	IAN NOCK	26.20
290653		001090	INGRAM LIBRARY SERVICES	4,063.61
290653	*	001090	INGRAM LIBRARY SERVICES	1,677.54
290655		MISC	INSTA-DRY BASEMENT SYSTEMS INC	100.00
290656		BDREFUND	JAMES FISHER LICENSED BUILDERS	100.00
290657		MISC	JANELLE LYNN WHIPPLE-BOYCE	100.00
290658		BDREFUND	JBE MANAGEMENT LLC	1,000.00
290659	*	MISC	JUDSON CENTER	100.00
290660		BDREFUND	KARP HOLDINGS INC	500.00
290661		BDREFUND	KEARNS BROTHERS INC	300.00
290662	*	TAXMISC	KEVIN & EVELYN JOY	1,496.29
290663		MISC	KHANSA GROUP	100.00
290664		MISC	KIMBERLY J KENNEDY REVOC TRUST	350.00
290665		004904	KONICA MINOLTA BUSINESS SOLUTIONS	2,667.60
290666		009524	KRAEMER DESIGN GROUP LLC	1,600.00
290667		BDREFUND	LAKES CONSTRUCTION	1,000.00
290668		BDREFUND	LAKES DEVELOPMENT GROUP	500.00
290669		MISC	LAUREN GONZALEZ	4.99
290670	*	009386	LAW OFFICE OF BRIAN P. FENECH	1,200.00
290671	*	009388	LAW OFFICE OF PATRICK G. GAGNIUK	300.00

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
290672	*	009598	JEFFERY KRAGT	895.05
290673	*	MISC	LEMAN ADEL AUSI	100.00
290674		BDREFUND	LEVINE & SONS INC	814.00
290675		006817	LEXISNEXIS RISK DATA MANAGEMENT INC	100.00
290676		000797	THE LIBRARY NETWORK	1,660.27
290677	*	TAXMISC	LINDA K BAKER	1,032.47
290678	*	008360	LINKEDIN CORPORATION	7,000.00
290679		009375	LITHIA MOTORS, INC SUPPORT SERVICES	3,095.49
290680		BDREFUND	LIVE WELL CUSTOM HOME LLC	2,500.00
290681		BDREFUND	LOUIS LEVINE & SONS	1,000.00
290682		MISC	MAC CONSTRUCTION, INC.	100.00
290683		MISC	MACQUEEN EMERGENCY	1,136.20
290684		BDREFUND	MARKER CONSTRUCTION LLC	200.00
290685	*	MISC	MATTHEW W ROSS CONSTRUCTIOIN LLC	100.00
290686	*	009585	MECHAM MECHANICAL SERVICES, INC	1,630.41
290687		009351	MERRITT CIESLAK DESIGN PLC	11,880.00
290688	*	TAXMISC	MICHAEL & SUSAN KILLELEA	6,300.27
290689	*	009200	MICHAEL MORRISON	750.00
290690	*	BDREFUND	MICHIGAN BASEMENTS	200.00
290691		004388	MICHIGAN CHAPTER I.A.E.I.	190.00
290692		MISC	MICHIGAN EGRESS LLC	200.00
290693	*	MISC	MICHIGAN GARDENER	135.00
290694		BDREFUND	MILFORD CONTRACTING	3,500.00
290695		007163	MOBILE HEALTH RESOURCES	2,614.12
290696	*	MISC	MOCERI PLUMBING & HEATING INC	100.00
290697		BDREFUND	MR ROOF HOLDING CO LLC	100.00
290698		MISC	N.C. CEMENT	100.00
290699		009596	WP COMPANY LLC	2,205.00
290700		006723	NEWMIND GROUP, INC	216.00
290701	*	MISC	NORTH WINDS BUILDING AND CONST	100.00
290702		BDREFUND	NU PIPE LLC	247.75
290703		MISC	OAK ELECTRIC SERVICE INC	168.75
290704	*	000477	OAKLAND COUNTY	495,270.52
290705		004370	OCCUPATIONAL HEALTH CENTERS	215.00
290706		000678	OCLC, INC.	319.87
290707	*	009478	ODP BUSINESS SOLUTIONS, LLC	166.46
290708		MISC	OFFER & ASSOCIATES INC	200.00
290709		008669	OHM ADVISORS INC	11,355.75
290710	*	006785	OVERDRIVE, INC.	14,395.60
290711		MISC	OVERLAND CONTRACTING INC.	200.00
290712	*	MISC	PAGE, WOLFBERG & WIRTH LLC	2,500.00
290713		BDREFUND	PAUL CAPPUSO	1,000.00
290714		MISC	PELLA WINDOWS & DOORS, INC.	500.00

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
290715		MISC	PINNACLE HOMES OF MICHIGAN LLC	100.00
290716		009595	PIPELOGIX INC	2,500.00
290717		008028	PK SAFETY SUPPLY	260.00
290718	*	000486	PLANTE & MORAN PLLC	11,575.00
290719		BDREFUND	PLUMBERZ NORTH AMERICA	1,000.00
290720	*	006691	SCOT POUNDERS	18.34
290721	*	007170	PRO PUMP CONTROLS INC	942.00
290722	*	006625	PTS COMMUNICATIONS, INC	78.00
290723		BDREFUND	REDGUARD FIRE SECURITY	70.00
290724		BDREFUND	ROBERT JOHN WEIDER	100.00
290725	*	MISC	RON AND ROMAN	100.00
290726		MISC	ROSELLI CONSTRUCTION INC	100.00
290727		MISC	ROYAL OAK KITCHENS INC	100.00
290728	*	002806	SAM'S CLUB/SYNCHRONY BANK	731.42
290729		MISC	SAS SERVICES INC	100.00
290730		BDREFUND	SEALCOATING AND PAVING	100.00
290731		MISC	SHERATON GRAND RAPIDS	238.00
290732	*	007142	SHERWIN-WILLIAMS COMPANY	350.83
290733	*	004202	SHRED-IT USA	192.18
290734		002524	SIGNGRAPHIX INC.	824.00
290735		MISC	SOLDIER BUILDING	1,527.08
290736		MISC	SOULLIERE STONE DESIGN	50.00
290737		000260	SPARTAN DISTRIBUTORS INC	2,339.95
290738	*	MISC	SPARTAN PAVING	100.00
290739	*	MISC	St Onge Masonry LLC	100.00
290740		BDREFUND	STEWART BUILDING	1,150.00
290741	*	001076	TAYLOR FREEZER OF MICH INC	325.00
290742	*	MISC	TEMPLETON BUILDING COMPANY	200.00
290743	*	009384	THE EDITH BLAKNEY LAW FIRM, PLLC	600.00
290744		BDREFUND	THORNTON & GROOMS INC.	123.65
290745		000275	TIRE WHOLESALERS CO INC	591.84
290746	*	009552	TRAFFIC & SAFETY CONTROL SYSTEMS	123,983.00
290747		MISC	UZNIS-DENEWETH CO	5,750.00
290748	*	000158	VERIZON WIRELESS	151.16
290749	*	000158	VERIZON WIRELESS	1,116.35
290750		BDREFUND	WALLSIDE WINDOWS	500.00
290751	*	004497	WATERFORD REGIONAL FIRE DEPT.	179.50
290752		000299	WEINGARTZ SUPPLY CO.	189.98
290753		009026	WELLS FARGO VENDOR FIN SERV	677.87
290754		BDREFUND	WINSTON AND SONS HOME IMPROVEMENT L	100.00
290755		MISC	WISE, ADAM P	2,500.00
290756	*	008902	ZORO TOOLS, INC.	15.67
290757		BDREFUND	ZWEIG, BRYAN M	200.00

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
			SUBTOTAL PAPER CHECK	$826,736.34
EFT TRANSFER				
" "		001843	ASCE/MEMBERSHIP	283.00
" "		CC MISC	AVIS	60.76
" "		009521	AWS	353.97
" "		CC MISC	BAKEHOUSE 46	45.08
" "		009430	CENTER FOR TECHNOLOGY AND TRAINING	60.00
" "		008955	COMCAST	12.90
" "	*	008955	COMCAST	83.20
" "		007774	COMCAST BUSINESS	979.27
" "		006172	CONSTANT CONTACT, INC.	1,771.00
" "		CC MISC	DELTA AIRLINES	3,184.50
" "		CC MISC	EXPEDIA	179.14
" "	*	008730	FACEBOOK/META HEADQUARTERS	99.53
" "		005524	FRIENDS OF THE ROUGE	89.00
" "		009427	GO DADDY	21.17
" "		009571	GOOGLE	3.98
" "		CC MISC	HOOT SUITE	588.00
" "		005990	ICC INC	910.00
" "		CC MISC	JACKNOB CORP.	67.50
" "	*	000362	KROGER COMPANY	56.01
" "		CC MISC	MENARDS	216.17
" "		004663	MGIA-MICHIGAN GREEN INDUSTRY ASSOC.	239.00
" "		001497	MICHIGAN STATE POLICE	800.00
" "	*	004876	NATIONAL LEAGUE OF CITIES	2,064.00
" "		006117	OAKLAND PRESS	14.00
" "	*	006117	OAKLAND PRESS	40.00
" "	*	004457	PAPA JOE'S MARKET	554.35
" "		CC MISC	PESTED.COM	90.00
" "	*	002518	PITNEY BOWES INC	195.00
" "		008974	PREMIER PET SUPPLY	140.98
" "		002852	QMI GROUP INC	120.00
" "		001334	RECIPROCAL ELECTRICAL COUNCIL INC	65.00
" "		002602	SIRCHIE ACQUISITION COMPANY	157.50
" "		001824	SOCIETY FOR HUMAN RESOURCE MGMNT	458.00
" "		CC MISC	SOUTHEASTER MICHIGAN ASSOCIATION	40.00
" "		CC MISC	SPARX	427.11
" "		002171	WEISSMAN'S COSTUMES	210.42
" "		CC MISC	WIRED SUBSCIPTION	5.00
" "	*	CC MISC	WUFOO	349.00
" "		004753	MICHIGAN ASSN OF PLANNING	150.00
" "		009362	BRYCER LLC	17.00
" "		CC MISC	CMS MEDICARE APPLIC FE	688.00

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
" "	*	008955	COMCAST	350.64
" "		009407	INTERNATIONAL ASSOCIATION OF	215.00
" "		CC MISC	MI STATE POLICE PMTS	400.00
" "		002021	SMAFC	20.00
			SUBTOTAL EFT TRANSFER	$16,874.18
ACH TRANSACTION				
7178		009126	AMAZON CAPITAL SERVICES INC	(25.58)
7233	*	007622	ALLSTAR PRO GOLF	677.10
7234		009126	AMAZON CAPITAL SERVICES INC	743.90
7235		009126	AMAZON CAPITAL SERVICES INC	79.99
7236		009126	AMAZON CAPITAL SERVICES INC	33.01
7237		009126	AMAZON CAPITAL SERVICES INC	49.99
7238		009126	AMAZON CAPITAL SERVICES INC	16.99
7239		009126	AMAZON CAPITAL SERVICES INC	72.53
7240		009126	AMAZON CAPITAL SERVICES INC	52.99
7241		009126	AMAZON CAPITAL SERVICES INC	99.79
7242		009126	AMAZON CAPITAL SERVICES INC	58.68
7243		009126	AMAZON CAPITAL SERVICES INC	28.48
7244		009126	AMAZON CAPITAL SERVICES INC	12.49
7245		009126	AMAZON CAPITAL SERVICES INC	443.56
7246	*	001357	ART/DESIGN GROUP LTD	130.00
7247	*	003839	MATTHEW J. BARTALINO	105.95
7248	*	000517	BEIER HOWLETT P.C.	33,979.05
7249	*	007624	BIRMINGHAM OIL CHANGE CENTER, LLC	38.47
7250	*	000542	BLUE WATER INDUSTRIAL PRODUCTS INC	99.75
7251		009183	BOB ADAMS TOWING	165.00
7252		007875	CANFIELD EQUIPMENT SERVICE INC.	4,425.40
7253		001750	COMERICA BANK	1,151.92
7253		001750	COMERICA BANK	272,619.00
7254		003176	COMERICA BANK - RHC	1,070.67
7254		003176	COMERICA BANK - RHC	120,732.91
7255		009515	KAMERON DIMITRY	157.86
7256	*	000565	DORNBOS SIGN & SAFETY INC	307.00
7257	*	000995	EQUATURE	280.00
7258	*	000243	GRAINGER	300.61
7259		008293	GRAINGER, INC	473.82
7260	*	001672	HAYES PRECISION INC	90.00
7261	*	009390	IDUMESARO LAW FIRM, PLLC	650.00
7262		000261	J.H. HART URBAN FORESTRY	21,953.00
7263		009298	JCR SUPPLY INC	728.93
7264	*	003458	JOE'S AUTO PARTS, INC.	881.92
7265	*	004085	KONE INC	2,086.45

Meeting of 02/27/2023

City of Birmingham
Warrant List Dated 02/15/2023

Check Number	Early Release	Vendor #	Vendor	Amount
7266	*	009392	LAMB LEGAL CONSULTING SERVICES	300.00
7267	*	009385	LAW OFFICE OF MICHAEL J. DICK	1,000.00
7268	*	005550	LEE & ASSOCIATES CO., INC.	1,483.40
7269		000377	MICHIGAN MUNICIPAL LEAGUE	69,721.00
7270		002013	MIDWEST TAPE	9.99
7271	*	001194	NELSON BROTHERS SEWER	130.00
7272	*	009276	NEWTONS SOLUTIONS LLC	2,275.00
7273	*	006027	PENCHURA, LLC	506.00
7274	*	001062	QUALITY COACH COLLISION	897.60
7275	*	003554	RKA PETROLEUM	22,154.25
7276	*	001181	ROSE PEST SOLUTIONS	74.00
7277		005861	UNIQUE MGMT SERVICE, INC	51.50
7278	*	000969	VIGILANTE SECURITY INC	600.50
7279		009128	WITMER PUBLIC SAFETY GROUP INC	70.67
7280	*	009379	YELLOW DOOR LAW	4,500.00
7281		009592	YOURMEMBERSHIP.COM, INC	450.00
			SUBTOTAL ACH TRANSACTION	$568,995.54
			GRAND TOTAL	$1,412,606.06

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 02/22/2023

Check Number	Early Release	Vendor #	Vendor	Amount
PAPER CHECK				
290758	*	000855	48TH DISTRICT COURT	500.00
290759		009346	ACCUFORM PRINTING & GRAPHICS, INC	395.00
290760		006638	ACTION MAT & TOWEL RENTAL, INC	70.72
290761	*	MISC	ANN PARKER	28.00
290762		008977	JOBMATCH LLC DBA APPLICANTPRO	1,378.00
290763		007033	APPLIED IMAGING	274.76
290764		000500	ARTECH PRINTING INC	753.00
290765	*	006759	AT&T	155.87
290766	*	006759	AT&T	185.25
290767	*	006759	AT&T	155.87
290768	*	000843	BAKER & TAYLOR BOOKS	825.54
290769		000408	BALDWIN PUBLIC LIBRARY	35.94
290770		002231	BILLINGS LAWN EQUIPMENT INC.	220.55
290771	*	006953	JACQUELYN BRITO	125.00
290772	*	MISC	BUCHANAN, LINDA	50.00
290773	*	008658	BWMS-BLUE WATER MGMT INC	825.00
290774		000605	CINTAS CORPORATION	171.06
290775	*	000605	CINTAS CORPORATION	128.83
290776		000605	CINTAS CORPORATION	72.40
290777	*	TAXMISC	CITY OF WIXOM	14.06
290778		009319	COMPTON PRESS INDUSTRIES LLC	3,148.96
290779	*	000627	CONSUMERS ENERGY	1,910.86
290780		008512	COOL THREADS EMBROIDERY	666.92
290781	*	TAXMISC	CORELOGIC TAX SERVICE	348.48
290782		003923	CUMMINS BRIDGEWAY LLC	52.13
290783	*	000575	DEMCO, INC	153.78
290784		008191	DETROIT JEWISH NEWS	800.00
290785		009130	DOG WASTE DEPOT	299.95
290786	*	000180	DTE ENERGY	49,118.69
290787		004493	ELITE IMAGING SYSTEMS, INC	906.27
290788		001495	ETNA SUPPLY	1,785.00
290789		006654	FLEETPRIDE INC	480.42
290790		007212	FOSTER BLUE WATER OIL	2,259.11
290791	*	MISC	GEORGE DILGARD	12.00
290792	*	004604	GORDON FOOD	79.46
290793		000249	GUARDIAN ALARM	181.58
290794		001531	GUNNERS METER & PARTS INC	1,813.00
290795	*	009563	HOWIES HOCKEY INC	491.37
290796		001090	INGRAM LIBRARY SERVICES	3,007.20
290796	*	001090	INGRAM LIBRARY SERVICES	624.25
290797	*	009401	IRENE S WASSEL	300.00
290798	*	MISC	JAMES OMALLEY	14.00

City of Birmingham
Warrant List Dated 02/22/2023

Meeting of 02/27/2023

Check Number	Early Release	Vendor #	Vendor	Amount
290799	*	MISC	JAMES SUHAY JR.	28.00
290800		009564	JOE PIZIK ELECTRIC	189.20
290801	*	009403	JUSTIN ZAYID	300.00
290802	*	005465	RYAN KEARNEY	596.25
290803	*	MISC	KHALIL, JAD	1,489.60
290804	*	009388	LAW OFFICE OF PATRICK G. GAGNIUK	620.00
290805		000797	THE LIBRARY NETWORK	559.30
290806	*	009422	ALEX LINKE	250.00
290807	*	007521	LUIGI FERDINANDI & SON INC	172,828.20
290808	*	UBREFUND	MAXIMO GARCIA SANCHEZ	284.32
290809		000888	MCKENNA ASSOCIATES INC	35,777.00
290810		002459	MICHIGAN PARKING ASSOCIATION	250.00
290811		001950	MILLER CANFIELD PADDOCK AND	770.00
290812		001169	MJ AWARDS	10.00
290813	*	000477	OAKLAND COUNTY	309,178.39
290814	*	000919	OAKLAND COUNTY TREASURER	30.00
290815	*	000919	OAKLAND COUNTY TREASURER	30.00
290816		004370	OCCUPATIONAL HEALTH CENTERS	86.00
290817	*	009478	ODP BUSINESS SOLUTIONS, LLC	92.78
290818	*	007588	PERMACARD	456.12
290819		001263	POSITIVE PROMOTIONS INC	1,986.18
290820		009364	POWERPHONE	12,498.00
290821		008783	PRESIDIO NETWORKED SOLUTIONS GROUP	2,791.94
290822		005379	RED WING BUSINESS ADVANTAGE ACCT	161.99
290823		002566	REYNOLDS WATER	110.81
290824	*	MISC	RICHARD FALCK	160.00
290825	*	MISC	RODGER DABISH	66.10
290826		006347	SOUTHERN COMPUTER WAREHOUSE	1,650.00
290827		000260	SPARTAN DISTRIBUTORS INC	280.87
290828		007831	STOPSTICK, LTD.	495.00
290829		004544	STRYKER SALES CORPORATION	7,556.40
290830		000272	TENNANT SALES & SVC CO	2,076.60
290831		000275	TIRE WHOLESALERS CO INC	891.98
290832	*	000158	VERIZON WIRELESS	128.49
290833	*	000158	VERIZON WIRELESS	308.16
290834	*	000158	VERIZON WIRELESS	98.18
290835	*	002996	GREG WALD	411.19
290836	*	002171	WEISSMAN'S COSTUMES	34.16
290837		009349	WELLSTREET URGENT CARE OF MICHIGAN	90.00
290838		001490	WEST SHORE FIRE INC	267.50
290839	*	008391	XEROX CORPORATION	120.90
			SUBTOTAL PAPER CHECK	$630,827.89

ACH TRANSACTION

City of Birmingham
Warrant List Dated 02/22/2023

Check Number	Early Release	Vendor #	Vendor	Amount
7283	*	002284	ABEL ELECTRONICS INC	2,344.00
7284		008847	ABS- AUTOMATED BENEFIT SVCS, INC	7,497.85
7284	*	008847	ABS- AUTOMATED BENEFIT SVCS, INC	32,347.22
7285		009126	AMAZON CAPITAL SERVICES INC	76.60
7286		009126	AMAZON CAPITAL SERVICES INC	73.49
7287		009126	AMAZON CAPITAL SERVICES INC	9.98
7288		009126	AMAZON CAPITAL SERVICES INC	19.26
7289		009126	AMAZON CAPITAL SERVICES INC	25.99
7290		009126	AMAZON CAPITAL SERVICES INC	61.99
7291		009126	AMAZON CAPITAL SERVICES INC	9.98
7292		009126	AMAZON CAPITAL SERVICES INC	25.12
7293	*	009126	AMAZON CAPITAL SERVICES INC	182.27
7294		009126	AMAZON CAPITAL SERVICES INC	161.40
7295		009126	AMAZON CAPITAL SERVICES INC	9.56
7296		009126	AMAZON CAPITAL SERVICES INC	17.69
7297		009126	AMAZON CAPITAL SERVICES INC	57.93
7298		009126	AMAZON CAPITAL SERVICES INC	39.59
7299		009126	AMAZON CAPITAL SERVICES INC	23.81
7300		009126	AMAZON CAPITAL SERVICES INC	74.99
7301		009126	AMAZON CAPITAL SERVICES INC	21.99
7302		009126	AMAZON CAPITAL SERVICES INC	31.47
7303		009126	AMAZON CAPITAL SERVICES INC	1,264.82
7304		009126	AMAZON CAPITAL SERVICES INC	219.55
7305	*	000517	BEIER HOWLETT P.C.	1,971.75
7306		009183	BOB ADAMS TOWING	236.90
7307	*	009396	CECILIA QUIRINDONGO BAUNSOE	300.00
7308	*	009122	CLAIRE CHUNG	557.75
7309	*	009246	CITY OF BIRMINGHAM #243	16,037.75
7310	*	008044	CLUB PROPHET	540.00
7311		002668	CONTRACTORS CLOTHING CO	987.82
7312	*	001367	CONTRACTORS CONNECTION INC	258.00
7313	*	007538	EGANIX, INC.	720.00
7314		000213	FIRE DEFENSE EQUIP CO INC	39.00
7315		001230	FIRE SYSTEMS OF MICHIGAN LLC	226.75
7315	*	001230	FIRE SYSTEMS OF MICHIGAN LLC	132.25
7316	*	007807	G2 CONSULTING GROUP LLC	15,310.97
7317		007927	MICHELLE HOLLO	560.00
7318		000331	HUBBELL ROTH & CLARK INC	26,050.00
7319	*	007870	J.C. EHRLICH CO. INC.	59.89
7320	*	002576	JAX KAR WASH	427.50
7321		009249	JCC CREATIVE LLC	150.00
7322		009298	JCR SUPPLY INC	875.39
7323	*	003458	JOE'S AUTO PARTS, INC.	1,575.89

Meeting of 02/27/2023

City of Birmingham
Warrant List Dated 02/22/2023

Check Number	Early Release	Vendor #	Vendor	Amount
7324	*	008827	KANOPY, INC	431.80
7325	*	007827	HAILEY R KASPER	292.50
7326	*	009385	LAW OFFICE OF MICHAEL J. DICK	300.00
7327	*	005550	LEE & ASSOCIATES CO., INC.	215.10
7328	*	009398	MARCIA C ROSS PC	300.00
7329		002013	MIDWEST TAPE	2,095.44
7329	*	002013	MIDWEST TAPE	8,131.26
7330		009331	MY CONCIERGE MICHIGAN, LLC	89.00
7331	*	007856	NEXT	216.00
7332	*	006359	NYE UNIFORM COMPANY	2,004.00
7333	*	009395	ORLANDO LAW PRACTICE PC	600.00
7334	*	006853	PAUL C SCOTT PLUMBING INC	460.00
7335	*	001753	PEPSI COLA	406.32
7336		000254	SOCRRA	73,144.00
7336	*	000254	SOCRRA	1,158.34
7337	*	000969	VIGILANTE SECURITY INC	950.00
7338	*	007278	WHITLOCK BUSINESS SYSTEMS, INC.	1,840.70
7339	*	007900	RYAN WISEMAN	25.00
7340	*	009379	YELLOW DOOR LAW	470.00
			SUBTOTAL ACH TRANSACTION	$204,743.62
			GRAND TOTAL	$835,571.51

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.

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Fire Department

DATE: February 27, 2023

TO: Thomas M. Markus, City Manager

FROM: Paul A. Wells, Fire Chief

SUBJECT: Park Street, West Side Parking Ban

INTRODUCTION:
The Birmingham Fire Department prioritizes the safety and protection of our community. Allowing vehicles to park on both sides of Park Street presents a significant risk to the neighborhood due to the street being too narrow to allow fire trucks to navigate if vehicles are parked across from each other. At present time, parking is temporarily restricted on the west side of the street.

BACKGROUND:
Three years ago, on December 17, 2019, at approximately 11 p.m., the fire department had a structure fire at 520 Park St. The home was under renovation and the fire was extinguished quickly without causing damage to the homes next door, which were in close proximity to the incident address.

Birmingham FD Ladder 1 was instrumental in extinguishing the third floor fire that breached the roof. Park Street has permit parking allowed on both sides of the street. If this fire happened at a time when both sides of the street had vehicles parked, there would have been a response delay since the fire trucks would not have been able to pass the parked vehicles. Additionally, in order to raise the ladder on Ladder 1, its stabilizing outriggers require an additional 6 feet of clearance on both sides.

After the fire, the police department temporarily banned parking on the west side of the street while construction vehicles continually congested the street without parking permits. This constant parking congestion caused issues with fire department to have road access.

At some point, the temporary parking ban on the west side was lifted and we are back to having road access issues. Parking enforcement was called by the fire department to clear out the vehicles without permits twice in October 2022. However, there is still an access issue any time two mid-sized SUVs with permits are parked across from each other on the street. Our fire trucks simply cannot pass. Beginning on November 8, 2022, at the request of the fire department, the police department temporarily suspended parking again on the west side of Park St. until a

permanent ban can be completed. Since the temporary west side parking ban in November there have been no complaints to the police or fire departments from the local residents.

Park Street is only 23′ 11″ feet wide at Oakland and gets more narrow traveling north. A large SUV/Truck is approximately 7.5 feet wide and current fire department engine trucks and ladder truck are approximately 10.5 feet wide. With parking on both sides of the street, 15 feet is accounted for SUVs. Fire department trucks account for 10.5 feet. This totals 25.5 feet worth of vehicles that will not safely clear one another on a street less than 24 feet wide (23′ 11″).

The request to permanently ban parking on the west side of Park street was presented to the Multi-Modal board on February 2, 2023. The board unanimously voted to support the proposed ban and move the issue to the City Commission for consideration.

LEGAL REVIEW:
In the 2021 International Fire Code, Section 503.4, states:
"Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles."
503.2.1 states:
"Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm). Exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches."

Therefore, in order for the City to be in compliance, the Fire Department and Police Department must assure that roadways are not obstructed for emergency vehicles to have free navigation across roadways.

FISCAL IMPACT:
None

PUBLIC COMMUNICATIONS:
N/A

SUMMARY:
In summary, the fire department is requesting that Park Street north of Oakland have permanent no parking signs placed along the west side of the street so that emergency vehicles can respond and operate without obstructions.

ATTACHMENTS:
1. Pictures of cars blocking the street

SUGGESTED BOARD ACTION:
Make a motion adopting a resolution to enact a traffic control order for Park Street north of Oakland allowing permitted parking only on the east side of the street, to post "no parking signs" on the west side of the street and to direct the police department to enforce such an order.

5H

5H

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Engineering Department

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Melissa A. Coatta, City Engineer**

SUBJECT: **Michigan Department of Transportation (MDOT) Contract Agreement for Cranbrook Non-Motorized Pathway Improvement**

INTRODUCTION:
The City received a Transportation Alternative Program (TAP) Grant from the Michigan Department of Transportation (MDOT) to install a non-motorized pathway along Cranbrook Road from 14 Mile to Midvale, and extend the sidewalks from the path along 14 Mile Road west of Cranbrook Road and along W. Lincoln Avenue east of Cranbrook Road. This project is being bid through MDOT and a resolution is required for the contract agreement.

BACKGROUND:
The City's 2013 Multi-Modal Plan discussed certain multi-modal improvements along Cranbrook Road. In 2019, the Road Commission for Oakland County (RCOC) approached the City with their plans for resurfacing Cranbrook Road and the City, along with the Multi-Modal Transportation Board (MMTB), requested certain elements to be incorporated in RCOC's project. In late 2019, the City submitted a TAP grant application and received notification in March 2020 that the grant was awarded.

For projects utilizing TAP funding, the projects are administered by MDOT's Local Agency Program (LAP). MDOT is responsible for advertising the project and receiving the bids, and will recommend award of the project. A contract agreement is required between the City and MDOT for the construction of the project. MDOT will enter into a contract with the contractor and the City pays MDOT for the work in accordance with the agreement.

Final plans and specifications were submitted to MDOT on November 23, 2022, which results in a bid letting (or opening date) of March 3, 2023. Construction on the project is expected to begin in the middle of April with final completion in Fall 2023.

LEGAL REVIEW:
The City Attorney has reviewed the agreement and has no comments or objections.

FISCAL IMPACT:
The construction cost of the project is estimated to be $1,396,100.00, with the TAP Grant covering $1,116,755.00. The City's cost will therefore be $279,345.00. The project will be funded by the following accounts:

Fund Account	Fund ID Number	City's Share of Construction Costs
Major Streets	202.0-449.001-981.0100	$187,161.15
Sidewalks	101.0-444.000-981.0100	$92,183.85
City's Share of Construction Costs		$279,345.00

This project has been planned and is included in the approved FY22/23 budget and no amendments are required for this project.

PUBLIC COMMUNICATIONS:
This project required one (1) sidewalk easement, one (1) right of way easement, and four (4) temporary entry agreement construction easements. The individual property owners who granted the easements have been informed about this project.

The City will hold a public meeting with property owners along the project area around the end March, and will provide flyers/notices and email updates to property owners during construction. The City's social media outlets will be used to provide general updates of the project.

SUMMARY:
It is recommended that the City Commission accept the $1,116,755 TAP Grant by entering into a contract with MDOT and authorize the City Engineer to electronically sign the agreement.

ATTACHMENTS:

- MDOT Contract No. 23-5001 (29 pages)
- Construction Plans (25 pages)

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve Contract No. 23-5001, Control Section TAU 63000, Job Number 23A0194 by and between the Michigan Department of Transportation and the City of Birmingham. In addition, authorize the City Engineer to sign the agreement on behalf of the city.

TAP DA

Control Section	TAU 63000
Job Number	210951CON
Project	23A0194
CFDA No.	20.205 (Highway Research Planning & Construction)
Contract No.	23-5001

PART I

THIS CONTRACT, consisting of PART I and PART II (Standard Agreement Provisions), is made by and between the MICHIGAN DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the "DEPARTMENT"; and the CITY OF BIRMINGHAM, a Michigan municipal corporation, hereinafter referred to as the "REQUESTING PARTY"; for the purpose of fixing the rights and obligations of the parties in agreeing to the following improvements, in Birmingham, Michigan, hereinafter referred to as the "PROJECT" and estimated in detail on EXHIBIT "I", dated January 23, 2023, attached hereto and made a part hereof:

PART A – FEDERAL PARTICIPATION
Concrete shared use path, sidewalk, curb ramps, and curb and gutter along 14 Mile Road from the west city limits to Cranbrook Road, along Cranbrook Road from 14 Mile Road to Midvale Road and along Lincoln Avenue from Cranbrook Road to Golfview Boulevard, including grading, subbase, aggregate base and shoulder, drainage, retaining wall, fence, permanent signing and pavement markings; and all together with necessary related work.

PART B – NO FEDERAL PARTICIPATION
Permit fees for the PROJECT as described in PART A; and all together with necessary related work.

WITNESSETH:

WHEREAS, pursuant to Federal law, monies have been provided for the performance of transportation enhancement activities; and

WHEREAS, it has been determined that the PROJECT qualifies for such funding by virtue of its direct relationship with the intermodal transportation system; and

WHEREAS, the reference "FHWA" in PART I and PART II refers to the United States Department of Transportation, Federal Highway Administration; and

WHEREAS, the PROJECT, or portions of the PROJECT, at the request of the REQUESTING PARTY, are being programmed with the FHWA, for implementation with the use of Federal Funds under the following Federal program(s) or funding:

TRANSPORTATION ALTERNATIVES PROGRAM

WHEREAS, the parties hereto have reached an understanding with each other regarding the performance of the PROJECT work and desire to set forth this understanding in the form of a written contract.

NOW, THEREFORE, in consideration of the premises and of the mutual undertakings of the parties and in conformity with applicable law, it is agreed:

1. The parties hereto shall undertake and complete the PROJECT in accordance with the terms of this contract.

2. The term "PROJECT COST", as herein used, is hereby defined as the cost of the physical construction necessary for the completion of the PROJECT, including any other costs incurred by the DEPARTMENT as a result of this contract, except construction engineering and inspection.

No charges will be made by the DEPARTMENT to the PROJECT for any inspection work or construction engineering.

The costs incurred by the REQUESTING PARTY for preliminary engineering, construction engineering, construction materials testing, inspection, and right-of-way are excluded from the PROJECT COST as defined by this contract.

The Michigan Department of Environment, Great Lakes, and Energy has informed the DEPARTMENT that it adopted new administrative rules (R 325.10101, et. seq.) which prohibit any governmental agency from connecting and/or reconnecting lead and/or galvanized service lines to existing and/or new water main. Questions regarding these administrative rules should be directed to Michigan Department of Environment, Great Lakes, and Energy. The cost associated with replacement of any lead and/or galvanized service lines, including but not limited to contractor claims, will be the sole responsibility of the REQUESTING PARTY.

3. The DEPARTMENT is authorized by the REQUESTING PARTY to administer on behalf of the REQUESTING PARTY all phases of the PROJECT including advertising and awarding the construction contract for the PROJECT or portions of the PROJECT. Such administration shall be in accordance with PART II, Section II of this contract.

Any items of the PROJECT COST incurred by the DEPARTMENT may be charged to the PROJECT.

4. The REQUESTING PARTY, under the terms of this contract, shall:

A. At no cost to the PROJECT

(1) Design or cause to be designed the plans for the PROJECT.

(2) Appoint a project engineer who shall be in responsible charge of the PROJECT and ensure that the plans and specifications are followed.

(3) Perform or cause to be performed the construction engineering, construction materials testing, and inspection services necessary for the completion of the PROJECT.

B. At least 10 days prior to any ceremony to be held in connection with the PROJECT, notify the DEPARTMENT.

C. When issuing any news release or promotional material regarding the PROJECT, give the DEPARTMENT and FHWA credit for participation in the PROJECT and provide a copy of such material to the DEPARTMENT.

The REQUESTING PARTY will furnish the DEPARTMENT proposed timing sequences for trunkline signals that, if any, are being made part of the improvement. No timing adjustments shall be made by the REQUESTING PARTY at any trunkline intersection, without prior issuances by the DEPARTMENT of Standard Traffic Signal Timing Permits.

5. The PROJECT COST shall be met in accordance with the following:

PART A
Federal Funds shall be applied to the eligible items of the PART A portion of the PROJECT COST up to the lesser of: (1) $1,116,755, or (2) an amount such that 81.85 percent, the normal Federal participation ratio for such funds, for the PART A portion of the PROJECT is not exceeded at the time of the award of the construction contract. The balance of the PART A portion of the PROJECT COST, after deduction of Federal Funds, shall be charged to and paid by the REQUESTING PARTY in the manner and at the times hereinafter set forth.

PART B
The PART B portion of the PROJECT COST is not eligible for Federal participation and shall be charged to and paid 100 percent by the REQUESTING PARTY in the manner and at the times hereinafter set forth.

Any items of PROJECT COST not reimbursed by Federal Funds will be the sole responsibility of the REQUESTING PARTY.

6. No working capital deposit will be required for this PROJECT.

In order to fulfill the obligations assumed by the REQUESTING PARTY under the provisions of this contract, the REQUESTING PARTY shall make prompt payments of its share of the PROJECT COST upon receipt of progress billings from the DEPARTMENT as herein provided. All payments will be made within 30 days of receipt of billings from the DEPARTMENT. Billings to the REQUESTING PARTY will be based upon the REQUESTING PARTY'S share of the actual costs incurred less Federal Funds earned as the PROJECT progresses.

7. It is understood that the REQUESTING PARTY is responsible for the facilities constructed as the PROJECT and that said facilities may require special or unusual operation and/or maintenance. The REQUESTING PARTY certifies, by execution of this contract, that upon completion of construction and at no cost to the PROJECT or the DEPARTMENT, it will properly maintain or provide for the maintenance and operation of the PROJECT, making ample provisions each year for the performance of such maintenance work as may be required. Upon completion of the PROJECT, the REQUESTING PARTY shall accept the facilities constructed as built to specifications within the construction contract documents.

On projects involving the mobility for bicyclists, the REQUESTING PARTY will enact no ordinances or regulations prohibiting the use of bicycles on the facility hereinbefore described as the PROJECT and will amend any existing restrictive ordinances in this regard so as to allow use of this facility by bicycles. No motorized vehicles shall be permitted on such facility constructed as the PROJECT except those for maintenance or emergency assistance purposes, or mobility for persons with disabilities.

On projects involving the restoration of historic facilities, the REQUESTING PARTY agrees that the project will not be awarded until the owner of such facilities has an Historic Preservation Covenant, which includes an Historic Preservation Easement, or an Historic Preservation Agreement, as appropriate, with the Michigan State Historic Preservation Office in accordance with 1995 PA 60 for the purpose of ensuring that the historic property will be preserved. The REQUESTING PARTY also agrees that such facilities shall be maintained and repaired by the REQUESTING PARTY or owner, as applicable, at no cost to the DEPARTMENT or the PROJECT, in such a manner as to preserve the historical integrity of features, materials, appearance, workmanship, and environment.

On projects which include landscaping, the DEPARTMENT, at PROJECT COST, agrees to perform or cause to be performed, the watering and cultivating necessary to properly establish the plantings for a period of two growing seasons, in general conformance with Section 815.03(L) of the DEPARTMENT'S Standard Specifications for Construction. The REQUESTING PARTY shall maintain all plantings following completion of said period of establishment.

Failure of the REQUESTING PARTY to fulfill its responsibilities as outlined herein may disqualify the REQUESTING PARTY from future Federal aid participation in Transportation Alternatives Program projects or in other projects on roads or streets for which it has maintenance responsibility. Federal aid may be withheld until such time as deficiencies in regulations have been corrected, and the improvements constructed as the PROJECT are brought to a satisfactory condition of maintenance.

8. The performance of the entire PROJECT under this contract, whether Federally funded or not, will be subject to the provisions and requirements of PART II that are applicable to a Federally funded project.

In the event of any discrepancies between PART I and PART II of this contract, the provisions of PART I shall prevail.

Buy America Requirements (23 CFR 635.410) shall apply to the PROJECT and will be adhered to, as applicable, by the parties hereto.

9. The REQUESTING PARTY certifies that it is not aware if and has no reason to believe that the property on which the work is to be performed under this agreement is a facility, as defined by the Michigan Natural Resources and Environmental Protection Act [(NREPA), PA 451, 1994, as amended 2012]; MCL 324.20101(1)(s). The REQUESTING PARTY also certifies that it is not a liable party pursuant to either Part 201 or Part 213 of NREPA, MCL 324.20126 et seq. and MCL 324.21323a et seq. The REQUESTING PARTY is a local unit of government that has acquired or will acquire property for the use of either a transportation corridor or public right-of-way and was not responsible for any activities causing a release or threat of release of any hazardous materials at or on the property. The REQUESTING PARTY is not a person who is liable for response activity costs, pursuant to MCL 324.20101 (vv) and (ww).

10. If, subsequent to execution of this contract, previously unknown hazardous substances are discovered within the PROJECT limits, which require environmental remediation pursuant to either state or federal law, the REQUESTING PARTY, in addition to reporting that fact to the Michigan Department of Environment, Great Lakes, and Energy, shall immediately notify the DEPARTMENT, both orally and in writing of such discovery. The DEPARTMENT shall consult with the REQUESTING PARTY to determine if it is willing to pay for the cost of remediation and, with the FHWA, to determine the eligibility, for reimbursement, of the remediation costs. The REQUESTING PARTY shall be charged for and shall pay all costs associated with such remediation, including all delay costs of the contractor for the PROJECT, in the event that remediation and delay costs are not deemed eligible by the FHWA. If the REQUESTING PARTY refuses to participate in the cost of remediation, the DEPARTMENT shall terminate the PROJECT. The parties agree that any costs or damages that the DEPARTMENT incurs as a result of such termination shall be considered a PROJECT COST.

11. If federal and/or state funds administered by the DEPARTMENT are used to pay the cost of remediating any hazardous substances discovered after the execution of this contract and if there is a reasonable likelihood of recovery, the REQUESTING PARTY, in cooperation with the Michigan Department of Environment, Great Lakes, and Energy and the DEPARTMENT, shall make a diligent effort to recover such costs from all other possible entities. If recovery is made, the DEPARTMENT shall be reimbursed from such recovery for the proportionate share of the amount paid by the FHWA and/or the DEPARTMENT and the DEPARTMENT shall credit such sums to the appropriate funding source.

12. The DEPARTMENT'S sole reason for entering into this contract is to enable the REQUESTING PARTY to obtain and use funds provided by the Federal Highway Administration pursuant to Title 23 of the United States Code.

Any and all approvals of, reviews of, and recommendations regarding contracts, agreements, permits, plans, specifications, or documents, of any nature, or any inspections of work by the DEPARTMENT or its agents pursuant to the terms of this contract are done to assist the REQUESTING PARTY in meeting program guidelines in order to qualify for available funds. Such approvals, reviews, inspections, and recommendations by the DEPARTMENT shall not relieve the REQUESTING PARTY of its ultimate control and shall not be construed as a warranty of their propriety or that the DEPARTMENT is assuming any liability, control, or jurisdiction.

The providing of recommendations or advice by the DEPARTMENT or its agents does not relieve the REQUESTING PARTY and the local agencies, as applicable of their exclusive jurisdiction of any of their highways and responsibility under MCL 691.1402 et seq., as amended.

When providing approvals, reviews and recommendations under this contract, the DEPARTMENT or its agents is performing a governmental function, as that term is defined in MCL 691.1401 et seq., as amended, which is incidental to the completion of the PROJECT.

Upon completion of the PROJECT, the REQUESTING PARTY shall accept the facilities constructed as built to specifications within the contract documents. It is understood that the REQUESTING PARTY shall own the facilities and shall operate and maintain the facilities in accordance with all applicable Federal and State laws and regulations, including, but not limited to, Title II of the Americans with Disabilities Act (ADA), 42 USC 12131 et seq., and its associated regulations and standards, and DEPARTMENT Road and Bridge Standard Plans and the Standard Specifications for Construction.

13. The DEPARTMENT, by executing this contract, and rendering services pursuant to this contract, has not and does not assume jurisdiction of any REQUESTING PARTY highway for purposes of MCL 691.1402 et seq., as amended. Exclusive jurisdiction of such highway for the purposes of MCL 691.1402 et seq., as amended, rests with the REQUESTING PARTY and other local agencies having respective jurisdiction.

14. The REQUESTING PARTY shall approve all of the plans and specifications to be used on the PROJECT and shall be deemed to have approved all changes to the plans and specifications when put into effect. It is agreed that ultimate responsibility and control over the PROJECT rests with the REQUESTING PARTY and local agencies, as applicable.

15. The REQUESTING PARTY agrees that the costs reported to the DEPARTMENT for this contract will represent only those items that are properly chargeable in accordance with this contract. The REQUESTING PARTY also certifies that it has read the contract terms and has made itself aware of the applicable laws, regulations, and terms of this contract that apply to the reporting of costs incurred under the terms of this contract.

16. Each party to this contract will remain responsible for any and all claims arising out of its own acts and/or omissions during the performance of the contract, as provided by this contract or by law. In addition, this is not intended to increase or decrease either party's liability for or immunity from tort claims. This contract is also not intended to nor will it be interpreted as giving either party a right of indemnification, either by contract or by law, for claims arising out of the performance of this contract.

17. The parties shall promptly provide comprehensive assistance and cooperation in defending and resolving any claims brought against the DEPARTMENT by the contractor, vendors or suppliers as a result of the DEPARTMENT'S award of the construction contract for the PROJECT. Costs incurred by the DEPARTMENT in defending or resolving such claims shall be considered PROJECT COSTS.

18. The DEPARTMENT shall require the contractor who is awarded the contract for the construction of the PROJECT to provide insurance in the amounts specified and in accordance with the DEPARTMENT'S current Standard Specifications for Construction and to:

A. Maintain bodily injury and property damage insurance for the duration of the PROJECT.

B. Provide owner's protective liability insurance naming as insureds the State of Michigan, the Michigan State Transportation Commission, the DEPARTMENT and its officials, agents and employees, the REQUESTING PARTY and any other county, county road commission, or municipality in whose jurisdiction the PROJECT is located, and their employees, for the duration of the PROJECT and to provide, upon request, copies of certificates of insurance to the insureds. It is understood that the DEPARTMENT does not assume either ownership of any portion of the PROJECT or jurisdiction of any REQUESTING PARTY highway as a result of being named as an insured on the owner's protective liability insurance policy.

C. Comply with the requirements of notice of cancellation and reduction of insurance set forth in the current standard specifications for construction and to provide, upon request, copies of notices and reports prepared to those insured.

19. This contract shall become binding on the parties hereto and of full force and effect upon the signing thereof by the duly authorized officials for the parties hereto and upon the adoption of the necessary resolutions approving said contract and authorizing the signatures thereto of the respective officials of the REQUESTING PARTY, a certified copy of which resolution shall be attached to this contract.

IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed as written below.

CITY OF BIRMINGHAM

By_____
Title:

By _____
Title:

MICHIGAN DEPARTMENT
OF TRANSPORTATION

By _____
Department Director MDOT

REVIEWED
By Larry Doyle at 11:31 am, 1/30/23

January 23, 2023

EXHIBIT I

CONTROL SECTION	TAU 63000
JOB NUMBER	210951CON
PROJECT	23A0194

ESTIMATED COST

CONTRACTED WORK

	PART A	PART B	TOTAL
Estimated Cost	$1,391,000	$ 5,100	$1,396,100

COST PARTICIPATION

GRAND TOTAL ESTIMATED COST	$1,391,000	$ 5,100	$1,396,100
Less Federal Funds*	$1,116,755	$ 0	$1,116,755
BALANCE (REQUESTING PARTY'S SHARE)	$ 274,245	$ 5,100	$ 279,345

*Federal Funds for the PROJECT are limited to an amount as described in Section 5.

NO DEPOSIT

PART II

STANDARD AGREEMENT PROVISIONS

SECTION I COMPLIANCE WITH REGULATIONS AND DIRECTIVES

SECTION II PROJECT ADMINISTRATION AND SUPERVISION

SECTION III ACCOUNTING AND BILLING

SECTION IV MAINTENANCE AND OPERATION

SECTION V SPECIAL PROGRAM AND PROJECT CONDITIONS

SECTION I

COMPLIANCE WITH REGULATIONS AND DIRECTIVES

A. To qualify for eligible cost, all work shall be documented in accordance with the requirements and procedures of the DEPARTMENT.

B. All work on projects for which reimbursement with Federal funds is requested shall be performed in accordance with the requirements and guidelines set forth in the following Directives of the Federal-Aid Policy Guide (FAPG) of the FHWA, as applicable, and as referenced in pertinent sections of Title 23 and Title 49 of the Code of Federal Regulations (CFR), and all supplements and amendments thereto.

1. Engineering

   a. FAPG (6012.1): Preliminary Engineering

   b. FAPG (23 CFR 172): Administration of Engineering and Design Related Service Contracts

   c. FAPG (23 CFR 635A): Contract Procedures

   d. FAPG (49 CFR 18.22): Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments–Allowable Costs

2. Construction

   a. FAPG (23 CFR 140E): Administrative Settlement Costs-Contract Claims

   b. FAPG (23 CFR 140B): Construction Engineering Costs

   c. FAPG (23 CFR 17): Recordkeeping and Retention Requirements for Federal-Aid Highway Records of State Highway Agencies

   d. FAPG (23 CFR 635A): Contract Procedures

   e. FAPG (23 CFR 635B): Force Account Construction

   f. FAPG (23 CFR 645A): Utility Relocations, Adjustments and Reimbursement

g. FAPG (23 CFR 645B): Accommodation of Utilities (PPM 30-4.1)

h. FAPG (23 CFR 655F): Traffic Control Devices on Federal-Aid and other Streets and Highways

i. FAPG (49 CFR 18.22): Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments–Allowable Costs

3. Modification Or Construction Of Railroad Facilities

a. FAPG (23 CFR 140I): Reimbursement for Railroad Work

b. FAPG (23 CFR 646B): Railroad Highway Projects

C. In conformance with FAPG (23 CFR 630C) Project Agreements, the political subdivisions party to this contract, on those Federally funded projects which exceed a total cost of $100,000.00 stipulate the following with respect to their specific jurisdictions:

1. That any facility to be utilized in performance under or to benefit from this contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities issued pursuant to the requirements of the Federal Clean Air Act, as amended, and the Federal Water Pollution Control Act, as amended.

2. That they each agree to comply with all of the requirements of Section 114 of the Federal Clean Air Act and Section 308 of the Federal Water Pollution Control Act, and all regulations and guidelines issued thereunder.

3. That as a condition of Federal aid pursuant to this contract they shall notify the DEPARTMENT of the receipt of any advice indicating that a facility to be utilized in performance under or to benefit from this contract is under consideration to be listed on the EPA List of Violating Facilities.

D. Ensure that the PROJECT is constructed in accordance with and incorporates all committed environmental impact mitigation measures listed in approved environmental documents unless modified or deleted by approval of the FHWA.

E. All the requirements, guidelines, conditions and restrictions noted in all other pertinent Directives and Instructional Memoranda of the FHWA will apply to this contract and will be adhered to, as applicable, by the parties hereto.

SECTION II

PROJECT ADMINISTRATION AND SUPERVISION

A. The DEPARTMENT shall provide such administrative guidance as it determines is required by the PROJECT in order to facilitate the obtaining of available federal and/or state funds.

B. The DEPARTMENT will advertise and award all contracted portions of the PROJECT work. Prior to advertising of the PROJECT for receipt of bids, the REQUESTING PARTY may delete any portion or all of the PROJECT work. After receipt of bids for the PROJECT, the REQUESTING PARTY shall have the right to reject the amount bid for the PROJECT prior to the award of the contract for the PROJECT only if such amount exceeds by ten percent (10%) the final engineer's estimate therefor. If such rejection of the bids is not received in writing within two (2) weeks after letting, the DEPARTMENT will assume concurrence. The DEPARTMENT may, upon request, readvertise the PROJECT. Should the REQUESTING PARTY so request in writing within the aforesaid two (2) week period after letting, the PROJECT will be cancelled and the DEPARTMENT will refund the unused balance of the deposit less all costs incurred by the DEPARTMENT.

C. The DEPARTMENT will perform such inspection services on PROJECT work performed by the REQUESTING PARTY with its own forces as is required to ensure compliance with the approved plans & specifications.

D. On those projects funded with Federal monies, the DEPARTMENT shall as may be required secure from the FHWA approval of plans and specifications, and such cost estimates for FHWA participation in the PROJECT COST.

E. All work in connection with the PROJECT shall be performed in conformance with the Michigan Department of Transportation Standard Specifications for Construction, and the supplemental specifications, Special Provisions and plans pertaining to the PROJECT and all materials furnished and used in the construction of the PROJECT shall conform to the aforesaid specifications. No extra work shall be performed nor changes in plans and specifications made until said work or changes are approved by the project engineer and authorized by the DEPARTMENT.

F. Should it be necessary or desirable that portions of the work covered by this contract be accomplished by a consulting firm, a railway company, or governmental agency, firm, person, or corporation, under a subcontract with the REQUESTING PARTY at PROJECT expense, such subcontracted arrangements will be covered by formal written agreement between the REQUESTING PARTY and that party.

This formal written agreement shall: include a reference to the specific prime contract to which it pertains; include provisions which clearly set forth the maximum reimbursable and the basis of payment; provide for the maintenance of accounting records in accordance with generally accepted accounting principles, which clearly document the actual cost of the services provided; provide that costs eligible for reimbursement shall be in accordance with clearly defined cost criteria such as 49 CFR Part 18, 48 CFR Part 31, 23 CFR Part 140, OMB Circular A-87, etc. as applicable; provide for access to the department or its representatives to inspect and audit all data and records related to the agreement for a minimum of three years after the department's final payment to the local unit.

All such agreements will be submitted for approval by the DEPARTMENT and, if applicable, by the FHWA prior to execution thereof, except for agreements for amounts less than $100,000 for preliminary engineering and testing services executed under and in accordance with the provisions of the "Small Purchase Procedures" FAPG (23 CFR 172), which do not require prior approval of the DEPARTMENT or the FHWA.

Any such approval by the DEPARTMENT shall in no way be construed as a warranty of the subcontractor's qualifications, financial integrity, or ability to perform the work being subcontracted.

G. The REQUESTING PARTY, at no cost to the PROJECT or the DEPARTMENT, shall make such arrangements with railway companies, utilities, etc., as may be necessary for the performance of work required for the PROJECT but for which Federal or other reimbursement will not be requested.

H. The REQUESTING PARTY, at no cost to the PROJECT, or the DEPARTMENT, shall secure, as necessary, all agreements and approvals of the PROJECT with railway companies, the Railroad Safety & Tariffs Division of the DEPARTMENT and other concerned governmental agencies other than the FHWA, and will forward same to the DEPARTMENT for such reviews and approvals as may be required.

I. No PROJECT work for which reimbursement will be requested by the REQUESTING PARTY is to be subcontracted or performed until the DEPARTMENT gives written notification that such work may commence.

J. The REQUESTING PARTY shall be responsible for the payment of all costs and expenses incurred in the performance of the work it agrees to undertake and perform.

K. The REQUESTING PARTY shall pay directly to the party performing the work all billings for the services performed on the PROJECT which are authorized by or through the REQUESTING PARTY.

L. The REQUESTING PARTY shall submit to the DEPARTMENT all paid billings for which reimbursement is desired in accordance with DEPARTMENT procedures.

M. All work by a consulting firm will be performed in compliance with the applicable provisions of 1980 PA 299, Subsection 2001, MCL 339.2001; MSA 18.425(2001), as well as in accordance with the provisions of all previously cited Directives of the FHWA.

N. The project engineer shall be subject to such administrative guidance as may be deemed necessary to ensure compliance with program requirement and, in those instances where a consultant firm is retained to provide engineering and inspection services, the personnel performing those services shall be subject to the same conditions.

O. The DEPARTMENT, in administering the PROJECT in accordance with applicable Federal and State requirements and regulations, neither assumes nor becomes liable for any obligations undertaken or arising between the REQUESTING PARTY and any other party with respect to the PROJECT.

P. In the event it is determined by the DEPARTMENT that there will be either insufficient Federal funds or insufficient time to properly administer such funds for the entire PROJECT or portions thereof, the DEPARTMENT, prior to advertising or issuing authorization for work performance, may cancel the PROJECT, or any portion thereof, and upon written notice to the parties this contract shall be void and of no effect with respect to that cancelled portion of the PROJECT. Any PROJECT deposits previously made by the parties on the cancelled portions of the PROJECT will be promptly refunded.

Q. Those projects funded with Federal monies will be subject to inspection at all times by the DEPARTMENT and the FHWA.

SECTION III

ACCOUNTING AND BILLING

A. Procedures for billing for work undertaken by the REQUESTING PARTY:

1. The REQUESTING PARTY shall establish and maintain accurate records, in accordance with generally accepted accounting principles, of all expenses incurred for which payment is sought or made under this contract, said records to be hereinafter referred to as the "RECORDS". Separate accounts shall be established and maintained for all costs incurred under this contract.

The REQUESTING PARTY shall maintain the RECORDS for at least three (3) years from the date of final payment of Federal Aid made by the DEPARTMENT under this contract. In the event of a dispute with regard to the allowable expenses or any other issue under this contract, the REQUESTING PARTY shall thereafter continue to maintain the RECORDS at least until that dispute has been finally decided and the time for all available challenges or appeals of that decision has expired.

The DEPARTMENT, or its representative, may inspect, copy, or audit the RECORDS at any reasonable time after giving reasonable notice.

If any part of the work is subcontracted, the REQUESTING PARTY shall assure compliance with the above for all subcontracted work.

In the event that an audit performed by or on behalf of the DEPARTMENT indicates an adjustment to the costs reported under this contract, or questions the allowability of an item of expense, the DEPARTMENT shall promptly submit to the REQUESTING PARTY, a Notice of Audit Results and a copy of the audit report which may supplement or modify any tentative findings verbally communicated to the REQUESTING PARTY at the completion of an audit.

Within sixty (60) days after the date of the Notice of Audit Results, the REQUESTING PARTY shall: (a) respond in writing to the responsible Bureau or the DEPARTMENT indicating whether or not it concurs with the audit report, (b) clearly explain the nature and basis for any disagreement as to a disallowed item of expense and, (c) submit to the DEPARTMENT a written explanation as to any questioned or no opinion expressed item of expense, hereinafter referred to as the "RESPONSE". The RESPONSE shall be clearly stated and provide any supporting documentation necessary to resolve any disagreement or questioned or no opinion expressed item of expense. Where the documentation is voluminous, the REQUESTING PARTY may supply appropriate excerpts and make alternate

arrangements to conveniently and reasonably make that documentation available for review by the DEPARTMENT. The RESPONSE shall refer to and apply the language of the contract. The REQUESTING PARTY agrees that failure to submit a RESPONSE within the sixty (60) day period constitutes agreement with any disallowance of an item of expense and authorizes the DEPARTMENT to finally disallow any items of questioned or no opinion expressed cost.

The DEPARTMENT shall make its decision with regard to any Notice of Audit Results and RESPONSE within one hundred twenty (120) days after the date of the Notice of Audit Results. If the DEPARTMENT determines that an overpayment has been made to the REQUESTING PARTY, the REQUESTING PARTY shall repay that amount to the DEPARTMENT or reach agreement with the DEPARTMENT on a repayment schedule within thirty (30) days after the date of an invoice from the DEPARTMENT. If the REQUESTING PARTY fails to repay the overpayment or reach agreement with the DEPARTMENT on a repayment schedule within the thirty (30) day period, the REQUESTING PARTY agrees that the DEPARTMENT shall deduct all or a portion of the overpayment from any funds then or thereafter payable by the DEPARTMENT to the REQUESTING PARTY under this contract or any other agreement, or payable to the REQUESTING PARTY under the terms of 1951 PA 51, as applicable. Interest will be assessed on any partial payments or repayment schedules based on the unpaid balance at the end of each month until the balance is paid in full. The assessment of interest will begin thirty (30) days from the date of the invoice. The rate of interest will be based on the Michigan Department of Treasury common cash funds interest earnings. The rate of interest will be reviewed annually by the DEPARTMENT and adjusted as necessary based on the Michigan Department of Treasury common cash funds interest earnings. The REQUESTING PARTY expressly consents to this withholding or offsetting of funds under those circumstances, reserving the right to file a lawsuit in the Court of Claims to contest the DEPARTMENT'S decision only as to any item of expense the disallowance of which was disputed by the REQUESTING PARTY in a timely filed RESPONSE.

The REQUESTING PARTY shall comply with the Single Audit Act of 1984, as amended, including, but not limited to, the Single Audit Amendments of 1996 (31 USC 7501-7507).

The REQUESTING PARTY shall adhere to the following requirements associated with audits of accounts and records:

a. Agencies expending a total of $500,000 or more in federal funds, from one or more funding sources in its fiscal year, shall comply with the requirements of the federal Office of Management and Budget (OMB) Circular A-133, as revised or amended.

The agency shall submit two copies of:

The Reporting Package
The Data Collection Form
The management letter to the agency, if one issued by the audit firm

The OMB Circular A-133 audit must be submitted to the address below in accordance with the time frame established in the circular, as revised or amended.

b. Agencies expending less than $500,000 in federal funds must submit a letter to the Department advising that a circular audit was not required. The letter shall indicate the applicable fiscal year, the amount of federal funds spent, the name(s) of the Department federal programs, and the CFDA grant number(s). This information must also be submitted to the address below.

c. Address: Michigan Department of Education
Accounting Service Center
Hannah Building
608 Allegan Street
Lansing, MI 48909

d. Agencies must also comply with applicable State laws and regulations relative to audit requirements.

e. Agencies shall not charge audit costs to Department's federal programs which are not in accordance with the OMB Circular A-133 requirements.

f. All agencies are subject to the federally required monitoring activities, which may include limited scope reviews and other on-site monitoring.

2. Agreed Unit Prices Work - All billings for work undertaken by the REQUESTING PARTY on an agreed unit price basis will be submitted in accordance with the Michigan Department of Transportation Standard Specifications for Construction and pertinent FAPG Directives and Guidelines of the FHWA.

3. Force Account Work and Subcontracted Work - All billings submitted to the DEPARTMENT for Federal reimbursement for items of work performed on a force account basis or by any subcontract with a consulting firm, railway company, governmental agency or other party, under the terms of this contract, shall be prepared in accordance with the provisions of the pertinent FHPM Directives and the procedures of the DEPARTMENT. Progress billings may be submitted monthly during the time work is being performed provided, however, that no bill of a lesser amount than $1,000.00 shall be submitted unless it is a final

or end of fiscal year billing. All billings shall be labeled either "Progress Bill Number _____", or "Final Billing".

4. Final billing under this contract shall be submitted in a timely manner but not later than six months after completion of the work. Billings for work submitted later than six months after completion of the work will not be paid.

5. Upon receipt of billings for reimbursement for work undertaken by the REQUESTING PARTY on projects funded with Federal monies, the DEPARTMENT will act as billing agent for the REQUESTING PARTY, consolidating said billings with those for its own force account work and presenting these consolidated billings to the FHWA for payment. Upon receipt of reimbursement from the FHWA, the DEPARTMENT will promptly forward to the REQUESTING PARTY its share of said reimbursement.

6. Upon receipt of billings for reimbursement for work undertaken by the REQUESTING PARTY on projects funded with non-Federal monies, the DEPARTMENT will promptly forward to the REQUESTING PARTY reimbursement of eligible costs.

B. Payment of Contracted and DEPARTMENT Costs:

1. As work on the PROJECT commences, the initial payments for contracted work and/or costs incurred by the DEPARTMENT will be made from the working capital deposit. Receipt of progress payments of Federal funds, and where applicable, State Critical Bridge funds, will be used to replenish the working capital deposit. The REQUESTING PARTY shall make prompt payments of its share of the contracted and/or DEPARTMENT incurred portion of the PROJECT COST upon receipt of progress billings from the DEPARTMENT. Progress billings will be based upon the REQUESTING PARTY'S share of the actual costs incurred as work on the PROJECT progresses and will be submitted, as required, until it is determined by the DEPARTMENT that there is sufficient available working capital to meet the remaining anticipated PROJECT COSTS. All progress payments will be made within thirty (30) days of receipt of billings. No monthly billing of a lesser amount than $1,000.00 will be made unless it is a final or end of fiscal year billing. Should the DEPARTMENT determine that the available working capital exceeds the remaining anticipated PROJECT COSTS, the DEPARTMENT may reimburse the REQUESTING PARTY such excess. Upon completion of the PROJECT, payment of all PROJECT COSTS, receipt of all applicable monies from the FHWA, and completion of necessary audits, the REQUESTING PARTY will be reimbursed the balance of its deposit.

2. In the event that the bid, plus contingencies, for the contracted, and/or the DEPARTMENT incurred portion of the PROJECT work exceeds the estimated cost therefor as established by this contract, the REQUESTING PARTY may be advised and billed for the additional amount of its share.

C. General Conditions:

1. The DEPARTMENT, in accordance with its procedures in existence and covering the time period involved, shall make payment for interest earned on the balance of working capital deposits for all projects on account with the DEPARTMENT. The REQUESTING PARTY in accordance with DEPARTMENT procedures in existence and covering the time period involved, shall make payment for interest owed on any deficit balance of working capital deposits for all projects on account with the DEPARTMENT. This payment or billing is processed on an annual basis corresponding to the State of Michigan fiscal year. Upon receipt of billing for interest incurred, the REQUESTING PARTY promises and shall promptly pay the DEPARTMENT said amount.

2. Pursuant to the authority granted by law, the REQUESTING PARTY hereby irrevocably pledges a sufficient amount of funds received by it from the Michigan Transportation Fund to meet its obligations as specified in PART I and PART II. If the REQUESTING PARTY shall fail to make any of its required payments when due, as specified herein, the DEPARTMENT shall immediately notify the REQUESTING PARTY and the State Treasurer of the State of Michigan or such other state officer or agency having charge and control over disbursement of the Michigan Transportation Fund, pursuant to law, of the fact of such default and the amount thereof, and, if such default is not cured by payment within ten (10) days, said State Treasurer or other state officer or agency is then authorized and directed to withhold from the first of such monies thereafter allocated by law to the REQUESTING PARTY from the Michigan Transportation Fund sufficient monies to remove the default, and to credit the REQUESTING PARTY with payment thereof, and to notify the REQUESTING PARTY in writing of such fact.

3. Upon completion of all work under this contract and final audit by the DEPARTMENT or the FHWA, the REQUESTING PARTY promises to promptly repay the DEPARTMENT for any disallowed items of costs previously disbursed by the DEPARTMENT. The REQUESTING PARTY pledges its future receipts from the Michigan Transportation Fund for repayment of all disallowed items and, upon failure to make repayment for any disallowed items within ninety (90) days of demand made by the DEPARTMENT, the DEPARTMENT is hereby authorized to withhold an equal amount from the REQUESTING PARTY'S share of any future distribution of Michigan Transportation Funds in settlement of said claim.

4. The DEPARTMENT shall maintain and keep accurate records and accounts relative to the cost of the PROJECT and upon completion of the PROJECT, payment of all items of PROJECT COST, receipt of all Federal Aid, if any, and completion of final audit by the DEPARTMENT and if applicable, by the FHWA, shall make final accounting to the REQUESTING PARTY. The final PROJECT accounting will not include interest earned or charged on working capital deposited for the PROJECT which will be accounted for separately at the close of the State of Michigan fiscal year and as set forth in Section C(1).

5. The costs of engineering and other services performed on those projects involving specific program funds and one hundred percent (100%) local funds will be apportioned to the respective portions of that project in the same ratio as the actual direct construction costs unless otherwise specified in PART I.

SECTION IV

MAINTENANCE AND OPERATION

A. Upon completion of construction of each part of the PROJECT, at no cost to the DEPARTMENT or the PROJECT, each of the parties hereto, within their respective jurisdictions, will make the following provisions for the maintenance and operation of the completed PROJECT:

1. All Projects:

   Properly maintain and operate each part of the project, making ample provisions each year for the performance of such maintenance work as may be required, except as qualified in paragraph 2b of this section.

2. Projects Financed in Part with Federal Monies:

   a. Sign and mark each part of the PROJECT, in accordance with the current Michigan Manual of Uniform Traffic control Devices, and will not install, or permit to be installed, any signs, signals or markings not in conformance with the standards approved by the FHWA, pursuant to 23 USC 109(d).

   b. Remove, prior to completion of the PROJECT, all encroachments from the roadway right-of-way within the limits of each part of the PROJECT.

      With respect to new or existing utility installations within the right-of-way of Federal Aid projects and pursuant to FAPG (23 CFR 645B): Occupancy of non-limited access right-of-way may be allowed based on consideration for traffic safety and necessary preservation of roadside space and aesthetic quality. Longitudinal occupancy of non-limited access right-of-way by private lines will require a finding of significant economic hardship, the unavailability of practicable alternatives or other extenuating circumstances.

   c. Cause to be enacted, maintained and enforced, ordinances and regulations for proper traffic operations in accordance with the plans of the PROJECT.

   d. Make no changes to ordinances or regulations enacted, or traffic controls installed in conjunction with the PROJECT work without prior review by the DEPARTMENT and approval of the FHWA, if required.

B. On projects for the removal of roadside obstacles, the parties, upon completion of construction of each part of the PROJECT, at no cost to the PROJECT or the DEPARTMENT, will, within their respective jurisdictions, take such action as is necessary to assure that the roadway right-of-way, cleared as the PROJECT, will be maintained free of such obstacles.

C. On projects for the construction of bikeways, the parties will enact no ordinances or regulations prohibiting the use of bicycles on the facility hereinbefore described as the PROJECT, and will amend any existing restrictive ordinances in this regard so as to allow use of this facility by bicycles. No motorized vehicles shall be permitted on such bikeways or walkways constructed as the PROJECT except those for maintenance purposes.

D. Failure of the parties hereto to fulfill their respective responsibilities as outlined herein may disqualify that party from future Federal-aid participation in projects on roads or streets for which it has maintenance responsibility. Federal Aid may be withheld until such time as deficiencies in regulations have been corrected, and the improvements constructed as the PROJECT are brought to a satisfactory condition of maintenance.

SECTION V

SPECIAL PROGRAM AND PROJECT CONDITIONS

A. Those projects for which the REQUESTING PARTY has been reimbursed with Federal monies for the acquisition of right-of-way must be under construction by the close of the twentieth (20th) fiscal year following the fiscal year in which the FHWA and the DEPARTMENT projects agreement covering that work is executed, or the REQUESTING PARTY may be required to repay to the DEPARTMENT, for forwarding to the FHWA, all monies distributed as the FHWA'S contribution to that right-of-way.

B. Those projects for which the REQUESTING PARTY has been reimbursed with Federal monies for the performance of preliminary engineering must be under construction by the close of the tenth (10th) fiscal year following the fiscal year in which the FHWA and the DEPARTMENT projects agreement covering that work is executed, or the REQUESTING PARTY may be required to repay to the DEPARTMENT, for forwarding to the FHWA, all monies distributed as the FHWA'S contribution to that preliminary engineering.

C. On those projects funded with Federal monies, the REQUESTING PARTY, at no cost to the PROJECT or the DEPARTMENT, will provide such accident information as is available and such other information as may be required under the program in order to make the proper assessment of the safety benefits derived from the work performed as the PROJECT. The REQUESTING PARTY will cooperate with the DEPARTMENT in the development of reports and such analysis as may be required and will, when requested by the DEPARTMENT, forward to the DEPARTMENT, in such form as is necessary, the required information.

D. In connection with the performance of PROJECT work under this contract the parties hereto (hereinafter in Appendix "A" referred to as the "contractor") agree to comply with the State of Michigan provisions for "Prohibition of Discrimination in State Contracts", as set forth in Appendix A, attached hereto and made a part hereof. The parties further covenant that they will comply with the Civil Rights Acts of 1964, being P.L. 88-352, 78 Stat. 241, as amended, being Title 42 U.S.C. Sections 1971, 1975a-1975d, and 2000a-2000h-6 and the Regulations of the United States Department of Transportation (49 C.F.R. Part 21) issued pursuant to said Act, including Appendix "B", attached hereto and made a part hereof, and will require similar covenants on the part of any contractor or subcontractor employed in the performance of this contract.

E. The parties will carry out the applicable requirements of the DEPARTMENT'S Disadvantaged Business Enterprise (DBE) program and 49 CFR, Part 26, including, but not limited to, those requirements set forth in Appendix C.

APPENDIX A
PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS

In connection with the performance of work under this contract; the contractor agrees as follows:

1. In accordance with Public Act 453 of 1976 (Elliott-Larsen Civil Rights Act), the contractor shall not discriminate against an employee or applicant for employment with respect to hire, tenure, treatment, 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. A breach of this covenant will be regarded as a material breach of this contract. Further, in accordance with Public Act 220 of 1976 (Persons with Disabilities Civil Rights Act), as amended by Public Act 478 of 1980, the contractor shall not 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 a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants will be regarded as a material breach of this contract.

2. The contractor hereby agrees that any and all subcontracts to this contract, whereby a portion of the work set forth in this contract is to be performed, shall contain a covenant the same as hereinabove set forth in Section 1 of this Appendix.

3. The contractor will take affirmative action to ensure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or any disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action shall include, but not be limited to, the following: employment; treatment; upgrading; demotion or transfer; recruitment; advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

4. The contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.

5. The contractor or its collective bargaining representative shall send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding a notice advising such labor union or workers' representative of the contractor's commitments under this Appendix.

6. The contractor shall comply with all relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission that may be in effect prior to the taking of bids for any individual state project.

7. The contractor shall furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of each subcontractor, as well as the contractor itself, and said contractor shall permit access to the contractor's books, records, and accounts by the Michigan Civil Rights Commission and/or its agent for the purposes of investigation to ascertain compliance under this contract and relevant rules, regulations, and orders of the Michigan Civil Rights Commission.

8. In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that a contractor has not complied with the contractual obligations under this contract, the Michigan Civil Rights Commission may, as a part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which State Administrative Board may order the cancellation of the contract found to have been violated and/or declare the contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, including the governing boards of institutions of higher education, until the contractor complies with said order of the Michigan Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.

9. The contractor shall include or incorporate by reference, the provisions of the foregoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Michigan Civil Rights Commission; all subcontracts and purchase orders will also state that said provisions will be binding upon each subcontractor or supplier.

Revised June 2011

APPENDIX B
TITLE VI ASSURANCE

During the performance of this contract, the contractor, for itself, its assignees, and its successors in interest (hereinafter referred to as the "contractor"), agrees as follows:

1. **Compliance with Regulations**: For all federally assisted programs, the contractor shall comply with the nondiscrimination regulations set forth in 49 CFR Part 21, as may be amended from time to time (hereinafter referred to as the Regulations). Such Regulations are incorporated herein by reference and made a part of this contract.

2. **Nondiscrimination**: The contractor, with regard to the work performed under the contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection, retention, and treatment of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices, when the contractor covers a program set forth in Appendix B of the Regulations.

3. **Solicitation for Subcontracts, Including Procurements of Materials and Equipment**: All solicitations made by the contractor, either by competitive bidding or by negotiation for subcontract work, including procurement of materials or leases of equipment, must include a notification to each potential subcontractor or supplier of the contractor's obligations under the contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

4. **Information and Reports**: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and facilities as may be determined to be pertinent by the Department or the United States Department of Transportation (USDOT) in order to ascertain compliance with such Regulations or directives. If required information concerning the contractor is in the exclusive possession of another who fails or refuses to furnish the required information, the contractor shall certify to the Department or the USDOT, as appropriate, and shall set forth the efforts that it made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Department shall impose such contract sanctions as it or the USDOT may determine to be appropriate, including, but not limited to, the following:

   a. Withholding payments to the contractor until the contractor complies; and/or

   b. Canceling, terminating, or suspending the contract, in whole or in part.

6. **Incorporation of Provisions**: The contractor shall include the provisions of Sections (1) through (6) in every subcontract, including procurement of material and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Department or the USDOT may direct as a means of enforcing such provisions, including sanctions for non-compliance, provided, however, that in the event a contractor becomes involved in or is threatened with litigation from a subcontractor or supplier as a result of such direction, the contractor may request the Department to enter into such litigation to protect the interests of the state. In addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Revised June 2011

APPENDIX C

TO BE INCLUDED IN ALL FINANCIAL ASSISTANCE AGREEMENTS WITH LOCAL AGENCIES

Assurance that Recipients and Contractors Must Make
(Excerpts from US DOT Regulation 49 CFR 26.13)

A. Each financial assistance agreement signed with a DOT operating administration (or a primary recipient) must include the following assurance:

> The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR Part 26. The recipient shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR Part 26 and as approved by US DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the department may impose sanctions as provided for under Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et seq.).

B. Each contract MDOT signs with a contractor (and each subcontract the prime contractor signs with a subcontractor) must include the following assurance:

> The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of US DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

CITY OF BIRMINGHAM

IN COOPERATION WITH

MICHIGAN DEPARTMENT OF TRANSPORTATION

AND

THE FEDERAL HIGHWAY ADMINISTRATION

CRANBROOK ROAD NON-MOTORIZED PATHWAY IMPROVEMENTS

14 MILE ROAD TO MIDVALE STREET

Part of the East/West $\frac{1}{2}$ of Sections 34 and 35, T.2N., R.10E.,
City of Birmingham, Oakland County, Michigan

CONTROL SECTION : 63000

JOB NUMBER : 210951

MDOT STANDARD PLANS:

R-28-J	CURB RAMP AND DETECTABLE WARNING DETAILS
R-29-I	DRIVEWAY OPENINGS AND APPROACHES, AND CONCRETE SIDEWALKS
R-30-G	CONCRETE CURB AND CONCRETE CURB AND GUTTER
R-44-F	CONCRETE PAVEMENT REPAIR
R-83-B	UTILITY TRENCHES
R-96-E	SOIL EROSION AND SEDIMENTATION CONTROL MEASURES
R-100-I	SEEDING AND TREE PLANTING (SPECIAL DETAIL)
R-1-G	DRAINAGE STRUCTURES
R-7-F	COVER B
R-10-D	COVER E
R-12-E	COVER G
R-14-D	COVER J
R-15-G	COVER K

MDOT MAINTAINING TRAFFIC TYPICALS:

101-GEN-SPACING-CHARTS	
102-GEN-NOTES	TRAFFIC TYPICALS NOTE SHEET
110-TR-NFW-2L	LANE CLOSURE UTILIZING TRAFFIC REGULATORS ON A 2-LANE UNDIVIDED ROADWAY
122-NFW-SHL-(R)	SHOULDER CLOSURE ON A 2-LANE, UNDIVIDED ROADWAY

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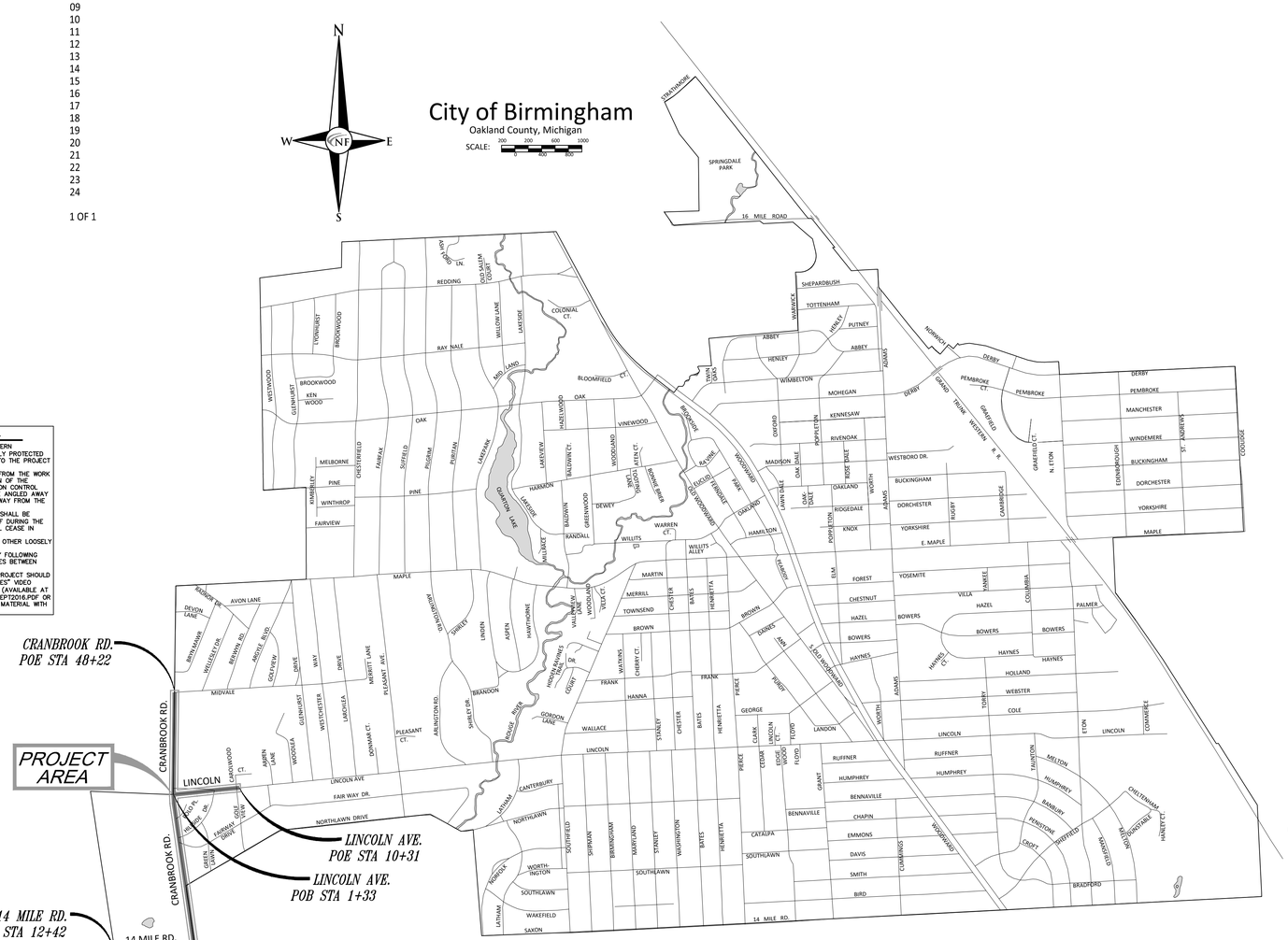
EASTERN MASSASAUGA RATTLESNAKE PROTOCOL

THE PROJECT IS WITHIN TIER 2 HABITAT AND/OR IS WITHIN HABITAT RANGE OF THE EASTERN MASSASAUGA RATTLESNAKE (EMR). THIS SNAKE SPECIES IS CURRENTLY ON THE FEDERALLY PROTECTED LIST AND AS SUCH, CERTAIN REQUIREMENTS AND FEATURES HAVE BEEN IMPLEMENTED INTO THE PROJECT AND SHALL BE ADHERED TO, INCLUDING:

1. INSTALLATION OF AND USE OF EXCLUSIONARY FENCING TO SEPARATE EMR HABITAT FROM THE WORK SITE TO PREVENT EMR FROM ACCESSING THE DISTURBANCE AREA FOR THE DURATION OF THE PROJECT. SILT FENCE HAS BEEN PROPOSED WITHIN THE PROJECT TO PROVIDE EROSION CONTROL AND TO ADHERE TO THE EMR REQUIREMENT. EACH END OF THE FENCING SHOULD BE ANGLED AWAY FROM THE AREA OF DISTURBANCE TO DIRECT SNAKES TRAVELING ALONG FENCING AWAY FROM THE SITE.
2. PRIOR TO INSTALLATION OF THIS LINE OF SILT FENCE, A QUALIFIED EMR SPECIALIST SHALL BE SCHEDULED TO REVIEW THE PROJECT LIMITS AND "CLEAR" THE AREA OF ANY EMR. IF DURING THE PROJECT, A CONTRACTOR WITNESSES THE EMR WITHIN THE WORK ZONE, WORK SHALL CEASE IN THAT AREA UNTIL UNTIL A QUALIFIED EMR SPECIALIST CAN RELOCATE THE SNAKE.
3. ALL PROPOSED EROSION BLANKET SHALL EXCLUDE PLASTIC MESH NETTING. JUTE OR OTHER LOOSELY WOVEN NATURAL FIBERS ARE REQUIRED.
4. CONTRACTOR SHALL AVOID THE SPREAD OF INVASIVE SPECIES INTO EMR HABITAT BY FOLLOWING BEST PRACTICES. THIS INCLUDES INSPECTING AND CLEANING EQUIPMENT AND VEHICLES BETWEEN WORK SITES AS NEEDED TO AVOID THE SPREAD OF INVASIVE PLANT MATERIALS.
5. TO INCREASE HUMAN SAFETY AND AWARENESS OF EMR, THOSE IMPLEMENTING THE PROJECT SHOULD FIRST WATCH MDNR'S "60-SECOND SNAKES: THE EASTER MASSASAUGA RATTLESNAKES" VIDEO (AVAILABLE AT HTTPS://YOUTUBE/-PTNXE_EO2W), OR REVIEW THE EMR FACTSHEET (AVAILABLE AT HTTPS://WWW.FWS.GOV/MIDWEST/ENDANGERED/REPTILES/EMA/PDF/EMRFACTSHEETSEP12016.PDF OR BY CALLING 517-351-2555. CONTRACTORS SHALL COORDINATE THE REVIEW OF THE MATERIAL WITH ALL WORKERS ON THE PROJECT PRIOR TO THEIR BEGINNING WORK ON-SITE.



811 Know what's below Call before you dig.

BENCHMARK NOTE

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

PROJECT LENGTH :1.20 MILES

DESCRIPTION OF THE WORK :
CONSTRUCTION OF VARYING WIDTH, SIDEWALKS AND SHARED USE PATHWAYS AT CRANBRROK ROAD, 14 MILE ROAD & W. LINCOLN STREET, INCLUDING ASSOCIATED RAMPS FOR SIDEWALKS/PATHWAYS AT ROAD PEDESTRIAN CROSSING.
WORK ALSO INCLUDES RETAINING WALL , STORM DRAIN IMPROVEMENTS, AND REPAIRS TO PAVEMENT, CURB AND DRIVEWAYS AS REQUIRED TO ACCOMMODATE PROPOSED SIDEWALKS/ PATHWAYS.

THROUGHOUT THE PROJECT, TRAFFIC WILL BE MAINTAINED AS DESCRIBED IN THE SPECIAL PROVISION FOR MAINTAINING TRAFFIC CONTAINED IN THIS PROPOSAL.

GENERAL PROVISIONS & PLAN NOTES

THE IMPROVEMENTS BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE PROPOSAL AND ACCOMPANYING SPECIFICATIONS FOR THIS PROJECT INCLUDING THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH THE M.D.O.T. ROAD DESIGN MANUAL, NON-FREEWAY, NHS, 4R MINIMUM GUIDELINE AND AASHTO 2012 GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES.

PAVEMENT MARKINGS AND PLACING OF TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS AMENDED.

THE LOCATIONS OF ALL PUBLIC UTILITIES SHOWN ON THESE PLANS ARE TAKEN FROM THE BEST AVAILABLE DATA. THE CITY OF BIRMINGHAM WILL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATIONS SHOWN.

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL (800) 482-7171 OR 811 A MINIMUM OF 3 WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS, & HOLIDAYS) PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" NETWORK.

ALL CONSTRUCTION SIGNING IS THE RESPONSIBILITY OF THE CONTRACTOR.

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).
3. See the City of Birmingham drawing "Water Main Standard Details" for details of water main work.
4. See the Oakland County Water Resources Commissioner (OCWRC) Storm Drain Notes and Details for details of storm manholes, catch basins, inlets, and end sections.
5. All excavation under or within three feet of pavement, public or private, shall be backfilled and compacted with sand.
6. 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.
7. The contractor shall be responsible for damage to existing utilities, pavement, trees, landscaping, gravel, etc., whether located on public or private property.
8. Storm, sewer and water main trench shall be backfilled with MDOT Class II sand and properly compacted to 95% of modified proctor density.
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. See applicable notes, details, and specific permitting requirements from all permitting agencies having jurisdiction on this project, including City of Birmingham, Oakland County Water Resources Commissioner (OCWRC), and the Road Commission for Oakland County (RCOC).

NOWAK & FRAUS 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

CONTRACT FOR: M.D.O.T. JOB NUMBER: JN210951

MUNICIPAL APPROVAL

MELISSA A. COATTA, P.E., CITY ENGINEER

PREPARED UNDER SUPERVISION OF:

PAUL A. TULIKANGAS, P.E. — 057929 REGISTRATION NUMBER

NOWAK & FRAUS ENGINEERS
ORGANIZATION

46777 WOODWARD AVENUE
PONTIAC, MICHIGAN 48342-5032
ADDRESS

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

REVISED: 12/09/22 REVISED PER M.D.O.T. LAP REVIEW

GENERAL NOTES

1. THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE MDOT STANDARD PLANS, EXCEPT WHERE OTHERWISE INDICATED IN THESE PLANS, THE PROPOSAL, SUPPLEMENTAL SPECIFICATIONS OR SPECIAL PROVISIONS.

2. FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL (800) 482-7171 OR 811 A MINIMUM OF 3 WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS, & HOLIDAYS) PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" NETWORK.

3. THE CITY OF BIRMINGHAM IS AN AUTHORIZED PUBLIC AGENCY UNDER THE SOIL EROSION AND SEDIMENTATION CONTROL PROGRAM – PUBLIC ACT 451 OF 1994. A SOIL EROSION CONTROL PERMIT WILL BE REQUIRED FOR THIS PROJECT FROM THE CITY OF BIRMINGHAM. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED AS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE ENGINEER FOR THE DURATION OF THE PROJECT. THE SOIL EROSION CONTROL MEASURES SHALL BE PAID USING APPLICABLE PAY ITEMS.

4. DRIVE APPROACHES TO RESIDENCES AND BUSINESSES SHALL NOT BE UNNECESSARILY BLOCKED. COMMERCIAL PROPERTY SHALL HAVE ONE ENTRANCE OPEN AND REASONABLE VEHICULAR ACCESS SHALL BE MAINTAINED AT ALL TIMES.

5. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH SPECIAL PROVISION FOR MAINTAINING TRAFFIC FOR THIS PROJECT. TEMPORARY TRAFFIC CONTROLS SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE M.D.O.T. TRAFFIC SAFETY TYPICALS.

6. SAWCUTTING IS REQUIRED FOR THE REMOVAL OF EXISTING PAVEMENTS, CURBS, AND SIDEWALKS. SAWCUTTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE COST OF THE WORK OF THE APPROPRIATE BID ITEM. ALL PAVEMENT, CURB AND GUTTER, AND SIDEWALK TO BE REMOVED SHALL BE SAWCUT FULL DEPTH.

7. THE CONTRACTOR IS REQUIRED TO COORDINATE THEIR WORK WITH ALL WORK BEING PERFORMED BY THE CITY OF BIRMINGHAM AND LOCAL UTILITY COMPANIES. NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR COORDINATION (SEE NOTICE TO BIDDER FOR UTILITY COORDINATION).

8. 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.

9. THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITH THE PROJECT LIMITS:

ELECTRIC

DTE ENERGY
1970 ORCHARD LAKE ROAD
SYLVAN LAKE, MI 48320-1743
CONTACT: JAMES HUMASON
(248) 924-4268

DTE ENERGY - COMMUNITY LIGHTING
8001 HAGGERTY
BELLEVILLE, MI 48111
CONTACT: BRANDON FARON
(734) 397-4017

NATURAL GAS

CONSUMERS ENERGY GROVELAND SERVICE CENTER
14500 DIXIE HIGHWAY,
HOLLY, MI 48442
CONTACT: CHERI PAYNE
(248) 769-5704

STORM, WATER MAIN AND SANITARY SEWER

CITY OF BIRMINGHAM
ENGINEERING DEPARTMENT
151 MARTIN STREET
BIRMINGHAM, MI 48009
CONTACT: MELISSA COATTA, P.E.
(248) 530-1839

OAKLAND COUNTY WATER RESOURCE COMMISSIONER
1 PUBLIC WORKS DRIVE
WATERFORD, MI 48328
CONTACT: STEVE KORTH
(248) 858-7598

CABLE TELEVISION

COMCAST CABLE TELEVISION
25626 TELEGRAPH ROAD
SOUTHFIELD, MI 48033
CONTACT: MIKE MARLOW
(248) 809-2707

AT & T
54 N. MILL STREET
PONTIAC, MI 48342
CONTACT: MATTHEW SILWA
(248) 877-0762

123 NET
24700 MORTHWESTERN HIGHWAY
SOUTHFIELD, MI 48075
CONTACT: AMANDA GRIFFITH
(248) 228-8286

WOW NETWORK
950 E. WHITCOMB
MADISON HEIGHTS, MI 48071
CONTACT: FRANK BINAGHI
(248) 677-9008

TRAFFIC SIGNALS & LIGHTING

ROAD COMMISSION FOR OAKLAND COUNTY
1200 N. TELEGRAPH ROAD
PONTIAC, MI 48341
CONTACT: STEVE WHEELER
(248) 858-7250

FIBER

123 NET
24700 NORTHWESTERN HWY,
SOUTHFIELD, MI 48075
CONTACT: AMANDA GRIFFITH
(248) 228-8286

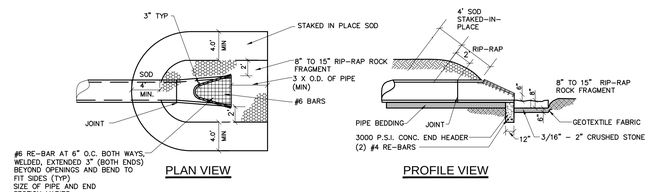
TELEPHONE

AT & T
54 N. MILL STREET
PONTIAC, MI 48342
CONTACT: MATT SLIWA
(248) 877-0762

MISCELLANEOUS PAY ITEMS

THE PAY ITEMS AND AND QUANTITIES ARE INCLUDED IN THE CONTRACT AND SHALL BE PERFORMED AS REQUIRED THROUGHOUT THE PROJECT LIMITS. THESE ITEMS ARE NOT SPECIFICALLY DETAILED OR QUANTIFIED IN INDIVIDUAL PLAN SHEETS:

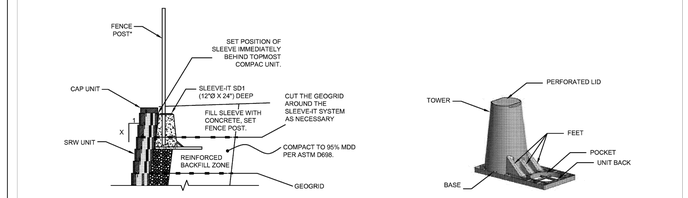
ESTIMATED QUANTITIES	UNIT	TOTAL QUANTITY
Mobilization, Max., _____	**Lump Sum**	**1**
Reimbursed Permit Fees	**Dollar**	5,100
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	**Each**	20
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	**Each**	20
Lighted Arrow, Type A, Furn	**Each**	8
Lighted Arrow, Type A, Oper	**Each**	8
Plastic Drum,Fluorescent, Furn	**Each**	200
Plastic Drum, Fluoresceny, Oper	**Each**	200
Sign, Type B. Temp, Prismatic, Furn	**Square Foot**	512
Sign, Type B. Temp, Prismatic, Oper	**Square Foot**	512
Minor Traf Devices	**Lump Sum**	1
Traf Regulator Control	**Lump Sum**	1
Subgrade Undercutting, Type II	**Cubic Yard**	250
Maintenance Gravel, LM	**Cubic Yard**	40
Gate Box, Adj, Case 1	**Each**	5
Dr Structure Cover, Adj, Case 1	**Each**	5
Dr Structure, Adj, Add Depth	**Foot**	5



#6 RE-BAR AT 6" O.C. BOTH WAYS, WELDED, EXTENDED 3" (BOTH ENDS) BEYOND OPENINGS AND BEND TO FIT SIDES (TYP)
SIZE OF PIPE AND END SECTION VARIES.

PLAN VIEW — PROFILE VIEW

END SECTION AND BAR SCREEN DETAIL
N.T.S.



DETAIL OF FENCE POST INSTALLATION USING SLEEVE-IT
N.T.S.

ASSEMBLY & INSTALLATION

1. General - The Sleeve-it post foundation system shall be purchased and installed by the retaining wall contractor to facilitate future fence post installation. Contractor shall verify proper spacing requirements prior to installation.
2. Assembly & Installation - Refer to instructions provided with units for specific information related to the assembly of the Sleeve-it™ system and the correct installation procedure. When the segmental retaining wall has been constructed to two feet from top not including the capstone:

Step 1: Prepare a level area approximately 24" wide x 36" deep behind the wall face. The prepared area should be 24" below the proposed top of wall (not including the cap stone).

Step 2: Place the Sleeve-it unit on the level surface in an upright position with the front edge of the unit flush against the back of the wall. Multiple units should be placed in accordance with fence specifications.

Step 3: Encapsulate and stabilize the Sleeve-it unit by placing and compacting sufficient backfill material layers as required. If geogrid is required, slit the geogrid perpendicular to the wall face just enough to fit around the base of the unit while ensuring that the geogrid remains properly attached to the wall. Continue the backfilling process until the material reaches the top of the lower. Do not remove perforated lid(unit) ready to place post. Do not step on perforated lid, as this could cause serious bodily injury.

Step 4: Punch the perforated lid using a mallet or hammer to expose the inside of the Sleeve-it unit. Detached lids can be left inside the unit or discarded prior to pouring the infill material.

Step 5: Place post through the exposed area and rest on the flat ground surface area inside the Sleeve-it cavity. Ensure that the post is upright and level and hold in place while carefully pouring infill material such as concrete through the exposed cavity. Follow guidelines as specified by infill supplier. Concrete is highly recommended as infill material.

Important Note: Backfill soil as prescribed by retaining wall manufacturer. Backfill material above and surrounding the Sleeve-it system must be compacted to a minimum of 95% of the material's maximum dry density as determined by **ASTM D-698** (Standard Proctor). Backfill and compaction within three feet of the wall face should be performed with hand operated equipment as recommended by the National Concrete Masonry Association (NCMA) SRW guidelines.
Repeat Above Steps for next Sleeve-it unit.

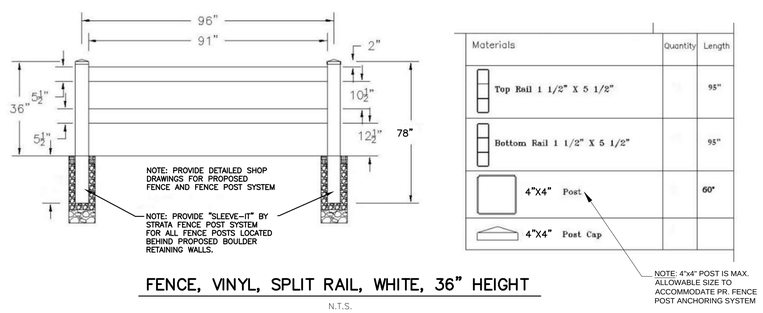
Fence posts shall extend a minimum distance of 18" into the sleeve to ensure proper engagement with the Sleeve-it system. All posts must be on the "inboard" side of the vertical portion of the cantilever base. Fill cavity completely with concrete. When concrete cures, topsoil or other surficial cover may be placed over the Sleeve-it system to create final, finished appearance.

The Sleeve-it product shall be evenly spaced. Use of the Sleeve-it system is limited to the following fencing applications without consideration of wind load:
- 8-foot high and under chain link fences
- 6-foot high and under wood fence with gaps between boards
- 6-foot high and under ballasted PVC, steel, aluminum or wrought iron fences.

For other fencing systems specifically not meeting these criteria, contact Strata Systems Inc., to determine suitability. **1 (866) 680-7750 or email orders@geogrid.com**

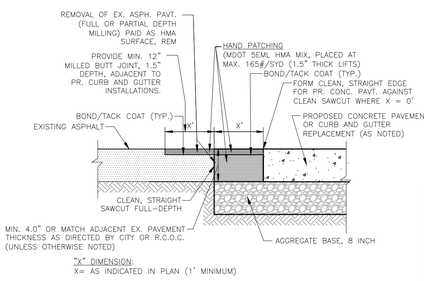
ALL material may be subject to site testing for compliance to the above specifications.

SLEEVE-IT by STRATA		FOR MORE INFORMATION CONTACT: STRATA SYSTEMS INC., 1-800-680-7750 OR strata@geogrid.com
DATE: 3/15/2022	SCALE: NTS	DWG NO. SLEEVE-IT SECTION

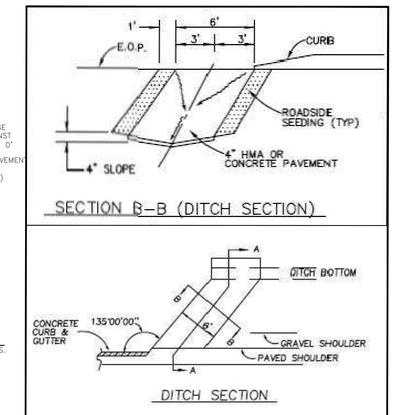


Materials	Quantity	Length
Top Rail 1 1/2" X 5 1/2"		95"
Bottom Rail 1 1/2" X 5 1/2"		95"
4"X4" Post		60"
4"X4" Post Cap		

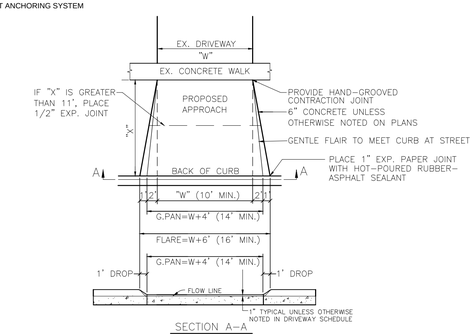
FENCE, VINYL, SPLIT RAIL, WHITE, 36" HEIGHT
N.T.S.



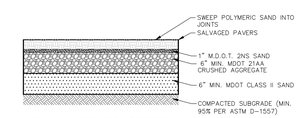
ASPHALT REPAIR DETAIL
N.T.S.



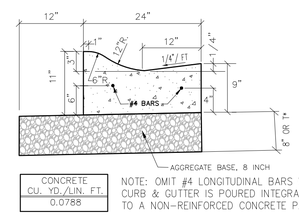
R.C.O.C. – SPILLWAY DETAIL
N.T.S.



CONCRETE DRIVE APPROACH – DETAIL 'L'
N.T.S.



HEAVY DUTY CONCRETE PAVER SECTION (VEHICLE TRAFFIC AREAS)
N.T.S.



CONCRETE CU. YD./LIN. FT.
0.0788

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

MDOT CONCRETE CURB AND GUTTER, DETAIL D2, MOD.

M.D.O.T. TYPE D-2 MODIFIED (REQUIRES E.J.I.W. 7065 OR NEENAH 3035 CASTING)
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.

GENERAL NOTES (BOULDER RETAINING WALLS)*

1. Construct walls to the lengths and grades shown on the latest Construction Drawings prepared by Nowka and Fraus, but do not exceed the wall heights shown herein. If discrepancies in wall height are noted, construction should stop and G2 Consulting Group should be contacted immediately to re-evaluate the design and actual site conditions.

2. In-situ foundation soil shall be examined by a qualified geotechnical engineer or technician to ensure the actual foundation soil strength meets or exceeds the assumed allowable soil bearing capacity of 1,500 psf. Soil not meeting the required strength shall be removed and replaced with engineered fill. Engineered fill soil shall be compacted to 95% of the maximum dry density as determined by the modified Proctor test. Use lightweight compaction equipment that will not disrupt the stability or batter of the wall. Hand-operated plate compaction equipment shall be used within 3 feet of the back of the wall to achieve compaction.

3. Base boulders shall be embedded 1 foot below finished grade.

4. Joints between boulders shall be tight and staggered.

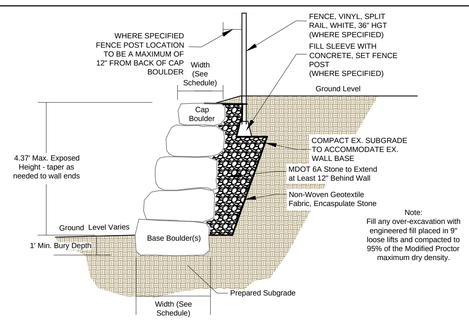
5. Back face of wall shall be angled into the slope.

6. Drainage layer behind boulders shall consist of MDOT 6A stone. The 6A stone shall be placed with each course of boulders and shall be encapsulated in non-woven geotextile fabric such as Mirafi 140N or equal.

7. Over-excavated areas behind the wall shall be backfilled with additional wrappped drainage stone or with engineered fill as wall construction progresses to maintain stability.

8. G2 Consulting Group, LLC shall observe boulder wall construction and perform field testing to ensure the walls are constructed in accordance with these plans.

***NOTE: BOULDER RETAINING WALL DESIGN DETAILS ARE PROVIDED BY G2 CONSULTING GROUP:**
CONTACT: MS. JENNIFER M. CASEY, P.E.;
PHONE: (248) 680-0400
EMAIL: jcasey@g2consultinggroup.com



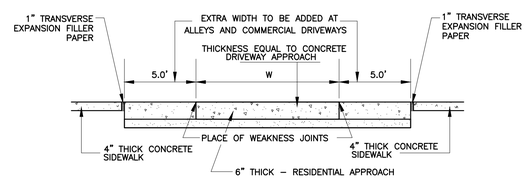
Note:
Fill any over-excavation with engineered fill placed in 9" loose lifts and compacted to 95% of the Modified Proctor maximum dry density.

TYPICAL BOULDER WALL SECTION*
(NO SCALE)

Wall	Station	Min. Base Boulder Width (inches)	Min. Cap Boulder Width (inches)	Max. Cap Boulder Width (inches)
14 Mile Road	19+75	19	14	19
14 Mile Road	20+25 to 24+75	26	13	16
14 Mile Road	25+36	19	12	16
Cranbrook Road	28+10	19	14	15
Cranbrook Road	28+30 TO 28+80	26	14	19
Cranbrook Road	29+04	19	14	15
Cranbrook Road	29+56	19	14	15
Cranbrook Road	29+75 to 30+80	26	14	19
Cranbrook Road	31+10	19	14	15

BOULDER WALL SCHEDULE*

GRAVITY RETAINING WALL, BOULDER
N.T.S.



THICKENED CONCRETE SIDEWALK AT DRIVE APPROACH (PLAIN)
N.T.S.

NOWAK & FRAUS 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

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

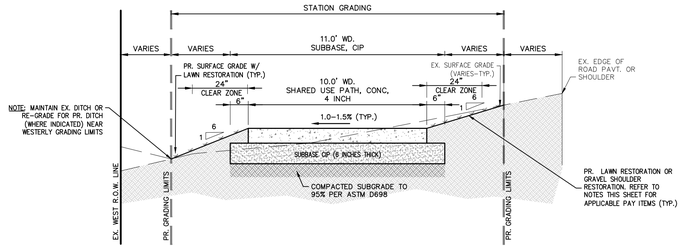
SHEET
General Project
Notes and Details

Know what's below Call before you dig.

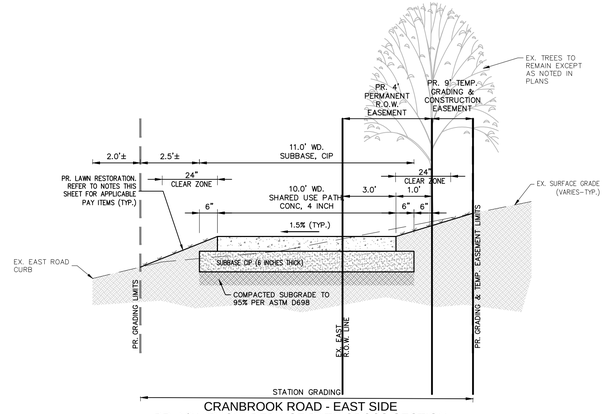
DATE	ISSUED/REVISED
11-19-20	G.I. SUBMITTAL
07-26-21	UPDATED PER OWNER
05-06-22	REVISED PER G.I. REVIEW
06-03-22	SUBMITTED FOR PERMITS
08-03-22	REVISED PER CITY
10-14-22	REVISED PER R.C.O.C.
11-16-22	REVISED PER R.C.O.C.
11-22-22	LAP BID PACKAGE
12-09-22	REVISED PER M.D.O.T. LAP REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: N.T.S.

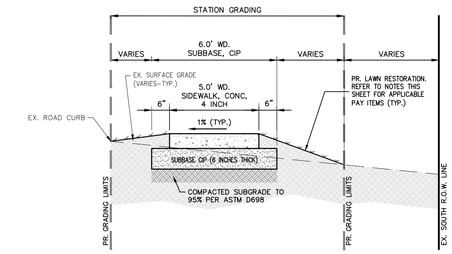
NFE JOB NO. L871
SHEET NO. 02



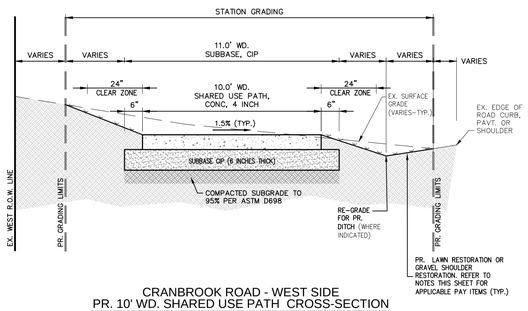
CRANBROOK ROAD - WEST SIDE
PR. 10' WD. SHARED USE PATH CROSS-SECTION
STA P.O.B. TO 16+02
(TRANSITION OCCURS 16+0 TO 16+14)



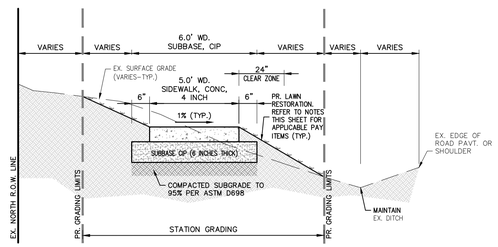
CRANBROOK ROAD - EAST SIDE
PR. 10' WD. SHARED USE PATH CROSS-SECTION
STA 32+59 TO 48+05
NOTE: SHARED USE PATH TRANSITIONS TO 5' WIDE SIDEWALK STA 48+05 TO P.O.E.



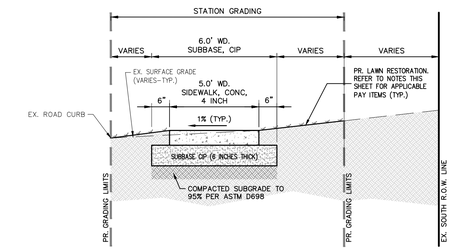
LINCOLN AVE.
PR. 5' WD. SIDEWALK CROSS-SECTION
STA P.O.B. TO 4+62



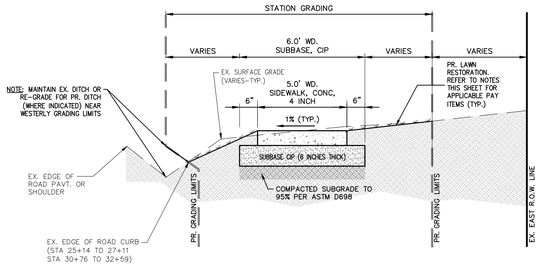
CRANBROOK ROAD - WEST SIDE
PR. 10' WD. SHARED USE PATH CROSS-SECTION
STA 16+14 TO 32+62
NOTE: SHARED USE PATH TRANSITIONS TO 5' WIDE SIDEWALK STA 32+62 TO STA 34+50



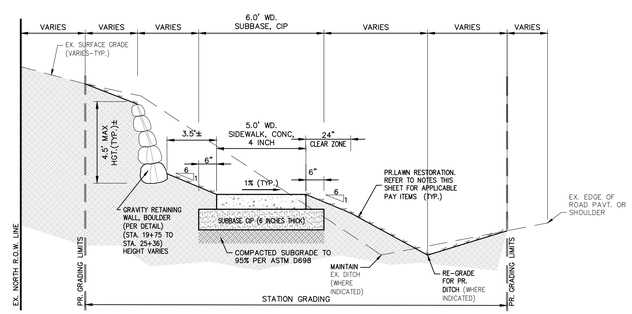
14 MILE ROAD
PR. 5' WD. SIDEWALK CROSS-SECTION
STA P.O.B. TO 19+75



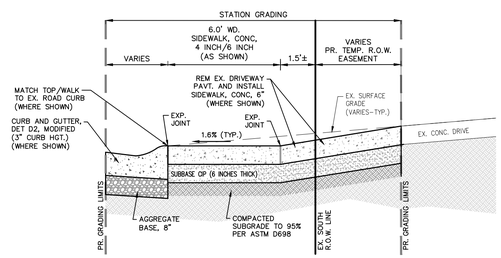
LINCOLN AVE.
PR. 5' WD. SIDEWALK CROSS-SECTION
STA 4+62 TO 7+05



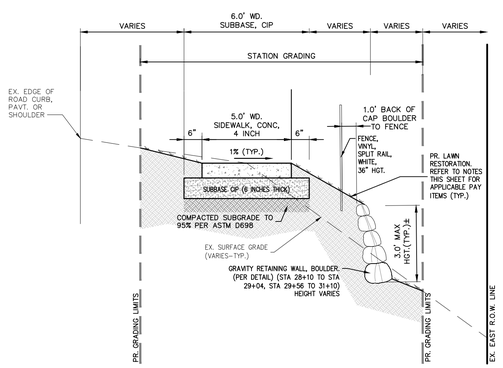
CRANBROOK ROAD - EAST SIDE
PR. 5' WD. SIDEWALK CROSS-SECTION
STA 19+06 TO 26+99
STA 31+53 TO 32+59
(TRANSITION OCCURS 26+99 TO 27+23)



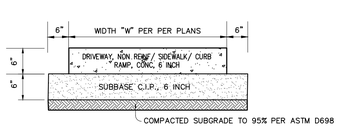
14 MILE ROAD
PR. 5' WD. SIDEWALK CROSS-SECTION
STA 19+75 TO P.O.E.



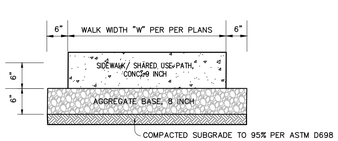
LINCOLN AVE.
PR. 5' WD. SIDEWALK CROSS-SECTION
STA 7+05 TO P.O.E.



CRANBROOK ROAD - EAST SIDE
PR. 5' WD. SIDEWALK CROSS-SECTION
STA 27+23 TO 31+16
(TRANSITION OCCURS 31+16 TO 31+53)



6" CONCRETE DRIVEWAY/
SIDEWALK/ CURB RAMP SECTION
N.T.S.



9" CONCRETE SIDEWALK/
SHARED USED PATH SECTION
N.T.S.

LAWN/ GRAVEL SHOULDER RESTORATION NOTES

ALL DISTURBED LAWN AREAS SHALL BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", "SEEDING MIXTURE THV", "MULCH", AND "MULCH ANCHORING" PAY ITEMS.

LAWN AREAS WITH DRAINAGE DITCHES AND/OR SIDE SLOPES EXCEEDING A 1:4 SLOPE SHALL ALSO BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", SEEDING MIXTURE THV", AND "MULCH BLANKET, MODIFIED".

WHERE EXISTING GRAVEL SHOULDER IS IMPACTED BY CONSTRUCTION, SHOULDER SHALL BE REPLACED WITH 8" THICK COMPACTED 23A AGGREGATE, PLACED AT A MINIMUM WIDTH OF 3 FEET FROM THE EXISTING EDGE OF PAVEMENT (OR TO MATCH ESTABLISHED WIDTH OF AN ESTABLISHED EXISTING EDGE OF GRAVEL SHOULDER). REQUIRED SHOULDER RESTORATION WILL BE PAID FOR SEPARATELY AS "SHLD, CL II, 8 INCH" PAY ITEM.

NOTES

1. EARTHWORK BALANCING (CUTTING & FILLING), INCLUDING GRADING FOR PR. RETAINING WALLS & DRAINAGE DITCHES SHALL BE PAID WITH "STATION GRADING" PAY ITEM
2. SIDEWALK RAMPS SHOWN IN PLAN VIEW SHALL BE PAID USING "SIDEWALK, RAMP, CONC, 6 INCH AND DETECTABLE WARNING SURFACE, CAST IRON" PAY ITEMS
3. PROVIDE LAWN RESTORATION PER APPLICABLE PAY ITEMS IN THE CONTRACT
4. PROVIDE 24" WIDE CLEAR ZONE ON EACH SIDE OF THE SHARED USE PATHS WITH MAX SLOPE OF 1(V):6(H).

NOWAK & FRAUS 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.CON

SEAL

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Proposed Non-Motorized
Pathway and Sidewalk
Cross-Sections

Know what's below
Call before you dig.

DATE	ISSUED/REVISED
11-19-20	G.I. SUBMITTAL
07-26-21	UPDATED PER OWNER
05-06-22	REVISED PER G.I. REVIEW
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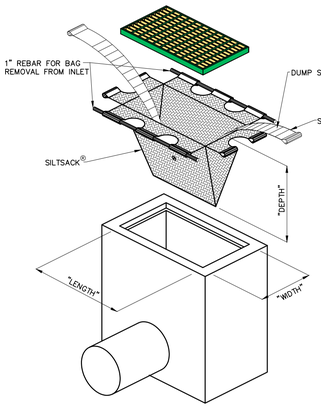
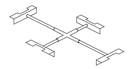
11-22-22	LAP BID PACKAGE
12-09-22	REVISED PER M.D.O.T. LAP REVIEW

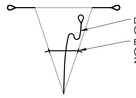
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: N.T.S.

NFE JOB NO. L871
SHEET NO. 03

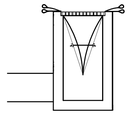


SILT SACK FILTER DETAIL

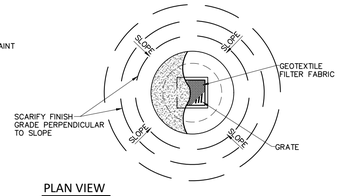




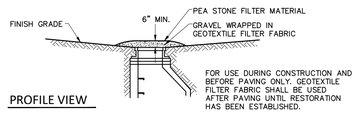
BAG DETAIL



INSTALLATION DETAIL



PLAN VIEW



PROFILE VIEW

LOW POINT INLET FILTER

N.T.S.

SOIL EROSION CONTROL - SEQUENCE OF OPERATION (NEW CONSTRUCTION)

INSTALL CRUSHED CONCRETE ACCESS DRIVE AND TEMPORARY CULVERTS AT THE SITE ENTRANCE AS INDICATED ON THE PLANS.

INSTALL SILT FENCE OR SIMILAR APPROVED SILT BARRIER ALONG PROPERTY LINES AND AROUND SENSITIVE NATURAL FEATURES AS INDICATED ON THE PLANS.

EXCAVATE A SHALLOW SWALE/DITCH AROUND PERIMETER OF SITE. GRADE THE TEMPORARY SWALE TO AN EXISTING DRAINAGE FACILITY. PLACE OUTLET FILTER IN EXISTING UPSTREAM STORM SEWER FACILITIES.

IF INDICATED ON CONSTRUCTION PLANS, SEDIMENTATION BASINS, DETENTION POND, ETC., SHALL BE CONSTRUCTED PRIOR TO THE INSTALLATION OF ANY OTHER WORK.

STRIP EXISTING TOPSOIL, VEGETATION AND ORGANIC MATTER FROM BUILDING PAD AND PARKING AREAS. COMMENCE LAND BALANCE AND MASS GRADING OPERATIONS. MAINTAIN A MINIMUM BUFFER OF 15' OF EXISTING VEGETATION WHEREVER POSSIBLE AROUND SITE PERIMETER. STOCK PILES SHOULD BE LOCATED AWAY FROM EXISTING DRAINAGE FACILITIES.

EXCAVATE AND INSTALL UNDERGROUND UTILITIES. INSTALL PEASTONE INLET FILTERS AROUND ALL NEW STORM SEWER FACILITIES AS INDICATED ON THE PLANS. EXISTING AND PROPOSED STORM SEWER FACILITIES SHALL BE PROTECTED FROM EROSION AND SEDIMENT INFILTRATION AT ALL TIMES.

COMMENCE FINAL GRADING AND TRIMMING OPERATIONS. PREPARE SUBGRADE FOR INSTALLATION OF PROPOSED PAVEMENT.

SEED AND MULCH ALL DISTURBED SITE AREAS AND INSTALLED SITE LANDSCAPING.

REMOVE CONSTRUCTION DEBRIS AND JET VAC NEWLY INSTALLED STORM SEWER SYSTEM AS REQUIRED BY THE MUNICIPALITY.

REMOVE ALL REMAINING TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED.

WHENEVER POSSIBLE, THE SITE SHALL BE GRADED TO WITHIN SIX INCHES (6") OF THE PROPOSED FINISH GRADE PRIOR TO INSTALLATION OF UNDERGROUND FACILITIES.

STAGING OF PROPOSED WORK SHALL BE COMPLETED BY THE CONTRACTOR AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED AREAS.

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1.	INSTALL PERIMETER FILTER FABRIC FENCING WHERE REQUIRED.	APRIL 2023
2.	COMMENCE MASS GRADING WITHIN PROPOSED CONSTRUCTION LIMITS	APRIL 2023
3.	COMMENCE UNDERGROUND UTILITY WORK.	APRIL 2023
4.	INSTALL INLET FILTERS ON PROPOSED DRAINAGE STRUCTURES.	MAY 2023
5.	FINE GRADE AND COMMENCE PAVING	JUNE 2023
6.	COMPLETE ALL LAWN RESTORATION	SEPTEMBER 2023
7.	REMOVE ALL TEMPORARY SOIL EROSION MEASURES.	NOVEMBER 2023

SOIL EROSION CONTROL

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVES FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

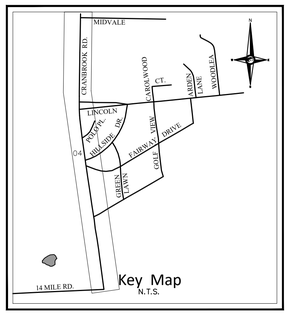
WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.



SESC PERMIT NOTES

REFER TO THE WRC SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET FOR ALL ADDITIONAL NOTES & DETAILS (TYP)

A DISTANCE OF APPROXIMATELY 400 FEET TO THE NEAREST BODY OF WATER (ROUGE RIVER).

THE APPROXIMATE TOTAL AREA OF EARTH DISRUPTION IS 3.7 ACRES.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.

A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM.

NOWAK & FRAUS ENGINEERS

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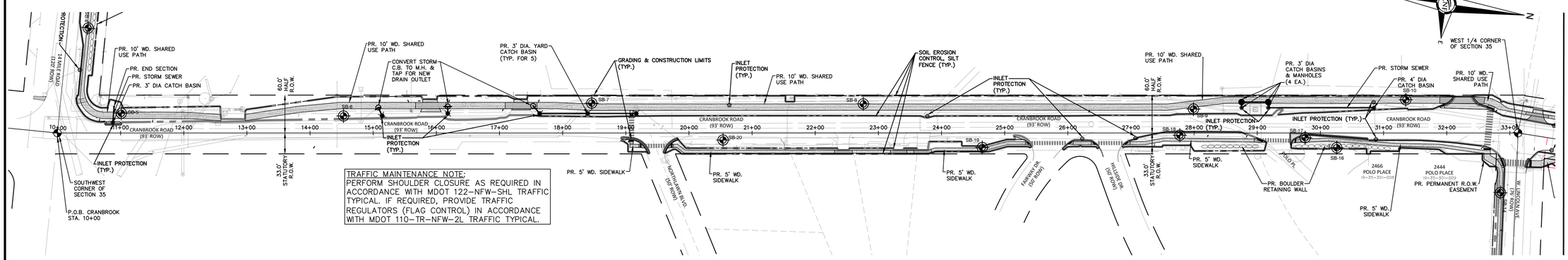
SEAL



TRAFFIC MAINTENANCE NOTE:
PERFORM SHOULDER CLOSURE AS REQUIRED IN ACCORDANCE WITH MDOT 122-NFW-SHL TRAFFIC TYPICAL. IF REQUIRED, PROVIDE TRAFFIC REGULATORS (FLAG CONTROL) IN ACCORDANCE WITH MDOT 110-TR-NFW-2L TRAFFIC TYPICAL.

CRANBROOK ROAD OVERALL PLAN VIEW

SCALE: 1" = 80'

LEGAL DESCRIPTION - PROJECT AREA

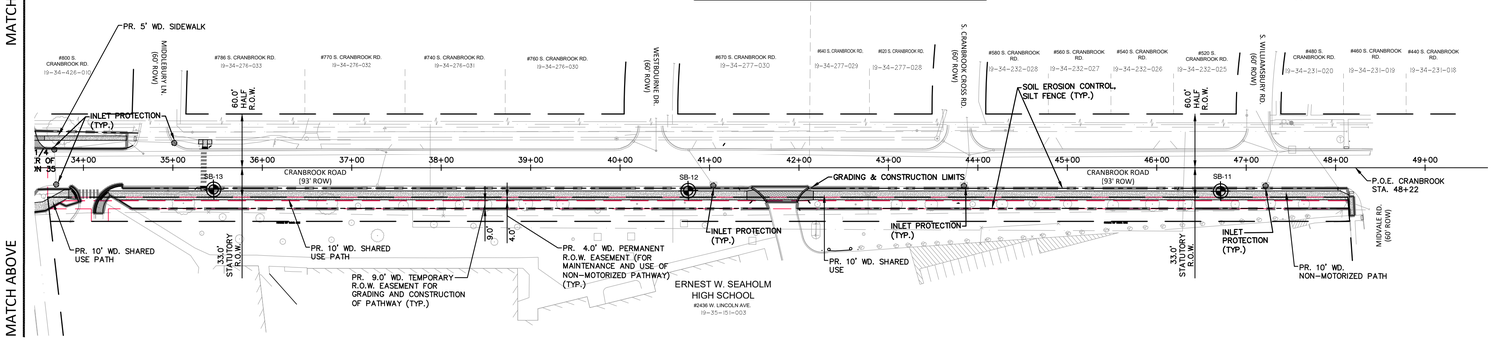
LAND LOCATED WITHIN BOTH THE CITY OF BIRMINGHAM, MICHIGAN AND BLOOMFIELD TOWNSHIP, MICHIGAN, SECTIONS 34 AND 35, TOWN 2 NORTH, RANGE 10 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE NORTH HALF OF THE 14 MILE ROAD PUBLIC R.O.W. (120 FEET WIDE) MEASURED APPROXIMATELY 1,400 FEET WEST FROM THE SOUTHWEST CORNER OF SAID SECTION 35 TO THE PROJECT CONSTRUCTION LIMITS, INCLUDING SECURED EASEMENTS.

ALSO, THE CRANBROOK ROAD PUBLIC R.O.W (93 FEET WIDE) MEASURED APPROXIMATELY 2,313 FEET NORTH FROM SAID SOUTHWEST CORNER OF SECTION 35 TO THE WEST 1/4 CORNER OF SECTION 35; THENCE APPROXIMATELY 1,509 FEET NORTH TO THE PROJECT CONSTRUCTION LIMITS, INCLUDING SECURED EASEMENTS.

ALSO, THE SOUTH HALF OF THE LINCOLN AVENUE PUBLIC R.O.W. (76 FEET WIDE) MEASURED APPROXIMATELY 981 FEET EAST OF SAID WEST 1/4 CORNER OF SECTION 35 TO THE PROJECT CONSTRUCTION LIMITS, INCLUDING SECURED EASEMENTS.

TRAFFIC MAINTENANCE NOTE:
PERFORM LANE SHIFT AS REQUIRED IN ACCORDANCE WITH MDOT 137-CLT-SHIFT-OLC TRAFFIC TYPICAL. IF REQUIRED, PROVIDE TRAFFIC REGULATORS (FLAG CONTROL) IN ACCORDANCE WITH MDOT 110-TR-NFW-2L TRAFFIC TYPICAL.



CRANBROOK ROAD OVERALL PLAN VIEW

SCALE: 1" = 80'

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.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

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TRAFFIC CONTROL / SIGNAGE

ALL TRAFFIC CONTROL ITEMS, CONSTRUCTION SIGNING, OR FLAG CONTROL REQUIRED TO CONSTRUCT THE PROJECT SHALL BE INCLUDED IN THE APPLICABLE PAY ITEMS AND IN ACCORDANCE WITH SPECIAL PROVISION FOR MAINTAINING TRAFFIC.

SOIL EROSION CONTROL PERMIT

A SOIL EROSION CONTROL PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM PRIOR TO ANY EARTH DISTURBANCE ASSOCIATED WITH THE PROJECT. PERMIT WILL BE SECURED BY ENGINEER ON BEHALF OF THE OWNER, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL PERMIT CONDITIONS.

SOIL EROSION CONTROL

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR. SHOULD THE CONTRACTOR FAIL TO COMPLETE AS REQUIRED, THE OWNER WILL COMPLETE AND BACK CHARGE THE CONTRACTOR.

STAGING / MATERIAL NOTE

ALL MATERIAL STAGING/STORAGE AREAS SHALL BE COORDINATED AND APPROVED WITH THE ENGINEER AND OWNER PRIOR TO THE COMMENCEMENT OF OPERATIONS.

LAWN RESTORATION NOTES

ALL DISTURBED LAWN AREAS SHALL BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", "SEEDING MIXTURE THV", "MULCH", AND "MULCH ANCHORING" PAY ITEMS.

LAWN AREAS WITH DRAINAGE DITCHES AND/OR SIDE SLOPES EXCEEDING A 1:4 SLOPE SHALL ALSO BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", SEEDING MIXTURE THV", AND "MULCH BLANKET, MODIFIED" PAY ITEMS (MULCH BLANKET SHALL BE CURLEX NETFREE BY AMERICAN EXCELSIOR COMPANY, FUTERRA F4 NETLESS BY PROFILE PRODUCTS, LLC AND NORTH AMERICAN GREEN S150BN).

STUMP REMOVAL / GRADING NOTES

THE CITY OF BIRMINGHAM WILL REMOVE ALL TREES NECESSARY TO CONSTRUCT THE PROJECT PRIOR TO START OF CONSTRUCTION.

ALL BRUSH & STUMP REMOVALS NECESSARY TO CONSTRUCT THE PROJECT SHALL BE COMPLETED BY THE CONTRACTOR WITHIN THE APPROXIMATE GRADING & CONSTRUCTION LIMITS DENOTED & OUTLINED ON THE PLAN. PAYMENT FOR REQUIRED STUMP REMOVALS SHALL BE INCLUDED IN "STUMP, REM" PAY ITEMS. GENERAL BRUSH CLEARING AND REQUIRED GRADING IS INCLUDED IN THE "STATION GRADING, MODIFIED" PAY ITEM.

SESC LEGEND

- INDICATES LIMITS OF SILT FABRIC FENCE
- INDICATES LIMITS OF SOIL DISRUPTION
- INDICATES INLET PROTECTION FILTER ON EX. OR PR. DRAINAGE STRUCTURE

SOIL BORING LEGEND

SB-# PROPOSED SOIL BORING LOCATION

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
- DOWNSPOUT
- ×000.00 GROUND ELEVATION
- DETECTABLE WARNING SURFACE, CAST IRON
- CURB AND GUTTER, CONC, DET F1
- CURB RAMP OPENING, CONC
- HMA SURFACE, REM HMA, LVSP
- SIDEWALK, CONC, 4"
- SIDEWALK, RAMP, CONC, 6"

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
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Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Overall Plan/SESC Plan -
Cranbrook Road

Know what's below Call before you dig.

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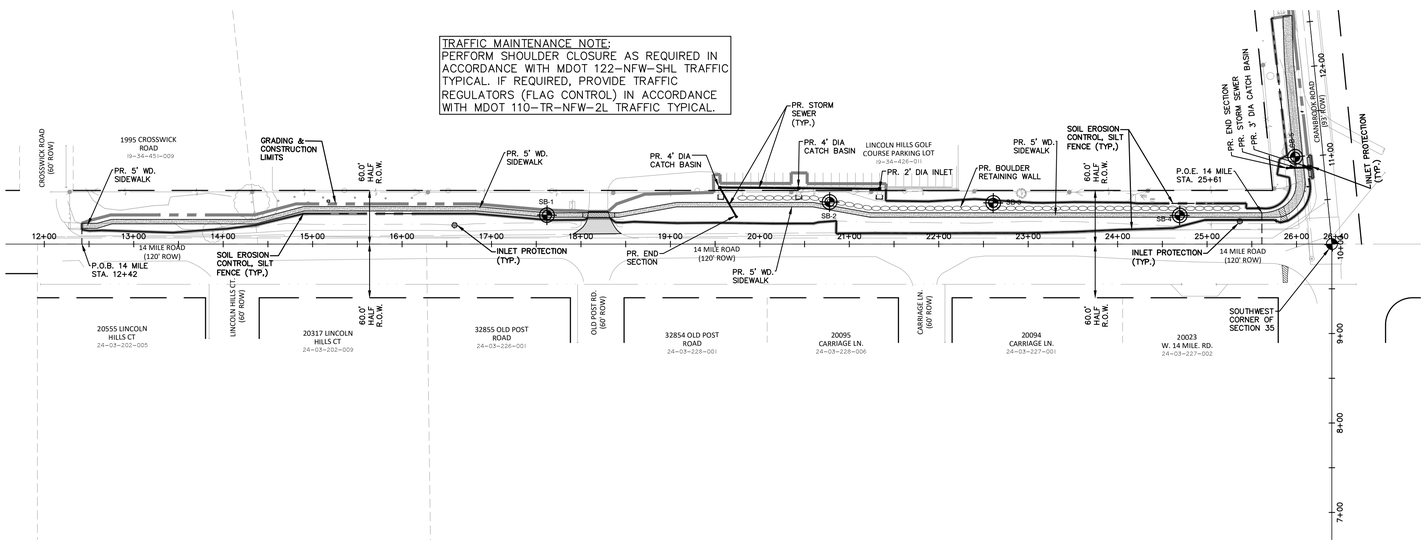
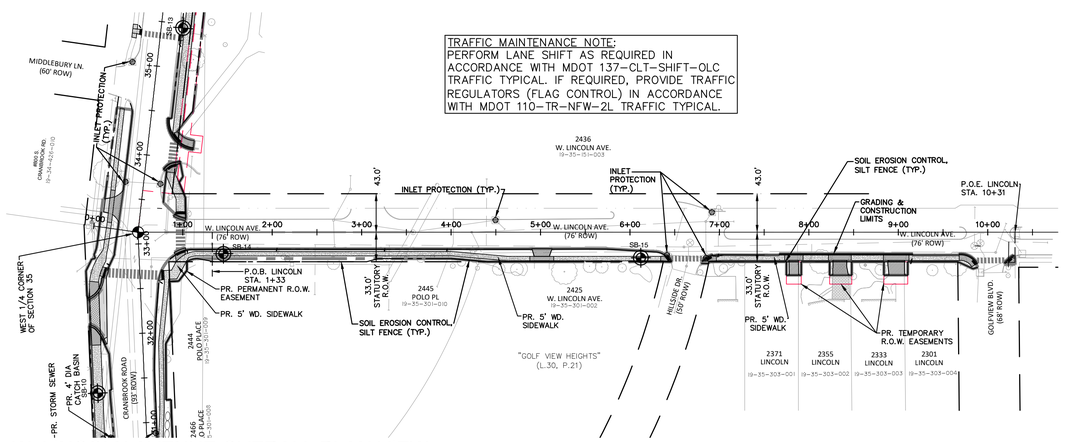
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 80'

NFE JOB NO. L871
SHEET NO. 04



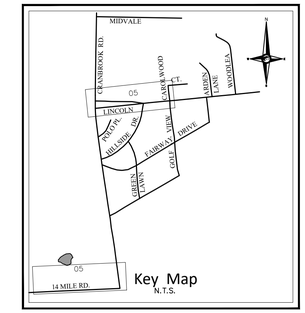
14 MILE ROAD OVERALL PLAN VIEW

SCALE: 1" = 80'



W. LINCOLN AVENUE OVERALL PLAN VIEW

SCALE: 1" = 80'



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A SOIL EROSION CONTROL PERMIT IS REQUIRED FROM THE CITY OF BIRMINGHAM PRIOR TO ANY EARTH DISTURBANCE ASSOCIATED WITH THE PROJECT. PERMIT WILL BE SECURED BY ENGINEER ON BEHALF OF THE OWNER, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL PERMIT CONDITIONS.

SOIL EROSION CONTROL

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR. SHOULD THE CONTRACTOR FAIL TO COMPLETE AS REQUIRED, THE OWNER WILL COMPLETE AND BACK CHARGE THE CONTRACTOR.

STAGING / MATERIAL NOTE

ALL MATERIAL STAGING/STORAGE AREAS SHALL BE COORDINATED AND APPROVED WITH THE ENGINEER AND OWNER PRIOR TO THE COMMENCEMENT OF OPERATIONS.

LAWN RESTORATION NOTES

ALL DISTURBED LAWN AREAS SHALL BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", "SEEDING MIXTURE THV", "MULCH", AND "MULCH ANCHORING" PAY ITEMS.

LAWN AREAS WITH DRAINAGE DITCHES AND/OR SIDE SLOPES EXCEEDING A 1:4 SLOPE SHALL ALSO BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", SEEDING MIXTURE THV", AND "MULCH BLANKET" PAY ITEMS (MULCH BLANKET SHALL BE NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL).

STUMP REMOVAL / GRADING NOTES

THE CITY OF BIRMINGHAM WILL REMOVE ALL TREES NECESSARY TO CONSTRUCT THE PROJECT PRIOR TO START OF CONSTRUCTION.

ALL BRUSH & STUMP REMOVALS NECESSARY TO CONSTRUCT THE PROJECT SHALL BE COMPLETED BY THE CONTRACTOR WITHIN THE APPROXIMATE GRADING & CONSTRUCTION LIMITS DENOTED & OUTLINED ON THE PLAN. PAYMENT FOR REQUIRED STUMP REMOVALS SHALL BE INCLUDED IN "STUMP, REM" PAY ITEMS. GENERAL BRUSH CLEARING AND REQUIRED GRADING IS INCLUDED IN THE "STATION GRADING, MODIFIED" PAY ITEM.

SESC LEGEND

- INDICATES LIMITS OF SILT FABRIC FENCE
- INDICATES LIMITS OF SOIL DISRUPTION
- INDICATES INLET PROTECTION FILTER ON EX. OR PR. DRAINAGE STRUCTURE

SOIL BORING LEGEND

SB-# PROPOSED SOIL BORING LOCATION

LEGEND

- CLEAN-OUT
- MANHOLE COMB SAN — EXISTING SAN/COMB SEWER
- CVB GVW HYDRANT — EXISTING WATER MAIN
- RYCB MANHOLE CB END SECTION — EXISTING STORM SEWER
- ELEC METER ELECTRIC MANHOLE TELEPHONE MANHOLE — EXISTING BURIED CABLES
- GAS METER GAS MARKER GAS VALVE — EXISTING GAS MAIN
- UTILITY POLE STRAIN POLE LIGHT POLE GUY WIRE — 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
- DOWNSPOUT
- ×000.00 GROUND ELEVATION
- DETECTABLE WARNING SURFACE, CAST IRON
- CURB AND GUTTER, CONC, DET F1
- CURB RAMP OPENING, CONC
- HMA SURFACE, REM HMA, LVSP
- SIDEWALK, CONC, 4", SIDEWALK, RAMP, CONC, 6"

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FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
City of Birmingham
A Walkable Community
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

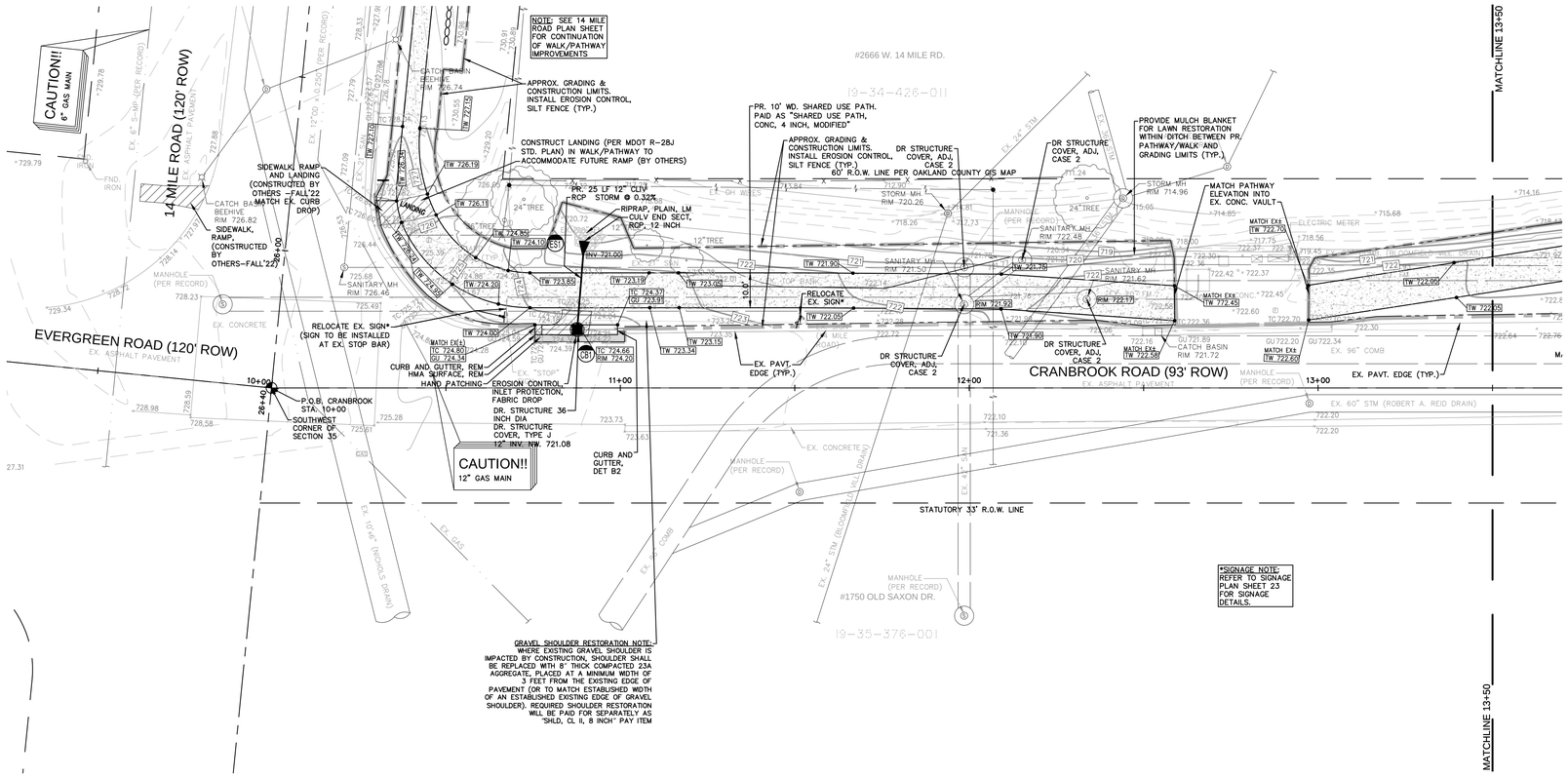
SHEET
Overall Plan/SESC Plan -
14 Mile Road and
W. Lincoln Avenue

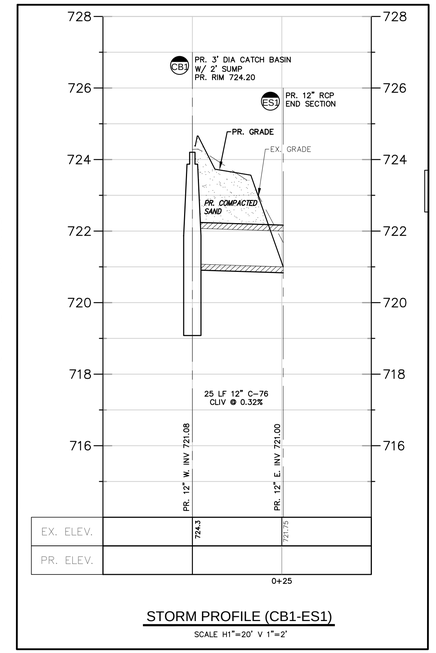
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
11-19-20	G.I. SUBMITTAL
07-26-21	UPDATED PER OWNER
05-06-22	REVISED PER G.I. REVIEW
06-03-22	SUBMITTED FOR PERMITS
08-03-22	REVISED PER CITY
10-14-22	REVISED PER R.C.O.C.
11-16-22	REVISED PER R.C.O.C.
11-22-22	LAP BID PACKAGE
12-09-22	REVISED PER M.D.O.T. LAP REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 80'

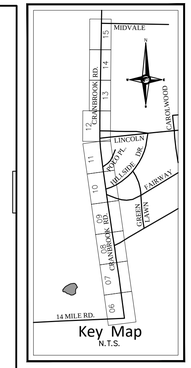
NFE JOB NO. L871
SHEET NO. 05



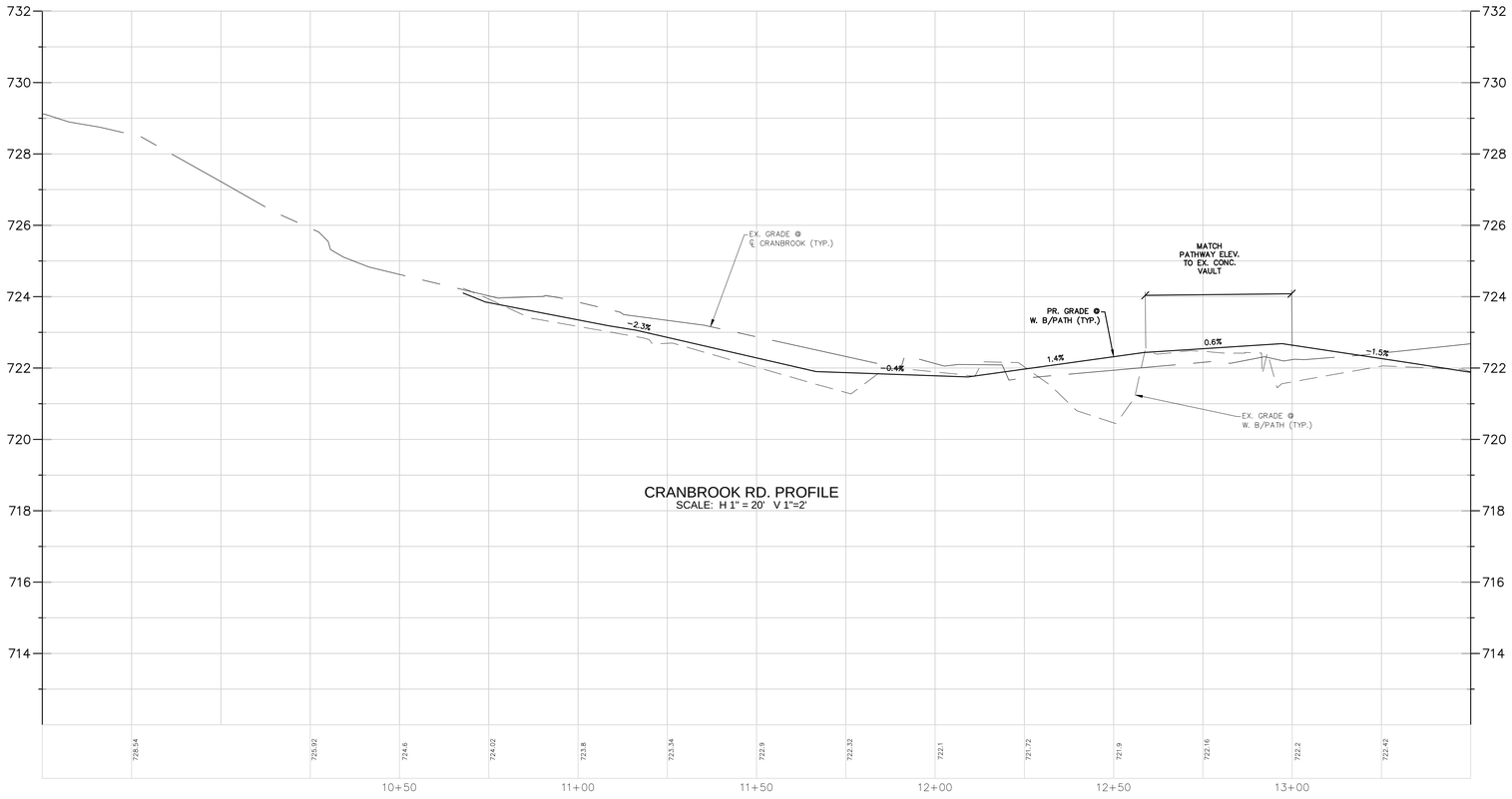


STORM PROFILE (CB1-ES1)

SCALE H1"=20' V 1"=2'



Key Map
N.T.S.



CRANBROOK RD. PROFILE

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

ESTIMATED QUANTITIES	UNIT	SHEET 06
Erosion Control, Inlet Protection, Fabric Drop	Each	1
Erosion Control, Silt Fence	Foot	625
HMA Surface, Rem	Square Yard	6
Curb and Gutter, Rem	Foot	16
Station Grading	Sta	3.5
Dr Structure Cover, Adj, Case 2	Each	4
Dr Structure Cover, Type J	Each	1
Dr Structure, 36 inch Dia	Each	1
Culv End Sect,Conc, 12 inch	Each	1
Culv End Sect, Grate	Each	1
Riprap, Plain, LM	Cubic Yard	3
Sewer, Cl-IV, 12 inch, Tr Det A	Foot	25
Subbase, CIP	Cubic Yard	65
Aggregate Base, 8 inch	Square Yard	16
Shared use Path, Conc, 4 inch, Modified	Square Yard	325
Hand Patching	Ton	1
Curb and Gutter, Conc, Det B2	Foot	24
Sign, Type II , Erect, Salv	Each	2
Sign, Type II A	Square Foot	31
Post, Steel, 3lb	Foot	12
Topsoil Surface, Furn, 3 inch	Square Yard	372
Seeding, Mixture THV	Pound	17
Mulch	Square Yard	342
Mulch Anchoring	Square Yard	342
Mulch Blanket, Modified	Square Yard	30
Water, Sodding/Seeding	Unit	1

UTILITY NOTE

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PROPOSED STORM STRUCTURE SCHEDULE

ES1: PR. 12" DIA. RCP END SECTION W/ BAR SCREEN
PR. 12" INV SE 721.00

CB1: PR. 3' DIA. CATCH BASIN W/ 2' SUMP
M.D.O.T. COVER "J"
(STANDARD PLAN R-14-D)
PR. RIM 724.20
PR. 12" INV NW 721.08

LAWN RESTORATION NOTES

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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
DOWNSPOUT
GROUND ELEVATION
DETECTABLE WARNING SURFACE, CAST IRON
CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC HMA SURFACE, REM HAND PATCHING
SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"
SIDEWALK, CONC, 9" S.U. PATH, CONC, 9"

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SEAL

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

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Cranbrook Rd.
Plan & Profile
Sta. P.O.B. to 13+50

Know what's below
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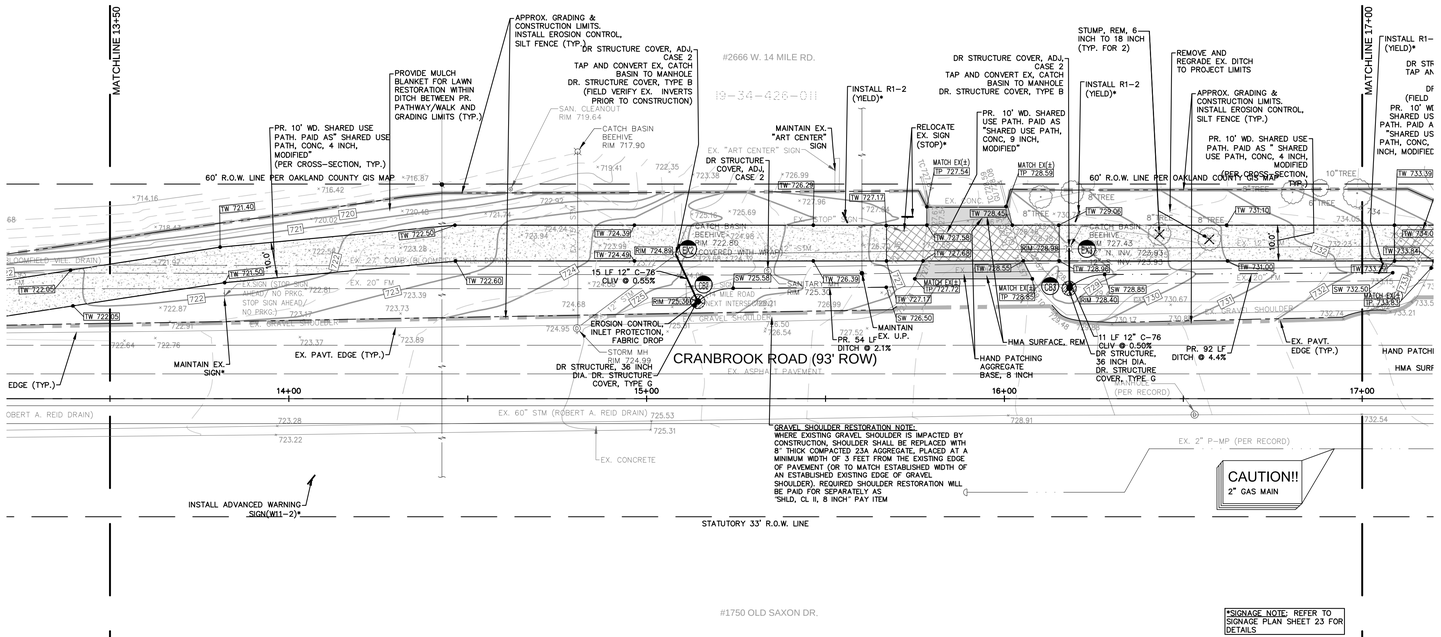
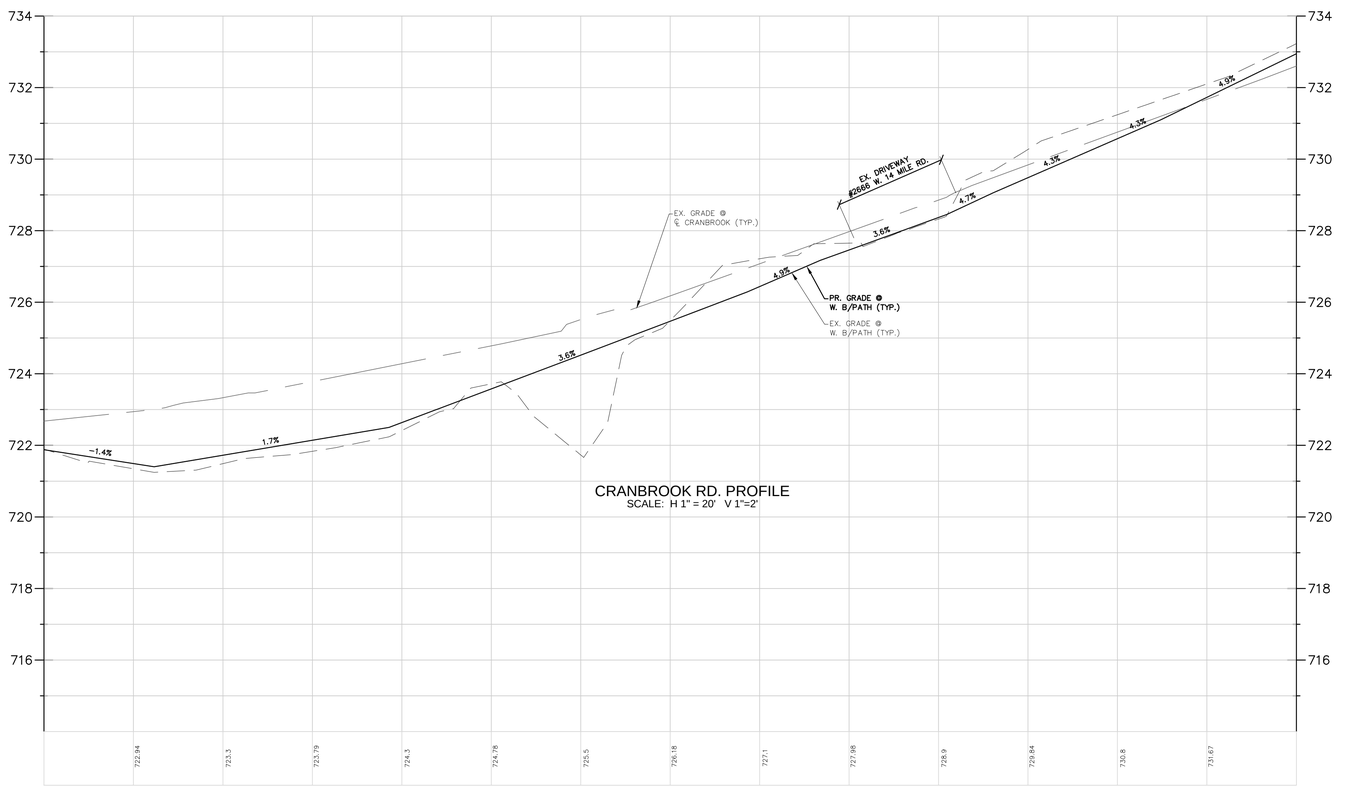
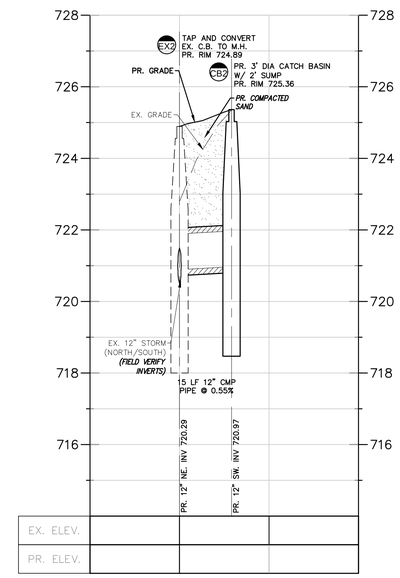
12-09-22	REVISED PER M.D.O.T. LAP REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20'

NFE JOB NO. L871
SHEET NO. 06

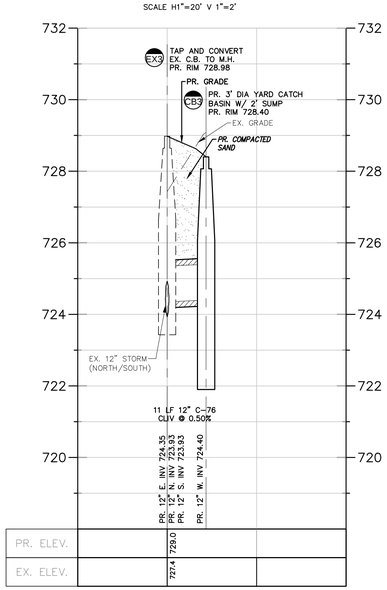






STORM PROFILE (CB2-EX2)

SCALE H1"=20' V 1"=2'



STORM PROFILE (CB3-EX3)

SCALE H1"=20' V 1"=2'

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PROPOSED STORM STRUCTURE SCHEDULE

EX2 — *TAP AND CONVERT*
EX. CATCH BASIN TO MANHOLE
M.D.O.T. COVER TYPE "B"
PR. RIM 724.89
EX. 12" INV SW *(FIELD VERIFY)*
EX. 12" INV. N *(FIELD VERIFY)*
PR. 12" INV. NE. 720.29

CB2 — *INSTALL*
PR. 3' DIA. REAR YARD CATCH BASIN W/ 2' SUMP
M.D.O.T. COVER TYPE "Q"
PR. RIM 725.36
PR. 12" INV W 720.97

EX3 — *TAP AND CONVERT*
EX. CATCH BASIN TO MANHOLE
M.D.OT. COVER TYPE "B"
PR. RIM 728.98
EX. 12" INV N. 723.93 *(FIELD VERIFY)*
EX. 12" INV. S. 723.93 *(FIELD VERIFY)*
PR. 12" INV. E. 724.35

CB3 — *INSTALL*
PR. 3' DIA. REAR YARD CATCH BASIN W/ 2' SUMP
M.D.O.T. COVER TYPE "Q"
PR. RIM 728.40
PR. 12" INV SW 724.40

UTILITY NOTE

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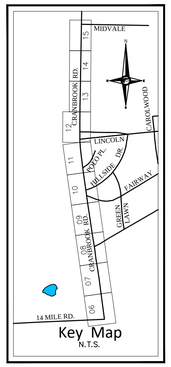
ESTIMATED QUANTITIES	UNIT	SHEET 07
Erosion Control, Inlet Protection, Fabric Drop	Each	2
Erosion Control, Silt Fence	Foot	650
HMA Surface, Rem	Square Yard	25
Stump, Rem, 6 inch to 18 inch	Each	2
Station Grading	Sta	3.5
Dr Structure Cover, Adj, Case 2	Each	2
Dr Structure Cover, Type B	Each	2
Dr Structure Cover, Type G	Each	2
Dr Structure, 36 inch Dia	Each	2
Dr Structure, Tap, 12 inch	Each	2
Sewer, Cl-IV, 12 inch, Tr Det A	Foot	26
Subbase, CIP	Cubic Yard	75
Aggregate Base, 8 inch	Square Yard	60
Shld, CL II, 8 inch	Square Yard	35
Shared use Path, Conc, 9 inch, Modified	Square Yard	53
Shared use Path, Conc, 4 inch, Modified	Square Yard	339
Hand Patching	Ton	9
Sign, Type II , Erect, Salv	Each	1
Sign, Type II A	Square Foot	3
Sign, Type II B	Square Foot	7
Post, Steel, 3lb	Foot	36
Topsoil Surface, Furn, 3 inch	Square Yard	821
Seeding, Mixture THV	Pound	38
Mulch	Square Yard	413
Mulch Anchoring	Square Yard	413
Mulch Blanket, Modified	Square Yard	408
Water, Sodding/Seeding	Unit	4

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
DOWNSPOUT
GROUND ELEVATION
DETECTABLE WARNING SURFACE, CAST IRON
CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC
HMA SURFACE, REM
HAND PATCHING
SIDEWALK, CONC, 4"
S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 6"
SIDEWALK, CONC, 6"
SIDEWALK, CONC, 9"
S.U. PATH, CONC, 9"



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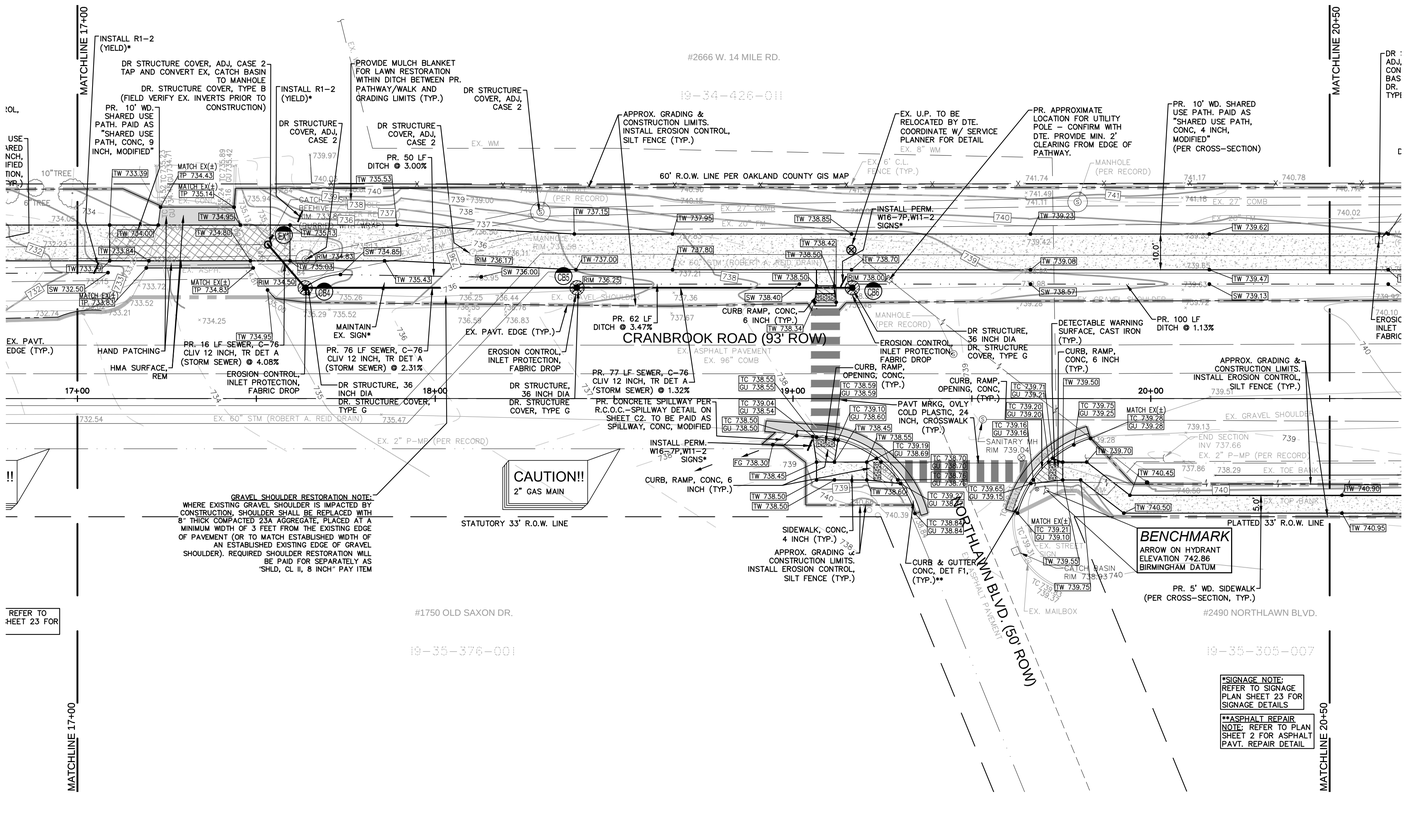

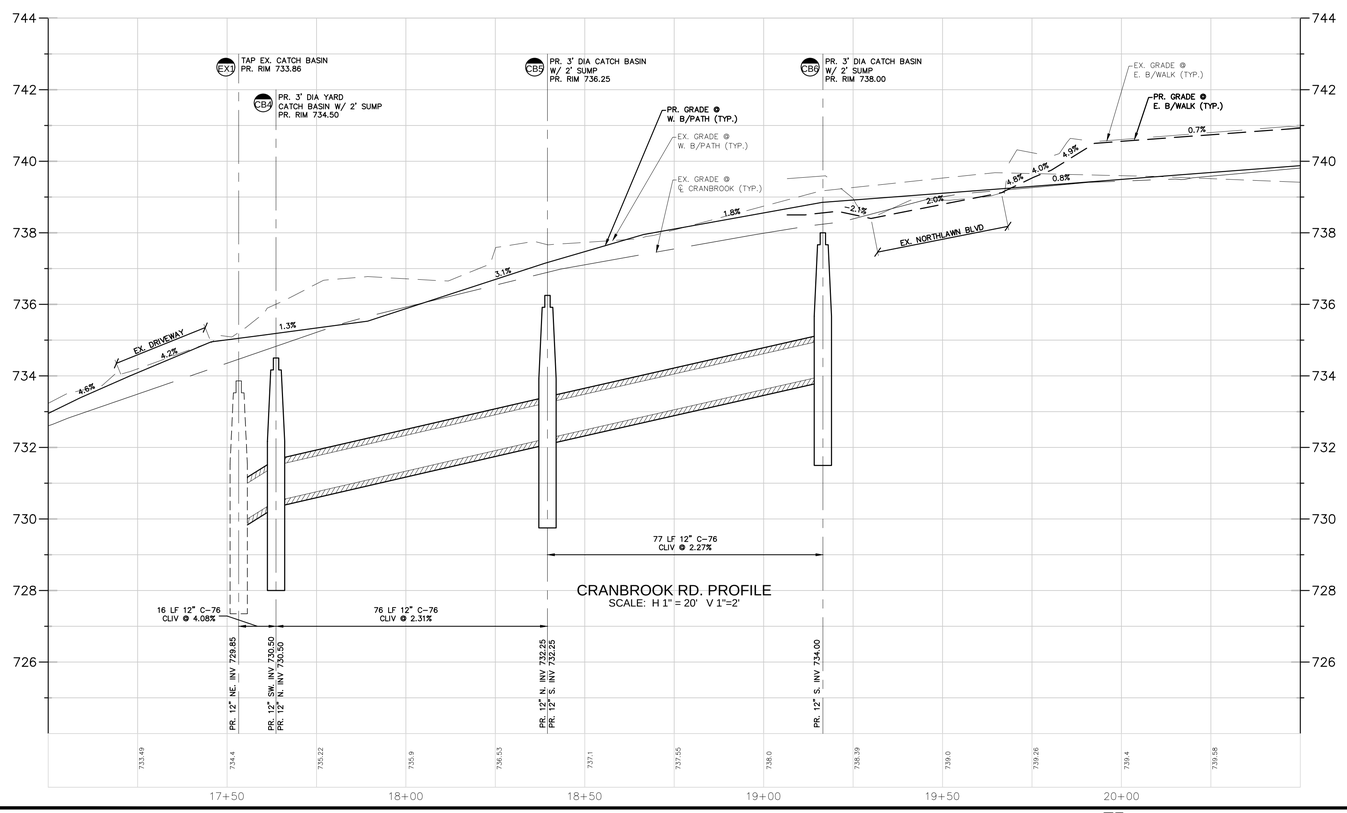

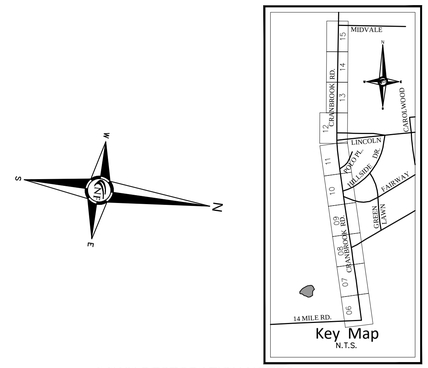

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PROPOSED STORM STRUCTURE SCHEDULE

EX1 *TAP* EX. CATCH BASIN
EX. RIM: 734.64
PR. RIM 733.86
M.D.O.T. COVER TYPE "B
PR. 12" INV N. 729.85
PR. 12" INV N. 730.50
(FIELD VERIFY EX. INVERTS)

CB4 PR. 3' DIA. CATCH BASIN W/ 2' SUMP
M.D.O.T. COVER TYPE "G"
PR. RIM 734.50
PR. 12" INV S. 730.50
PR. 12" INV N. 730.50

CB5 PR. 3' DIA. CATCH BASIN W/ 2' SUMP
M.D.O.T. COVER TYPE "G"
PR. RIM 736.25
PR. 12" INV N. 732.25
PR. 12" INV S. 732.25

CB6 PR. 3' DIA. CATCH BASIN W/ 2' SUMP
M.D.O.T. COVER TYPE "G"
PR. RIM 738.00
PR. 12" INV S. 734.00

ESTIMATED QUANTITIES	UNIT	SHEET 08
Erosion Control, Inlet Protection, Fabric Drop	Each	3
Erosion Control, Silt Fence	Foot	820
HMA Surface, Rem	Square Yard	6
Station Grading	Sta	3.5
Dr Structure Cover, Adj, Case 2	Each	4
Dr Structure Cover, Type B	Each	1
Dr Structure Cover, Type G	Each	3
Dr Structure, 36 inch Dia	Each	3
Dr Structure, Tap, 12 inch	Each	1
Sewer, Cl-IV, 12 inch, Tr Det A	Foot	169
Subbase, CIP	Cubic Yard	75
Aggregate Base, 8 inch	Square Yard	121
Shld, CL II, 8 inch	Square Yard	142
Shared use Path, Conc, 9 inch, Modified	Square Yard	56
Shared use Path, Conc, 4 inch, Modified	Square Yard	337
Curb, Ramp, Conc, 6 inch	Square Foot	145
Sidewalk, Conc, 4 inch	Square Foot	492
Hand Patching	Ton	2
Detectable Warning Surface, Cast Iron	Foot	40
Curb and Gutter, Conc, Det F1	Foot	58
Curb Ramp Opening, Conc	Foot	27
Spillway, Conc, Modified	Square Foot	15
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	144
Sign, Type II A	Square Foot	3
Sign, Type II B	Square Foot	20
Post, Steel, 3lb	Foot	48
Topsoil Surface, Furn, 3 inch	Square Yard	790
Seeding, Mixture THV	Pound	36
Mulch	Square Yard	340
Mulch Anchoring	Square Yard	340
Mulch Blanket, Modified	Square Yard	450
Water, Sodding/Seeding	Unit	3

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LEGEND

EXISTING SAN/COMB SEWER
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EXISTING GAS MAIN
OVERHEAD LINES
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LANDSCAPE BED
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PUBLIC PHONE
WELL
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PARKING METER
MAIL BOX
ROCK/BOULDER
SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
DOWNSPOUT
GROUND ELEVATION
DETECTABLE WARNING SURFACE, CAST IRON
CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC
HMA SURFACE, REM
HAND PATCHING
SIDEWALK, CONC, 4"
S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 6"
SIDEWALK, CONC, 6"
SIDEWALK, CONC, 9"
S.U. PATH, CONC, 9"

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SEAL

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Cranbrook Rd.
Plan & Profile
Sta. 17+00 to 20+50

Know what's below Call before you dig.

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11-22-22	LAP BID PACKAGE
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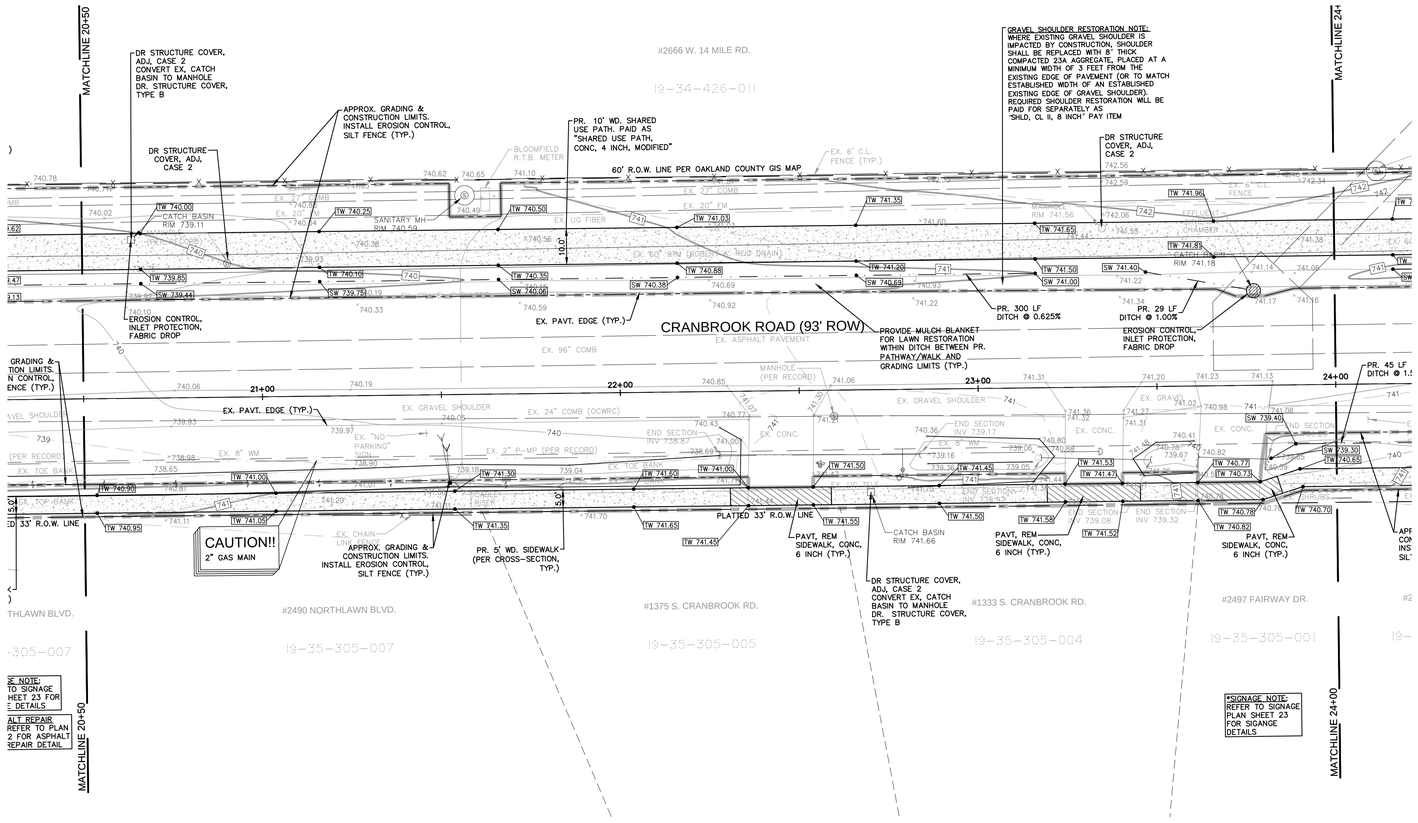
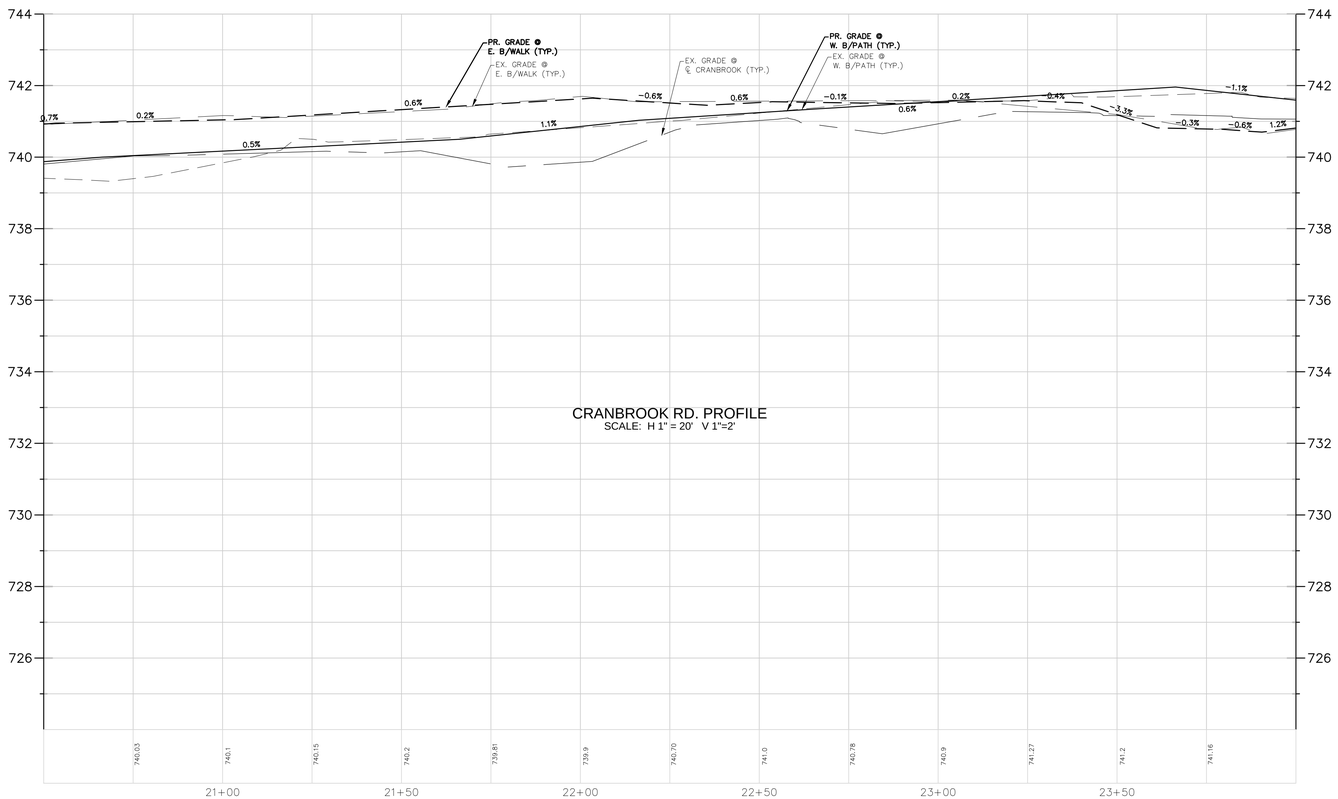
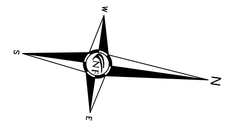
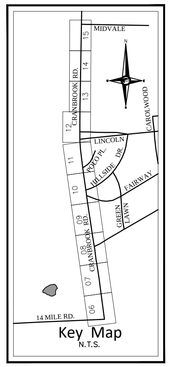
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. L871
SHEET NO. 08









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LAWN RESTORATION NOTES

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ESTIMATED QUANTITIES	UNIT	SHEET 09
Erosion Control, Inlet Protection, Fabric Drop	Each	1
Erosion Control, Silt Fence	Foot	1,275
Pavt, Rem	Square Yard	30
Station Grading	Sta	3.5
Dr Structure Cover, Adj, Case 2	Each	4
Dr Structure Cover, Type B	Each	2
Subbase, CIP	Cubic Yard	111
Shld, CL II, 8 inch	Square Yard	147
Shared use Path, Conc, 4 inch, Modified	Square Yard	389
Sidewalk, Conc, 6 inch	Square Foot	415
Sidewalk, Conc, 4 inch	Square Foot	1,340
Topsoil Surface, Furn, 3 inch	Square Yard	992
Seeding, Mixture THV	Pound	45
Mulch	Square Yard	625
Mulch Anchoring	Square Yard	625
Mulch Blanket, Modified	Square Yard	367
Water, Sodding/Seeding	Unit	5

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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
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CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC
HMA SURFACE, REM HAND PATCHING
SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"
SIDEWALK, CONC, 9" S.U. PATH, CONC, 9"

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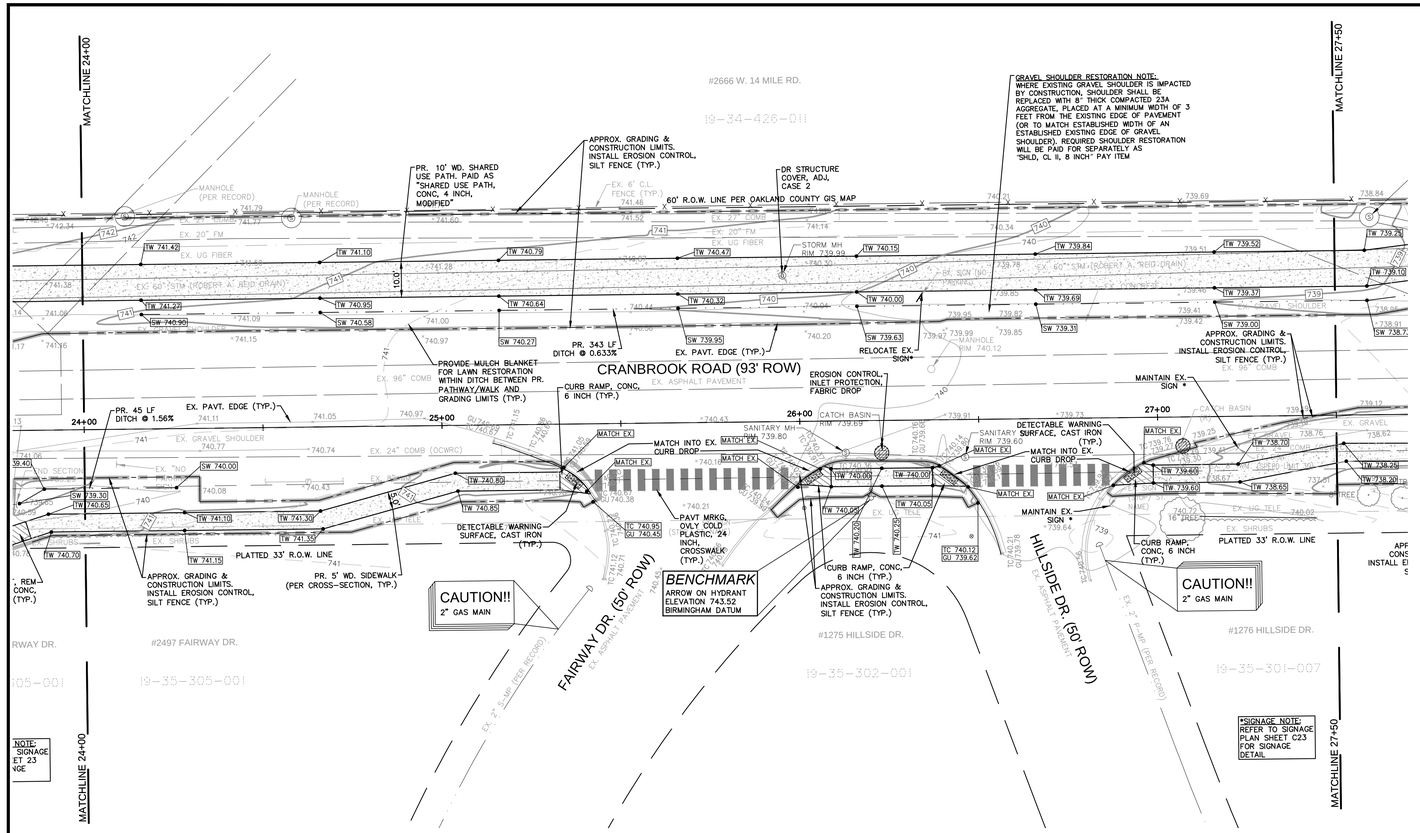

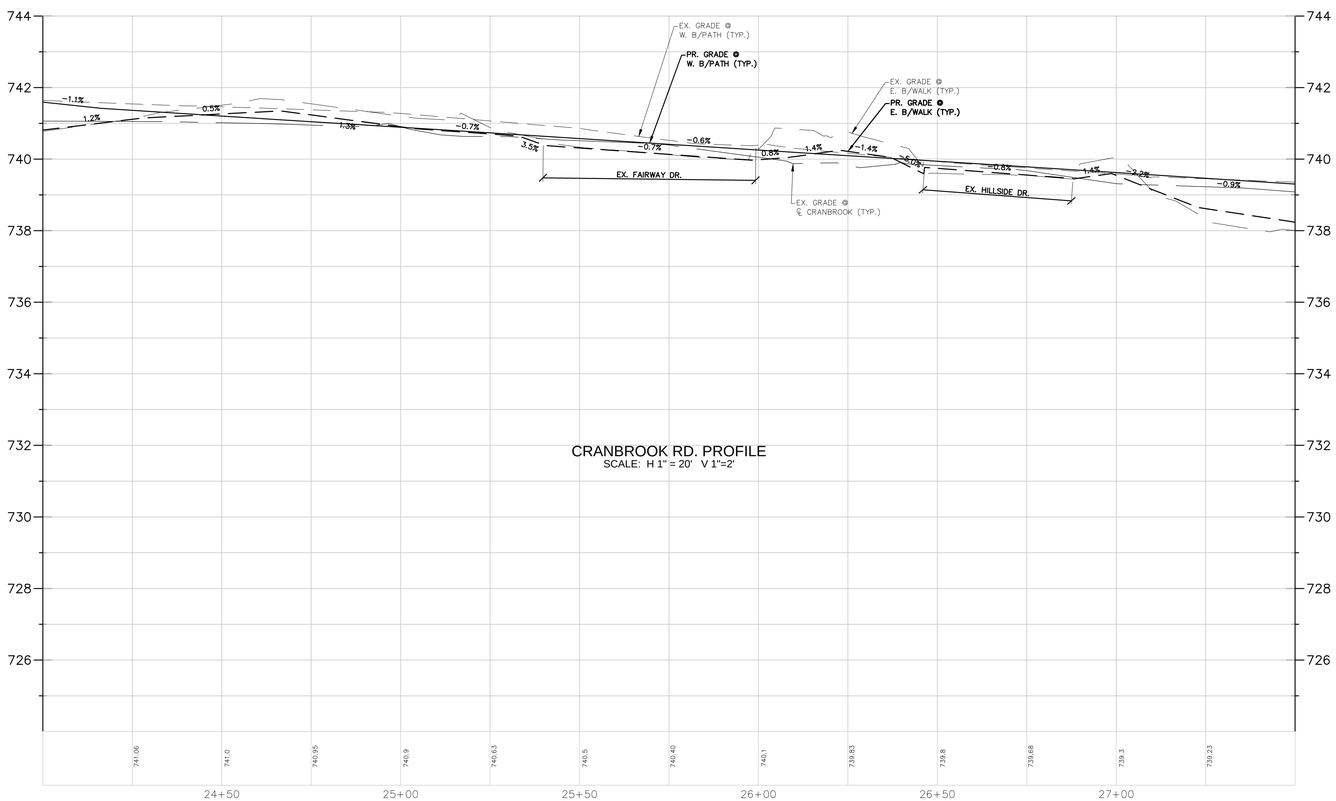

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ESTIMATED QUANTITIES	UNIT	SHEET 10
Erosion Control, Inlet Protection, Fabric Drop	Each	2
Erosion Control, Silt Fence	Foot	1,170
HMA Surface, Rem	Square Yard	11
Station Grading	Sta	3.5
Dr Structure Cover, Adj, Case 2	Each	1
Subbase, CIP	Cubic Yard	99
Shld, CL II, 8 inch	Square Yard	145
Shared use Path, Conc, 4 inch, Modified	Square Yard	389
Curb, Ramp, Conc, 6 inch	Square Foot	140
Sidewalk, Conc, 4 inch	Square Foot	1,075
Hand Patching	Ton	3
Detectable Warning Surface, Cast Iron	Foot	40
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	144
Sign, Type II , Erect, Salv	Each	1
Topsoil Surface, Furn, 3 inch	Square Yard	940
Seeding, Mixture THV	Pound	43
Mulch	Square Yard	580
Mulch Anchoring	Square Yard	580
Mulch Blanket, Modified	Square Yard	360
Water, Sodding/Seeding	Unit	4

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- EXISTING WATER MAIN (GVB, GVW, HYDRANT)
- EXISTING STORM SEWER (RYCB, MANHOLE, CB, END SECTION)
- EXISTING BURIED CABLES (ELEC. METER, ELECTRIC MANHOLE, TELEPHONE MANHOLE)
- EXISTING GAS MAIN (GAS METER, GAS MARKER, GAS VALVE)
- OVERHEAD LINES (UTILITY POLE, STRAIN POLE, LIGHT 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
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- CURB RAMP OPENING, CONC
- HMA SURFACE, REM HAND PATCHING
- SIDEWALK, CONC, 4", S.U. PATH, CONC, 4"
- CURB, RAMP, CONC, 6", SIDEWALK, CONC, 6"
- SIDEWALK, CONC, 5", S.U. PATH, CONC, 5"

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

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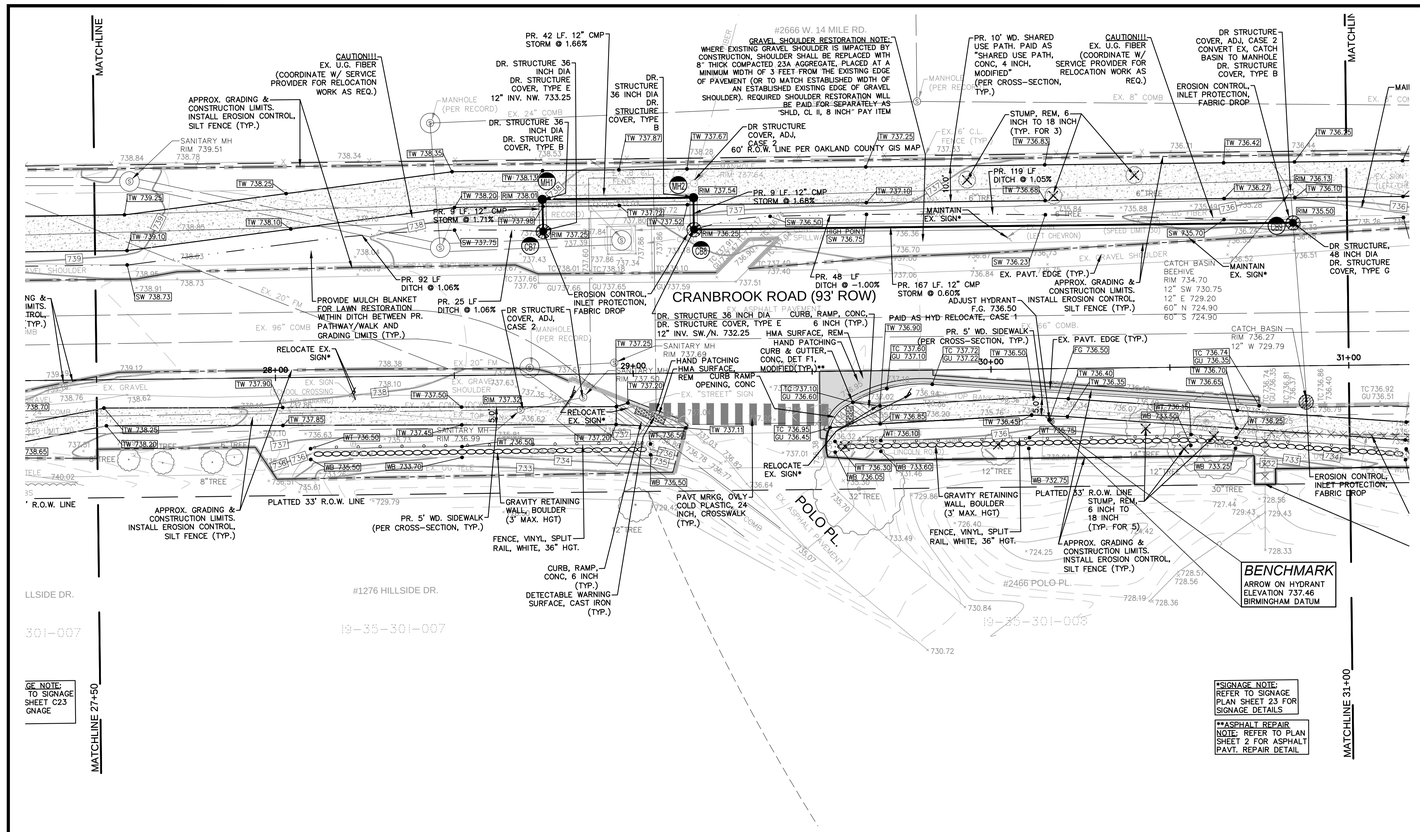
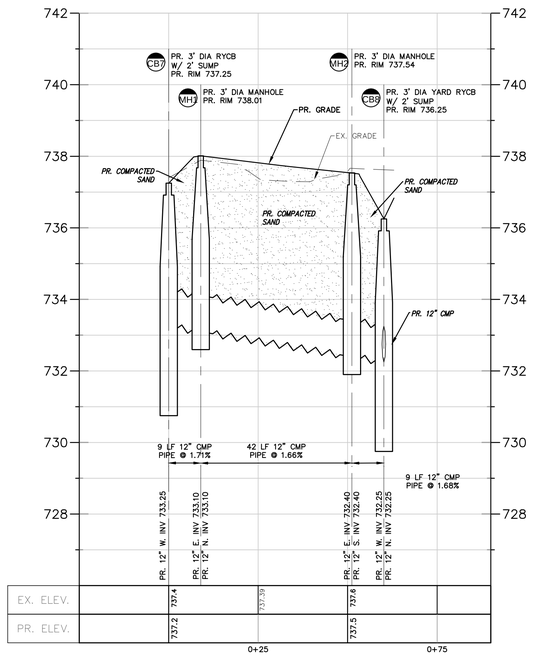
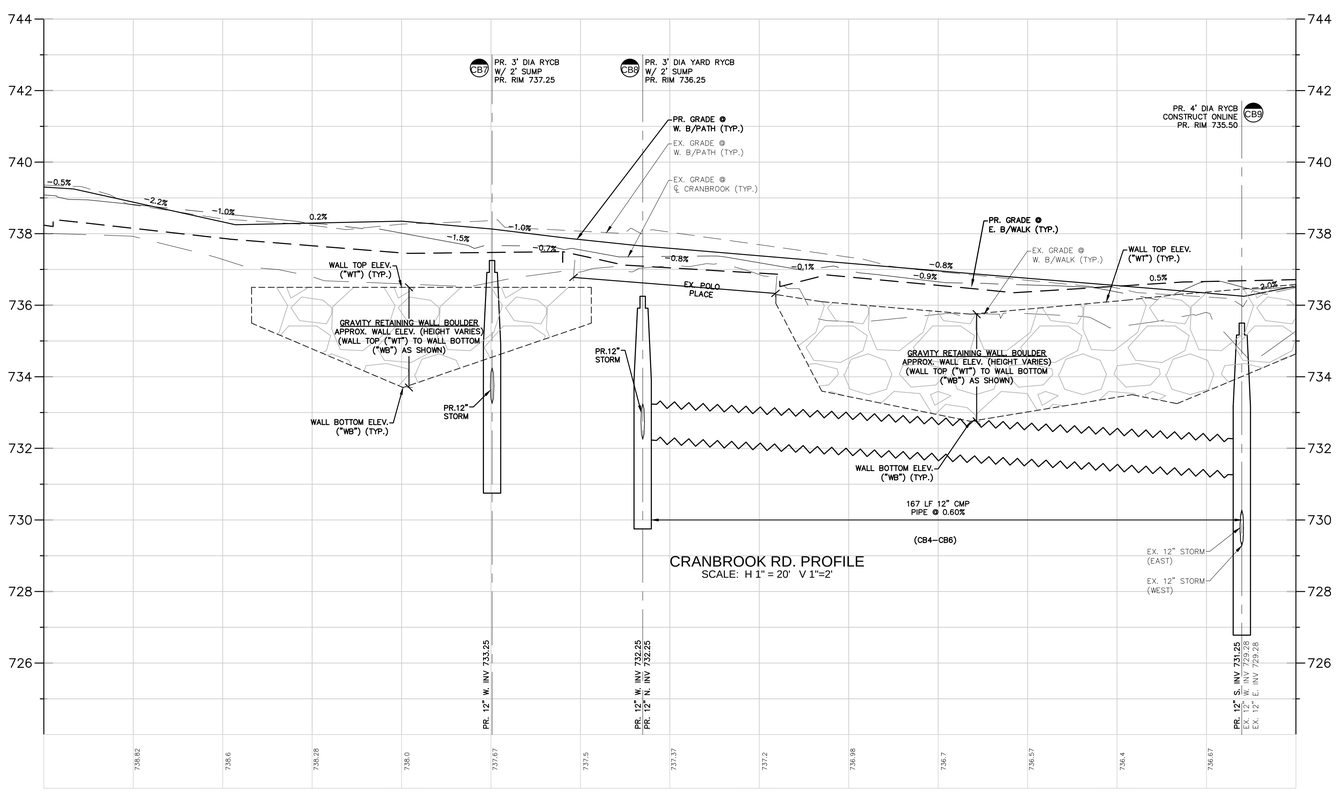
SHEET NO. 10





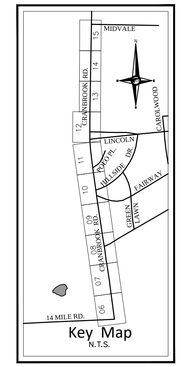
STORM PROFILE (CB4-CB5)

SCALE H1"=20' V 1"=2'



CRANBROOK RD. PROFILE

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



Key Map
N.T.S.

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	UNIT	SHEET 11
Erosion Control, Inlet Protection, Fabric Drop	Each	4
Erosion Control, Silt Fence	Foot	1,175
Fence, Rem & Salv	Foot	40
Stump, Rem, 6 inch to 18 inch	Each	8
Gravity Retaining Wall, Boulder	Square Foot	620
Station Grading	Sta	3.5
Hydrant, Relocate, Case 1	Each	1
Dr Structure Cover, Adj, Case 2	Each	4
Dr Structure Cover, Type B	Each	3
Dr Structure Cover, Type E	Each	2
Dr Structure Cover, Type G	Each	1
Dr Structure, 36 inch Dia	Each	4
Dr Structure, 48 inch Dia	Each	1
Sewer, CMP, 12 inch, Tr Det A	Foot	227
Subbase, CIP	Cubic Yard	320
Aggregate Base, 8 inch	Square Yard	73
Shld, CL II, 8 inch	Square Yard	98
Shared use Path, Conc, 4 inch, Modified	Square Yard	390
Curb, Ramp, Conc, 6 inch	Square Foot	115
Sidewalk, Conc, 4 inch	Square Foot	1,314
Hand Patching	Ton	1
Detectable Warning Surface, Cast Iron	Foot	20
Curb and Gutter, Conc, Det F1	Foot	118
Curb Ramp Opening, Conc	Foot	10
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	72
Fence, Vinyl, Split Rail, White, 36 inch Height	Foot	236
Sign, Type II , Erect, Salv	Each	3
Topsoil Surface, Furn, 3 inch	Square Yard	1,025
Seeding, Mixture THV	Pound	44
Mulch	Square Yard	335
Mulch Anchoring	Square Yard	335
Mulch Blanket, Modified	Square Yard	690
Water, Sodding/Seeding	Unit	4

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PROPOSED STORM STRUCTURE SCHEDULE

CB7 — PR. 3' RYCB W/ 2' SUMP
M.D.O.T. COVER TYPE E
PR. RIM 737.25
PR. 12" INV N.W. 733.25

CB9 — PR. 4' RYCB W/ 2' SUMP
CONSTRUCT ONLINE
M.D.O.T. COVER TYPE G
PR. RIM 735.50
PR. 12" INV S. 731.25
EX. 12" INV W. 729.28
(CONNECT)
EX. 12" INV E. 729.28
(CONNECT)

CB6 — PR. 3' RYCB W/ 2' SUMP
M.D.O.T. COVER TYPE E
PR. RIM 736.25
PR. 12" INV SW. 732.25
PR. 12" INV N. 732.25

MH7 — PR. 3' DIA MANHOLE
M.D.O.T. COVER TYPE B
PR. RIM 738.01
PR. 12" INV E. 733.10
PR. 12" INV N. 733.10

MH2 — PR. 3' DIA MANHOLE
M.D.O.T. COVER TYPE B
PR. RIM 737.54
PR. 12" INV E. 732.40
PR. 12" INV S. 732.40

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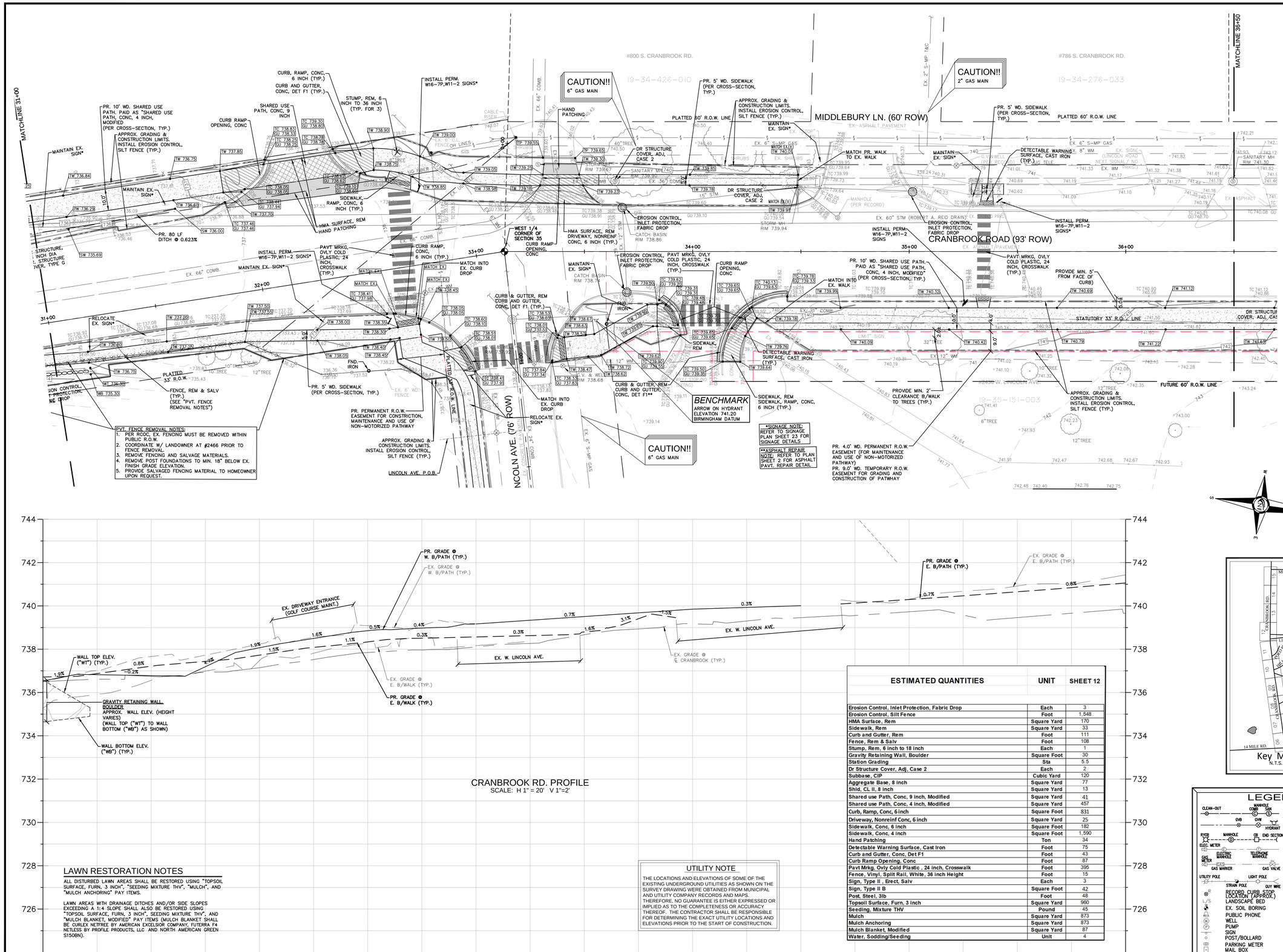

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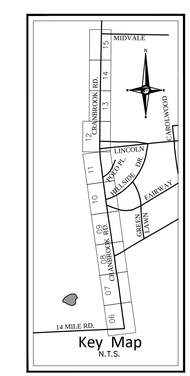
HMA Surface, Rem	Square Yard	170
Sidewalk, Rem	Square Yard	33
Curb and Gutter, Rem	Foot	111
Fence, Rem & Salv	Foot	108
Stump, Rem, 6 inch to 18 inch	Each	1
Gravity Retaining Wall, Boulder	Square Foot	30
Station Grading	Sta	5.5
Dr Structure Cover, Adj, Case 2	Each	2
Subbase, CIP	Cubic Yard	120
Aggregate Base, 8 inch	Square Yard	77
Shld, CL II, 8 inch	Square Yard	13
Shared use Path, Conc, 9 inch, Modified	Square Yard	41
Shared use Path, Conc, 4 inch, Modified	Square Yard	457
Curb, Ramp, Conc, 6 inch	Square Foot	831
Driveway, Nonreinf Conc, 6 inch	Square Yard	25
Sidewalk, Conc, 6 inch	Square Foot	182
Sidewalk, Conc, 4 inch	Square Foot	1,590
Hand Patching	Ton	34
Detectable Warning Surface, Cast Iron	Foot	75
Curb and Gutter, Conc, Det F1	Foot	43
Curb Ramp Opening, Conc	Foot	87
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	395
Fence, Vinyl, Split Rail, White, 36 inch Height	Foot	15
Sign, Type II , Erect, Salv	Each	3
Sign, Type II B	Square Foot	42
Post, Steel, 3lb	Foot	48
Topsoil Surface, Furn, 3 inch	Square Yard	960
Seeding, Mixture THV	Pound	45
Mulch	Square Yard	873
Mulch Anchoring	Square Yard	873
Mulch Blanket, Modified	Square Yard	87
Water, Sodding/Seeding	Unit	4



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
DOWNSPOUT
GROUND ELEVATION
DETECTABLE WARNING SURFACE, CAST IRON
CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC
HMA SURFACE, REM
HAND PATCHING
SIDEWALK, CONC, 4"
S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 8"
SIDEWALK, CONC, 6"
SIDEWALK, CONC, 9"
S.U. PATH, CONC, 9"

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SEAL

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Non-Motorized Pathway
Improvements

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Engineering Department
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Birmingham, MI 48012

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Range 10 East
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Plan & Profile
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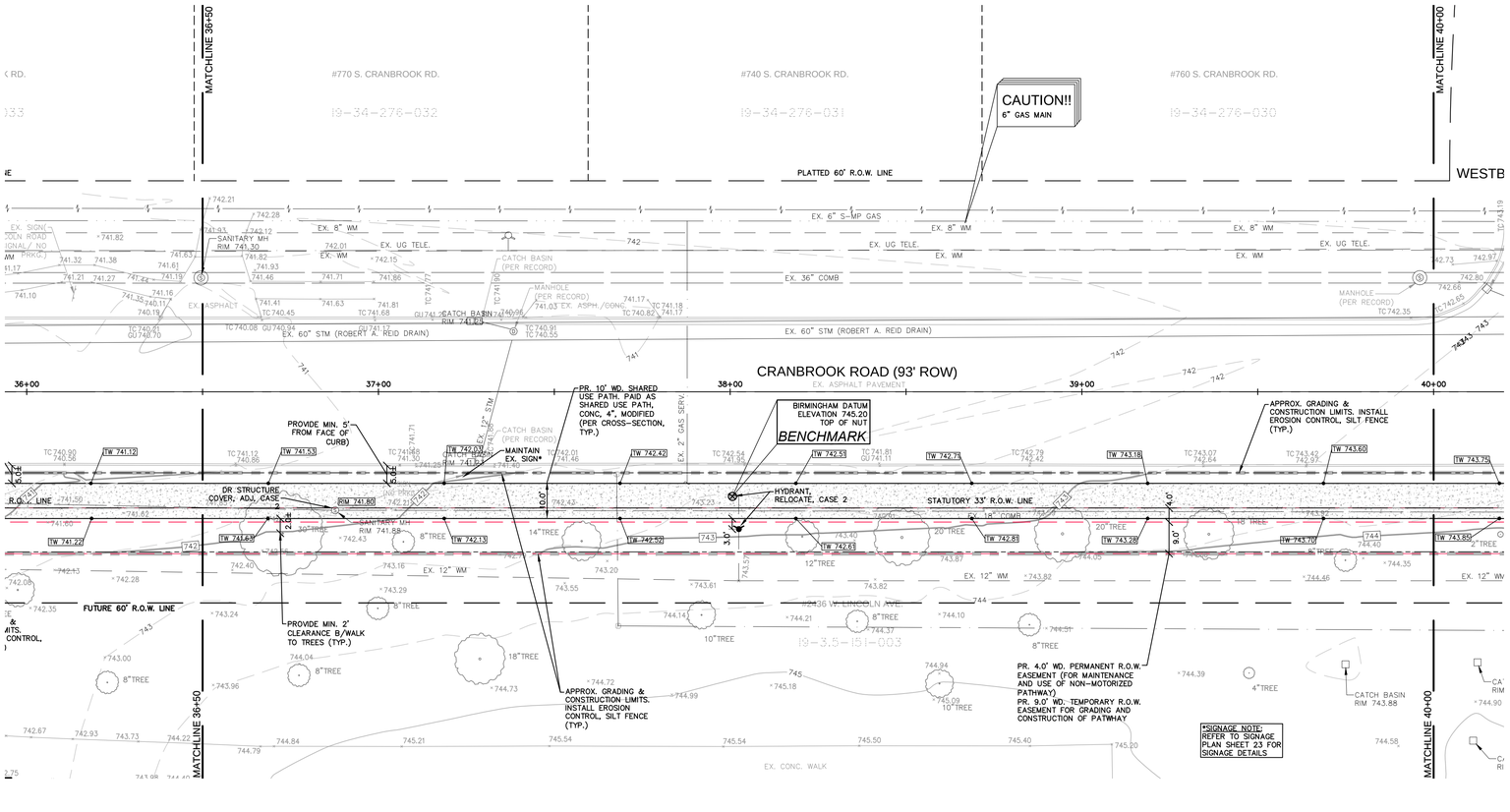
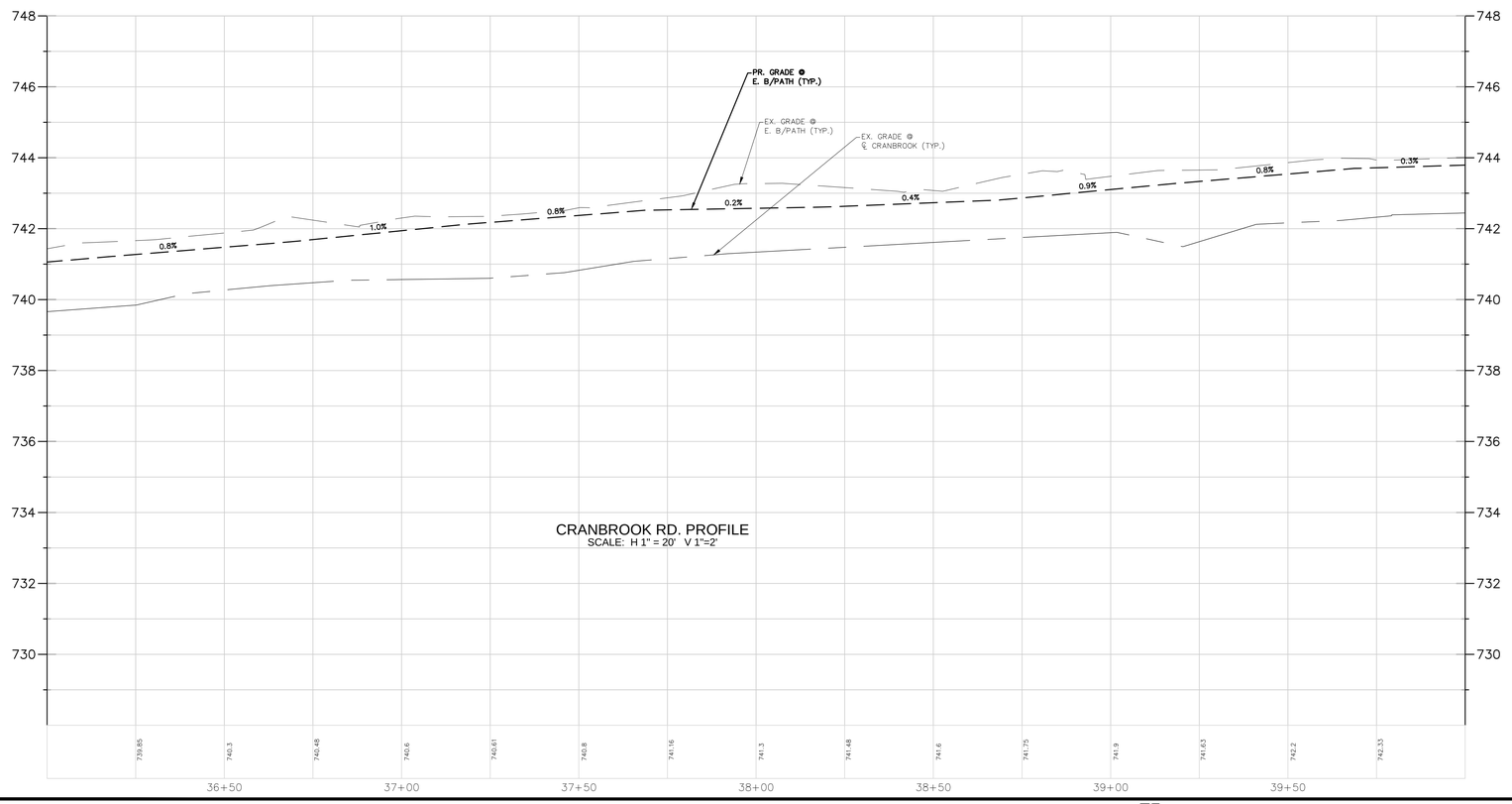
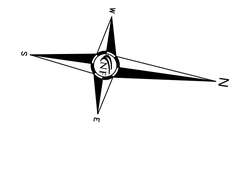
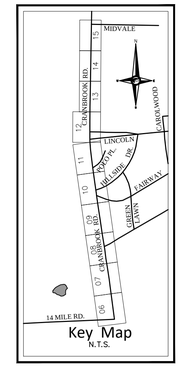
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. L871
SHEET NO. 12









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ESTIMATED QUANTITIES	UNIT	SHEET 13
Erosion Control, Silt Fence	Foot	700
Station Grading	Sta	3.5
Hydrant, Relocate, Case 2	Each	1
Dr Structure Cover, Adj, Case 2	Each	1
Subbase, CIP	Cubic Yard	72
Shared use Path, Conc, 4 inch, Modified	Square Yard	389
Topsoil Surface, Furn, 3 inch	Square Yard	480
Seeding, Mixture THV	Pound	22
Mulch	Square Yard	480
Mulch Anchoring	Square Yard	480
Water, Sodding/Seeding	Unit	3

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DESIGNED BY: P. Tulikangas
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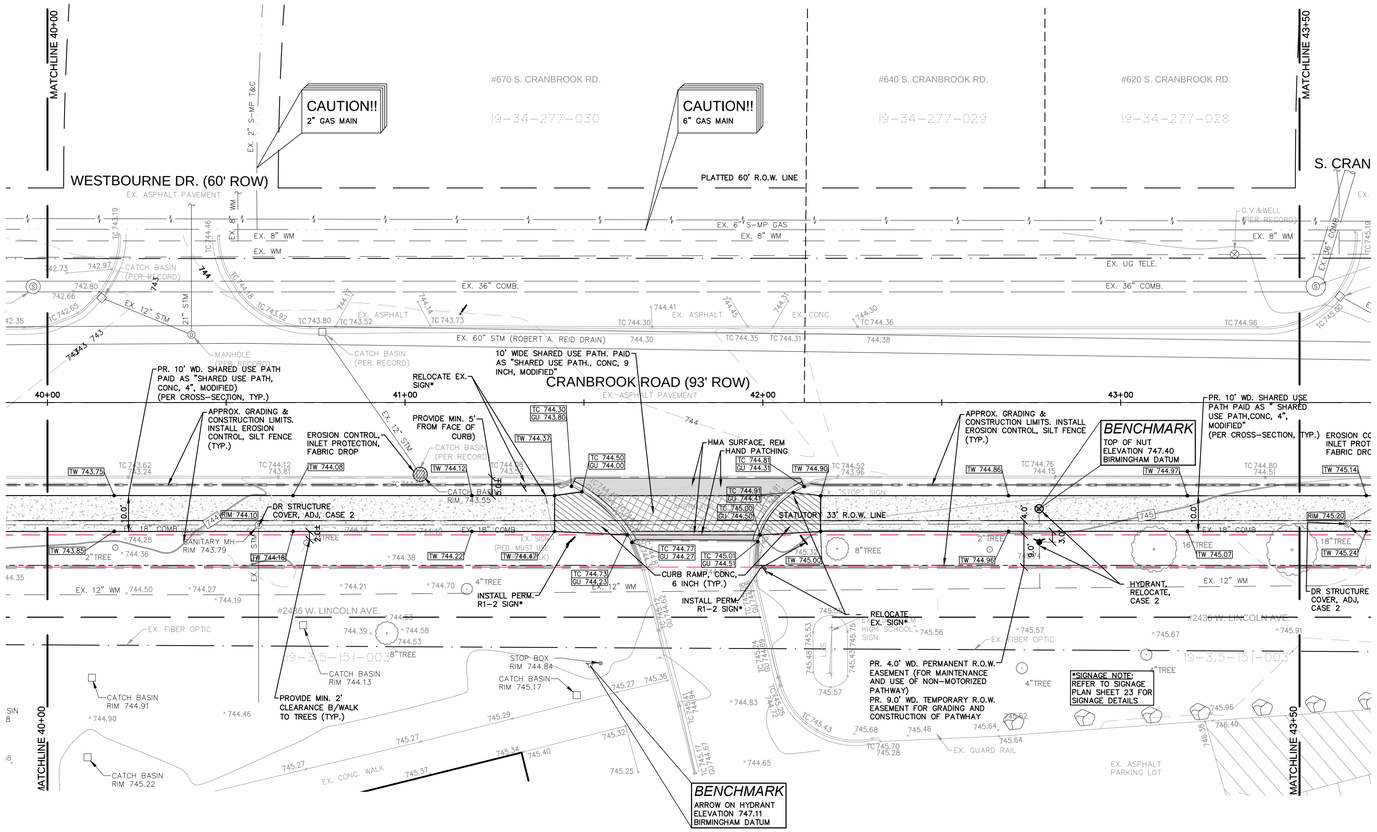
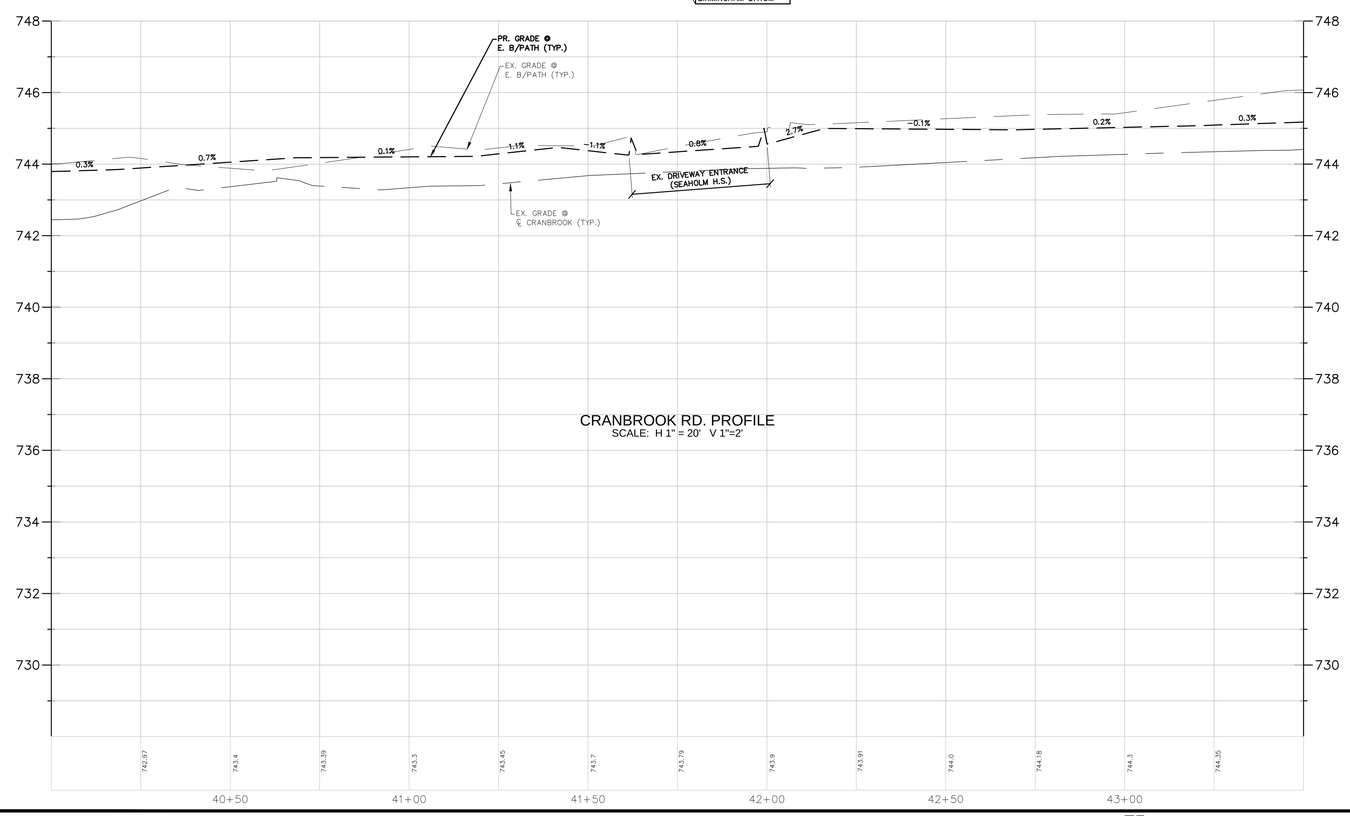
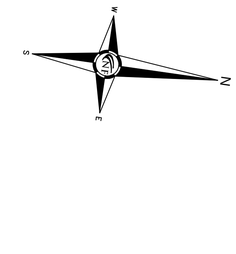
NFE JOB NO. L871
SHEET NO. 13





CRANBROOK RD. PROFILE
SCALE: H 1" = 20' V 1"=2'



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ESTIMATED QUANTITIES	UNIT	SHEET 14
Erosion Control, Inlet Protection, Fabric Drop	Each	1
Erosion Control, Silt Fence	Foot	640
HMA Surface, Rem	Square Yard	87
Curb and Gutter, Rem	Foot	26
Station Grading	Sta	3.5
Hydrant, Relocate, Case 2	Each	1
Dr Structure Cover, Adj, Case 2	Each	1
Subbase, CIP	Cubic Yard	74
Aggregate Base, 8 inch	Square Yard	87
Shared use Path, Conc, 9 inch, Modified	Square Yard	47
Shared use Path, Conc, 4 inch, Modified	Square Yard	328
Curb, Ramp, Conc, 6 inch	Square Foot	250
Hand Patching	Ton	14
Curb and Gutter, Conc, Det F1	Foot	6
Curb Ramp Opening, Conc	Foot	32
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	60
Sign, Type II , Erect, Salv	Each	2
Sign, Type II A	Square Foot	3
Sign, Type II B	Square Foot	7
Post, Steel, 3lb	Foot	36
Topsoil Surface, Furn, 3 inch	Square Yard	442
Seeding, Mixture THV	Pound	20
Mulch	Square Yard	442
Mulch Anchoring	Square Yard	442
Water, Sodding/Seeding	Unit	3

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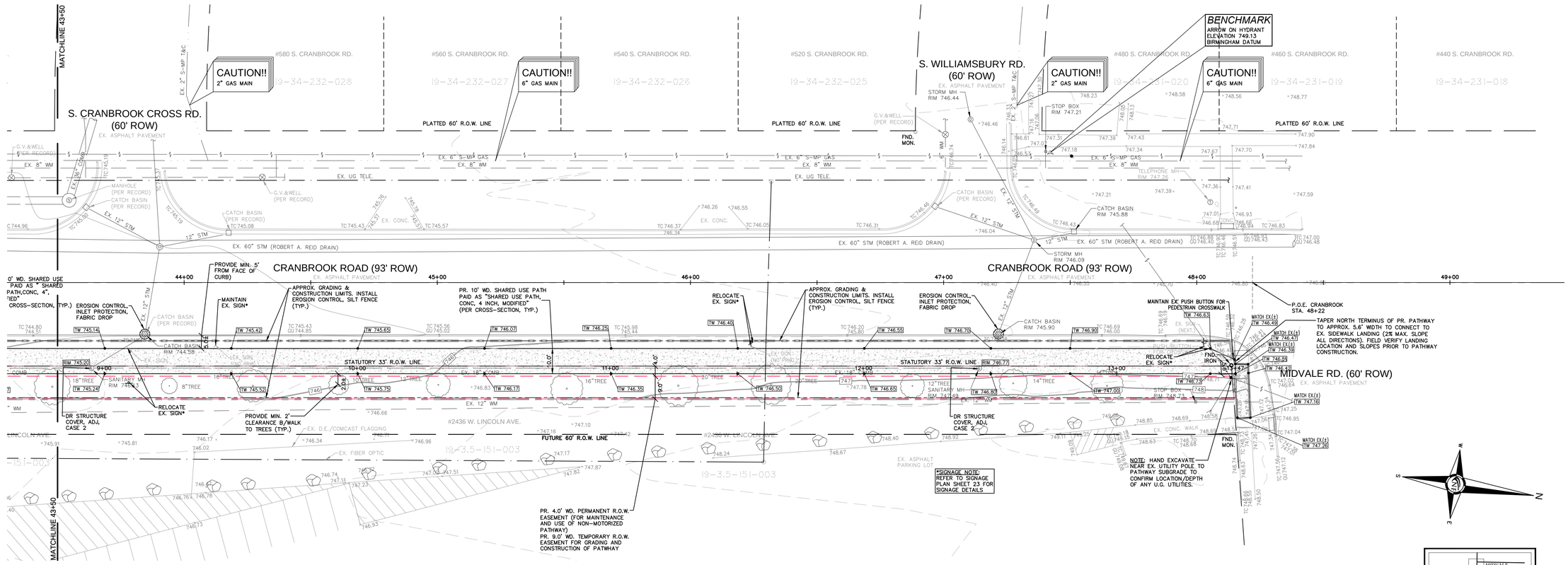
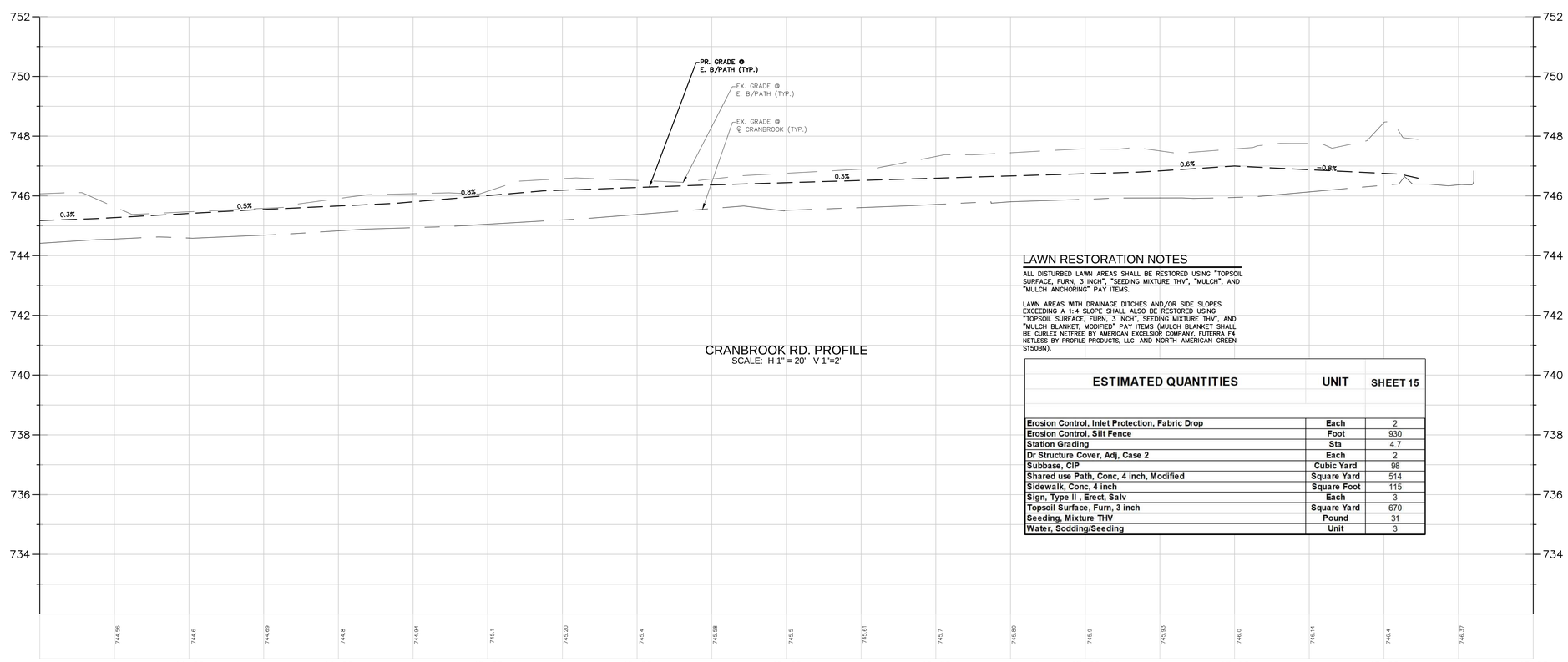
NFE JOB NO. L871
SHEET NO. 14





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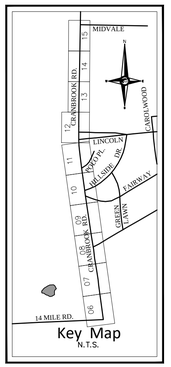
ESTIMATED QUANTITIES	UNIT	SHEET 15
Erosion Control, Inlet Protection, Fabric Drop	Each	2
Erosion Control, Silt Fence	Foot	930
Station Grading	Sta	4.7
Dr Structure Cover, Adj, Case 2	Each	2
Subbase, CIP	Cubic Yard	98
Shared use Path, Conc, 4 inch, Modified	Square Yard	514
Sidewalk, Conc, 4 inch	Square Foot	115
Sign, Type II , Erect, Salv	Each	3
Topsoil Surface, Furn, 3 inch	Square Yard	670
Seeding, Mixture THV	Pound	31
Water, Sodding/Seeding	Unit	3



Key Map
N.T.S.

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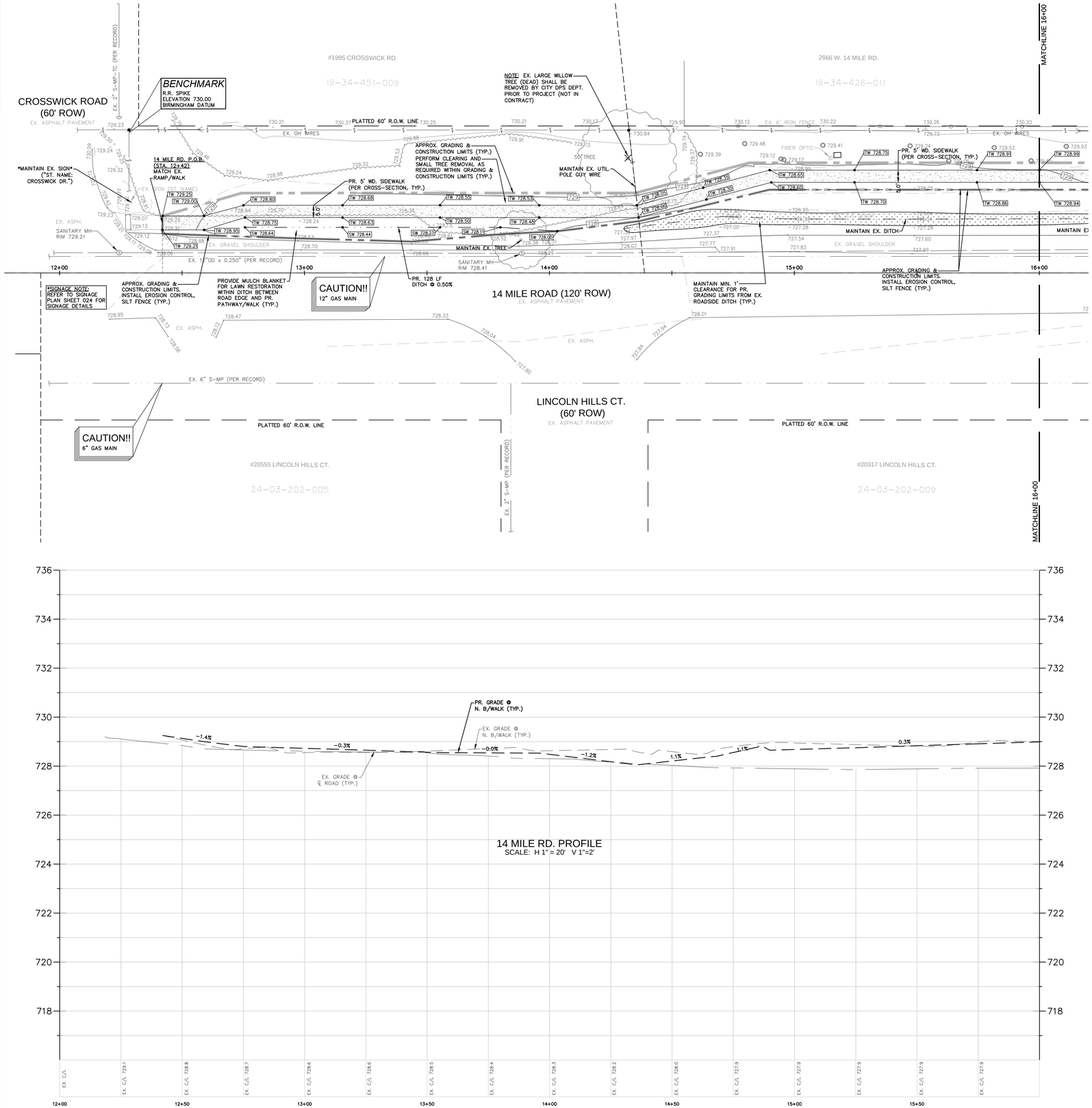
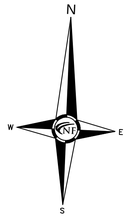
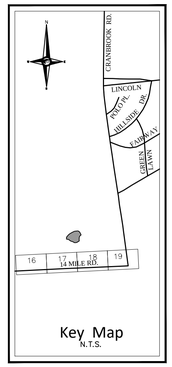
SHEET NO. 15







ESTIMATED QUANTITIES	UNIT	SHEET 16
Erosion Control, Silt Fence	Foot	360
Station Grading	Sta	3.6
Subbase, CIP	Cubic Yard	40
Sidewalk, Conc, 4 inch	Square Foot	1,820
Topsoil Surface, Furn, 3 inch	Square Yard	379
Seeding, Mixture THV	Pound	17
Mulch	Square Yard	231
Mulch Anchoring	Square Yard	231
Mulch Blanket, Modified	Square Yard	148
Water, Sodding/Seeding	Unit	2

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- GAS METER BARRICADE TELEPHONE MANHOLE
- GAS MARKER GAS VALVE — EXISTING GAS MAIN
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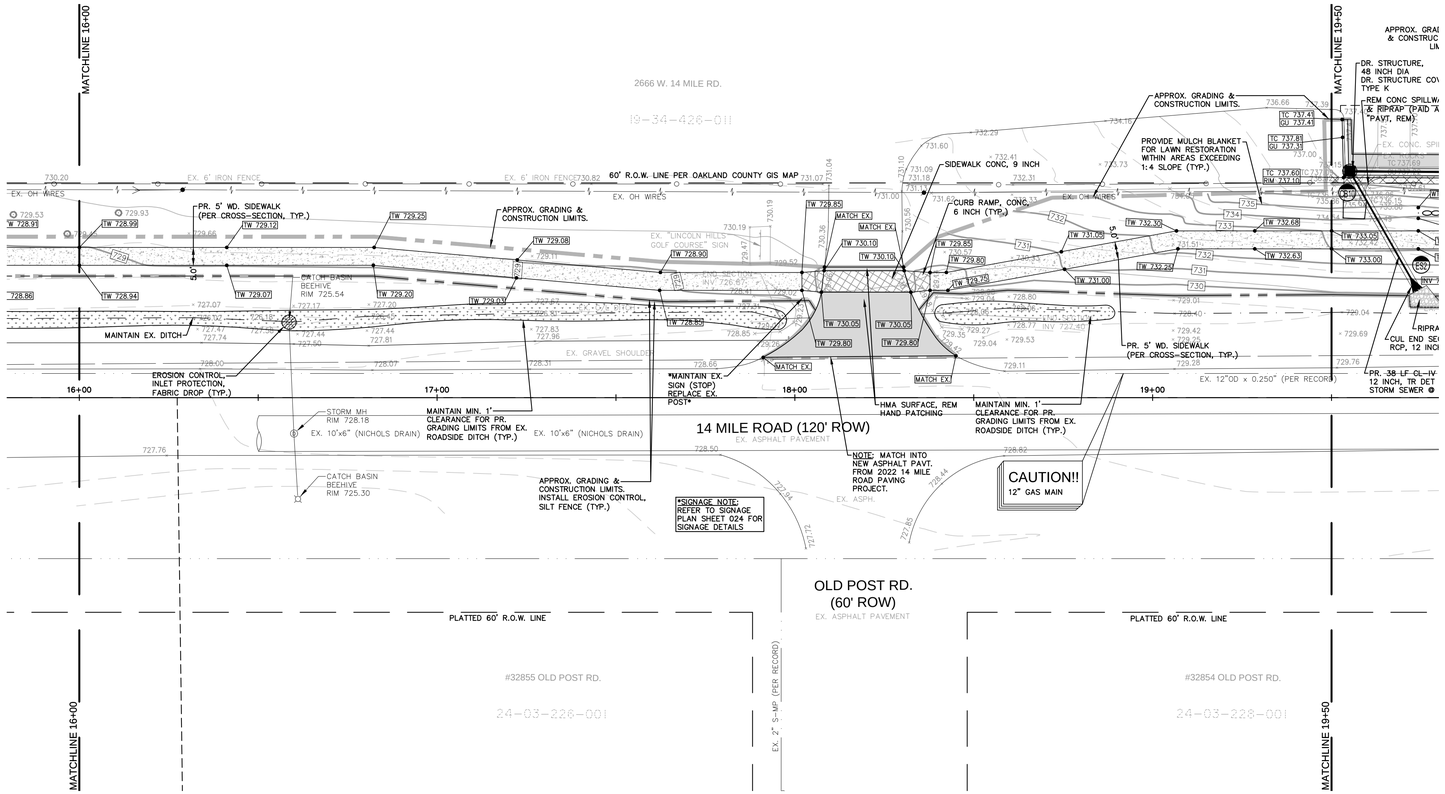
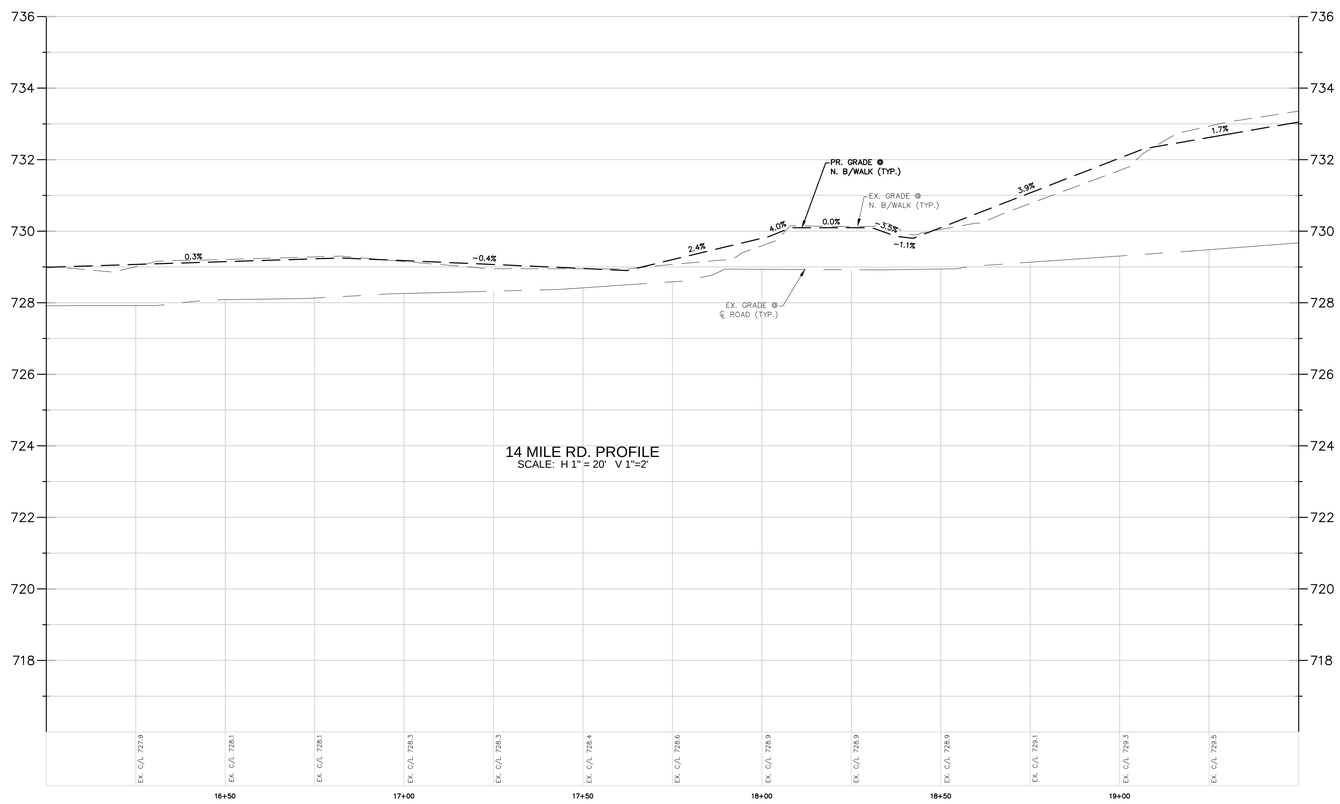
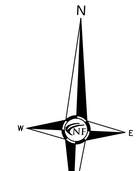
11-22-22	LAP BID PACKAGE
12-09-22	REVISED PER M.D.O.T. LAP REVIEW

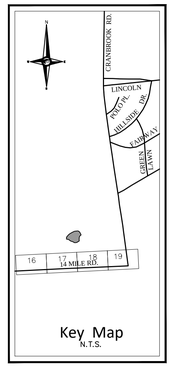
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. L871
SHEET NO. 16









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Cranbrook Road
Non-Motorized Pathway
Improvements

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A Walkable Community

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PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
14 Mile Rd.
Plan & Profile
Sta. 16+00 to 19+50

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ESTIMATED QUANTITIES	UNIT	SHEET 17
Erosion Control, Inlet Protection, Fabric Drop	Each	1
Erosion Control, Silt Fence	Foot	330
HMA Surface, Rem	Square Yard	74
Station Grading	Sta	3.5
Subbase, CIP	Cubic Yard	40
Aggregate Base, 8 inch	Square Yard	90
Curb, Ramp, Conc, 6 inch	Square Foot	67
Sidewalk, Conc, 9 inch	Square Foot	207
Sidewalk, Conc, 4 inch	Square Foot	1,578
Hand Patching	Ton	17
Detectable Warning Surface, Cast Iron	Foot	10
Post, Steel, 3lb	Foot	12
Topsoil Surface, Furn, 3 inch	Square Yard	410
Seeding, Mixture THV	Pound	19
Mulch	Square Yard	350
Mulch Anchoring	Square Yard	350
Mulch Blanket, Modified	Square Yard	60
Water, Sodding/Seeding	Unit	3

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
DOWNSPOUT
GROUND ELEVATION
DETECTABLE WARNING SURFACE, CAST IRON
CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC
HMA SURFACE, REM
HAND PATCHING
SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"
SIDEWALK, CONC, 9" S.U. PATH, CONC, 9"

LAWN RESTORATION NOTES

ALL DISTURBED LAWN AREAS SHALL BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", "SEEDING MIXTURE THV", "MULCH", AND "MULCH ANCHORING" PAY ITEMS.

LAWN AREAS WITH DRAINAGE DITCHES AND/OR SIDE SLOPES EXCEEDING A 1:4 SLOPE SHALL ALSO BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", SEEDING MIXTURE THV", AND "MULCH BLANKET, MODIFIED" PAY ITEMS (MULCH BLANKET SHALL BE CURLEX NETFREE BY AMERICAN EXCELSIOR COMPANY, FUTERRA F4 NETLESS BY PROFILE PRODUCTS, LLC AND NORTH AMERICAN GREEN S150BN).

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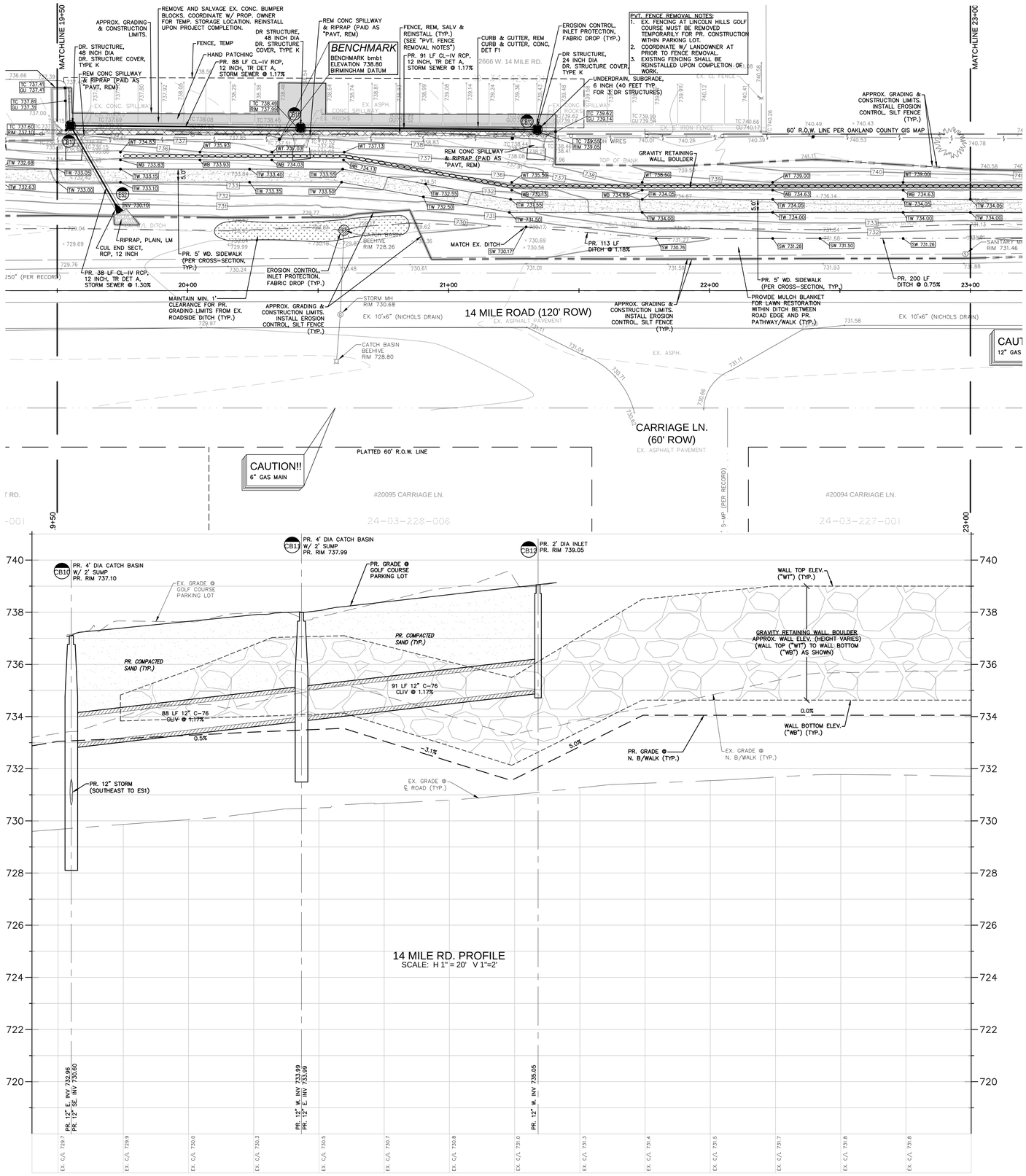
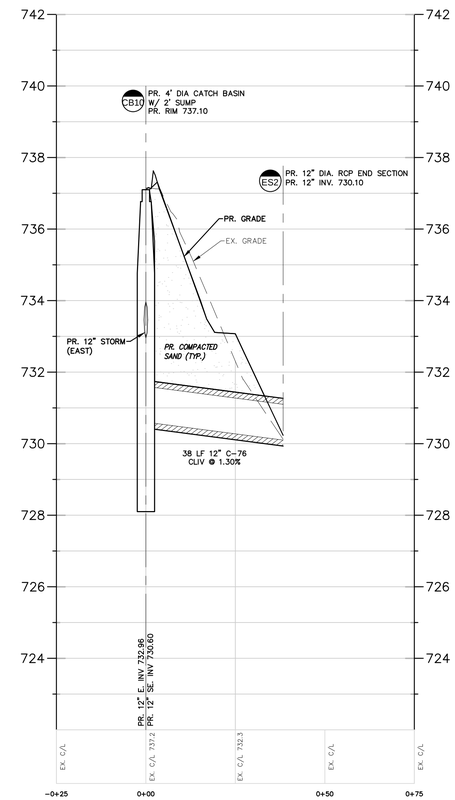
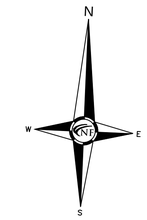
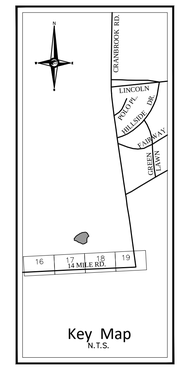




STORM PROFILE (CB10-ES2)

SCALE H1"=20' V 1"=2'





Key Map
N.T.S.

PROPOSED STORM STRUCTURE SCHEDULE

CB10 — PR. 2' DIA. DIA. INLET
M.D.O.T. COVER TYPE K
PR. RIM. 739.05
PR. 12" INV W 735.05

CB11 — PR. 4' DIA. C.B.
W/ 2' SUMP
M.D.O.T. COVER TYPE K
PR. RIM. 737.99
PR. 12" INV E 733.99
PR. 12" INV W 733.99

ES1 — PR. 12" DIA. RCP END SECTION
PR. 12" INV 730.10

CB10 — PR. 4' DIA. C.B.
W/ 2' SUMP
M.D.O.T. COVER TYPE K
PR. RIM. 737.10
PR. 12" INV E 732.96
PR. 12" INV SE 730.60

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ESTIMATED QUANTITIES

ESTIMATED QUANTITIES	UNIT	SHEET 18
Erosion Control, Inlet Protection, Fabric Drop	Each	4
Erosion Control, Silt Fence	Foot	545
Pavt, Rem	Square Yard	30
HMA Surface, Rem	Square Yard	130
Curb and Gutter, Rem	Foot	188
Bumper Blocks, Rem, Salv & Reinstall	Each	23
Fence, Rem, Salv & Reinstall	Foot	193
Gravity Retaining Wall, Boulder	Square Foot	1,200
Station Grading	Sta	3.5
Underdrain, Subgrade, 4 inch	Foot	120
Dr. Structure, 24 inch Dia	Each	1
Dr Structure, 48 inch Dia	Each	2
Culv End Sect,Conc, 12 inch	Each	1
Culv End Sect, Grate	Each	1
Riprap, Plain, LM	Cubic Yard	3
Sewer, Cl-IV, 12 inch, Tr Det A	Foot	217
Subbase, CIP	Cubic Yard	39
Aggregate Base, 8 inch	Square Yard	170
Sidewalk, Conc, 4 inch	Square Foot	1,750
Hand Patching	Ton	30
Curb and Gutter, Conc, Det F1	Foot	203
Fence, Temp	Foot	230
Topsoil Surface, Furn, 3 inch	Square Yard	1,315
Seeding, Mixture THV	Pound	60
Mulch	Square Yard	360
Mulch Anchoring	Square Yard	360
Mulch Blanket, Modified	Square Yard	955
Water, Sodding/Seeding	Unit	4

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EX. SOIL BORING
PUBLIC PHONE
WELL
PUMP
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POST/BOLLARD
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SPRINKLER VALVE BOX
SPRINKLER HEAD
FOUND PROPERTY MARKER
DOWNSPOUT
GROUND ELEVATION
DETECTABLE WARNING SURFACE, CAST IRON
CURB AND GUTTER, CONC, DET F1
CURB RAMP OPENING, CONC
HMA SURFACE, REM HAND PATCHING
SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"
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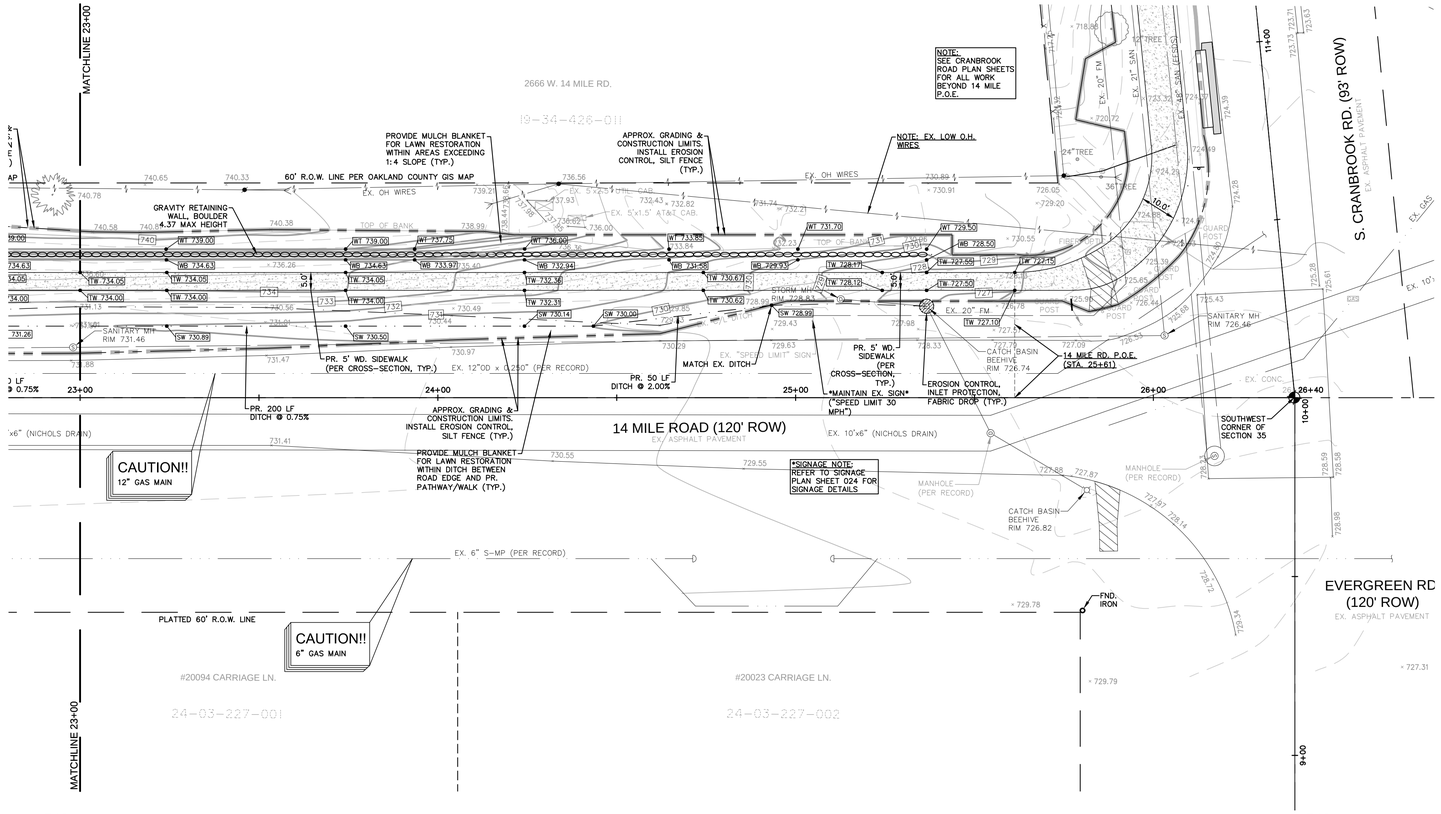

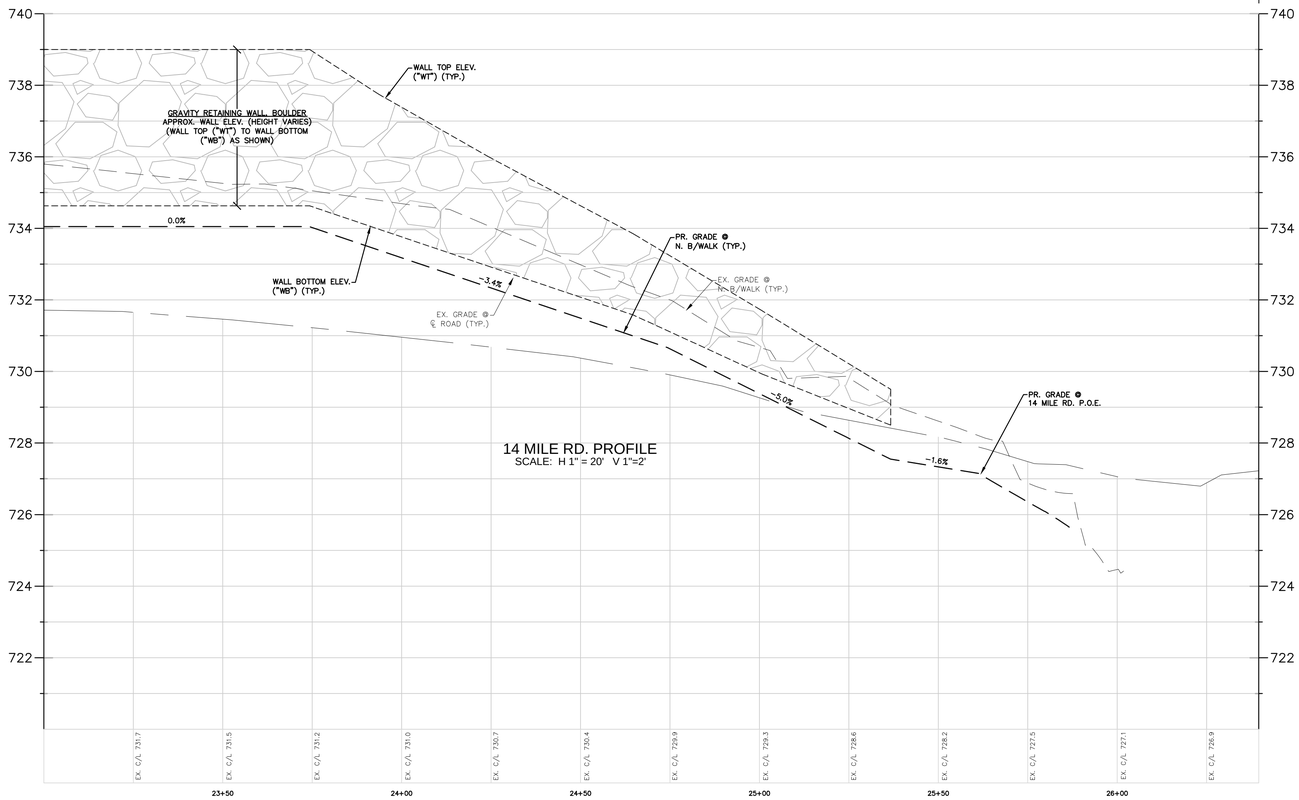

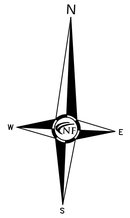

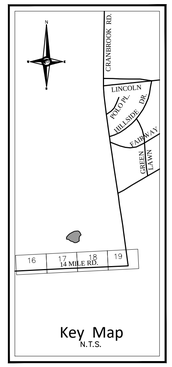

ESTIMATED QUANTITIES	UNIT	SHEET 19
Erosion Control, Inlet Protection, Fabric Drop	Each	1
Erosion Control, Silt Fence	Foot	529
Gravity Retaining Wall, Boulder	Square Foot	800
Station Grading	Sta	2.6
Subbase, CIP	Cubic Yard	30
Sidewalk, Conc, 4 inch	Square Foot	1,310
Topsoil Surface, Furn, 3 inch	Square Yard	630
Seeding, Mixture THV	Pound	29
Mulch	Square Yard	240
Mulch Anchoring	Square Yard	240
Mulch Blanket, Modified	Square Yard	390
Water, Sodding/Seeding	Unit	3

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LEGEND

- CLEAN-OUT
- MANHOLE COMB SAN — EXISTING SAN/COMB SEWER
- GVB GVW HYDRANT — EXISTING WATER MAIN
- RYCB MANHOLE CB END SECTION — EXISTING STORM SEWER
- ELEC METER ELECTRIC MANHOLE TELEPHONE MANHOLE — EXISTING BURIED CABLES
- GAS METER GAS MARKER GAS VALVE — EXISTING GAS MAIN
- UTILITY POLE STRAIN POLE LIGHT POLE GUY WIRE — 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
- DOWNSPOUT
- ×000.00 GROUND ELEVATION
- DETECTABLE WARNING SURFACE, CAST IRON
- CURB AND GUTTER, CONC, DET F1
- CURB RAMP OPENING, CONC HMA SURFACE, REM HAND PATCHING
- SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
- CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"
- SIDEWALK, CONC, 9" S.U. PATH, CONC, 9"

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20 10 0 10 20 30

NFE JOB NO. L871
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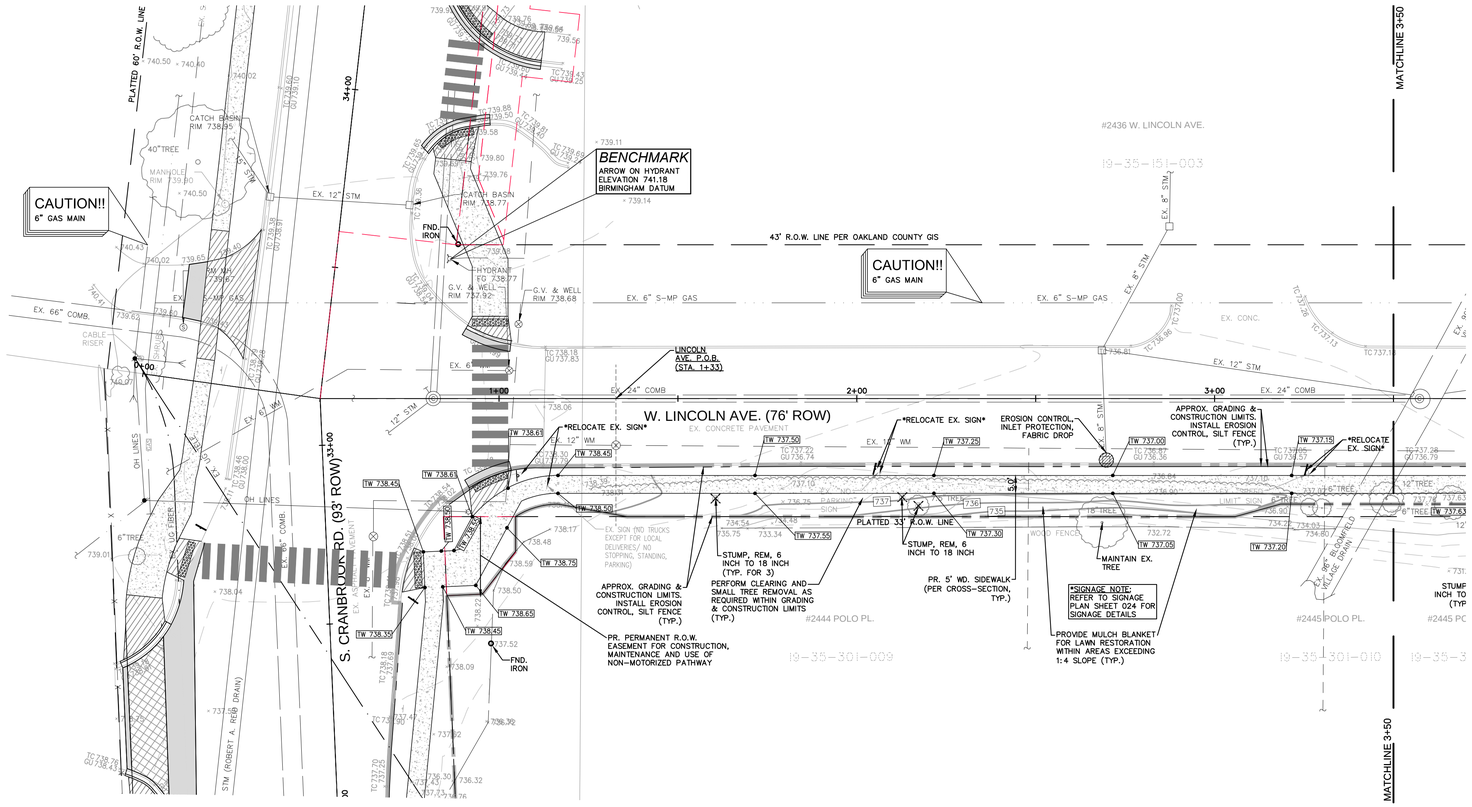

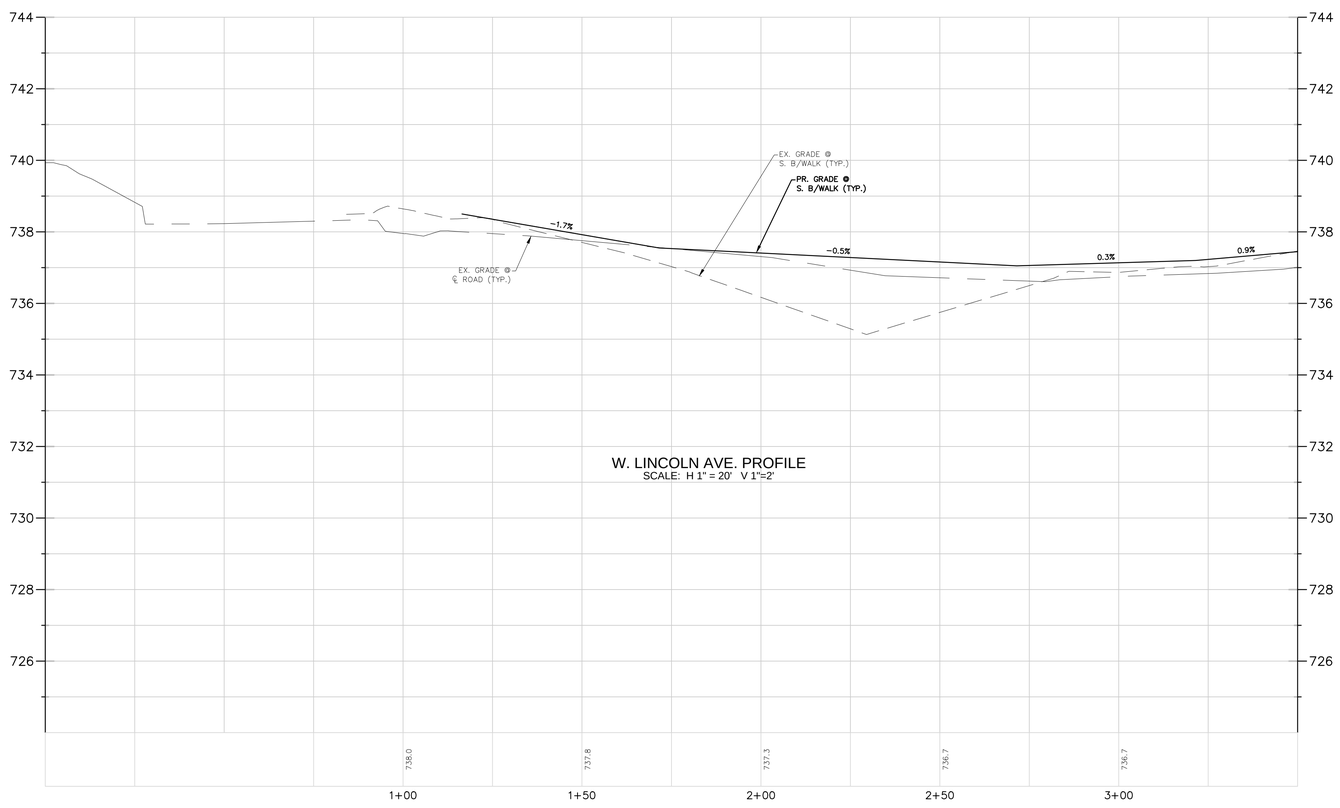

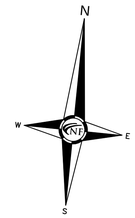

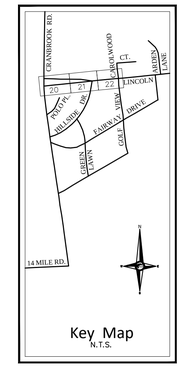

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ESTIMATED QUANTITIES	UNIT	SHEET 20
Erosion Control, Inlet Protection, Fabric Drop	Each	1
Erosion Control, Silt Fence	Foot	450
Stump, Rem, 6 inch to 18 inch	Each	3
Station Grading	Sta	2.2
Subbase, CIP	Cubic Yard	24
Sidewalk, Conc, 4 inch	Square Foot	1,085
Sign, Type II , Erect, Salv	Each	3
Topsoil Surface, Furn, 3 inch	Square Yard	230
Seeding, Mixture THV	Pound	10
Mulch	Square Yard	78
Mulch Anchoring	Square Yard	78
Mulch Blanket, Modified	Square Yard	152
Water, Sodding/Seeding	Unit	2

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- EXISTING WATER MAIN (GVB, GVW, HYDRANT)
- EXISTING STORM SEWER (RYCB, MANHOLE, CB, END SECTION)
- EXISTING BURIED CABLES (ELEC. METER, ELECTRIC MANHOLE, TELEPHONE MANHOLE)
- EXISTING GAS MAIN (GAS METER, GAS MARKER, GAS VALVE)
- OVERHEAD LINES (UTILITY POLE, STRAIN POLE, LIGHT POLE, GUY WIRE)
- RECORED CURB STOP LOCATION (APPROX.)
- LANDSCAPE BED
- EX. SOIL BORING
- PUBLIC PHONE
- WELL
- PUMP
- SIGN
- POST/BOLLARD
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- SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
- CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"

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SEAL

PROJECT
Cranbrook Road
Non-Motorized Pathway
Improvements

CLIENT
City of Birmingham
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the East/West 1/2
of Section 34 & 35
Town 2 North ,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Lincoln Ave.
Plan & Profile
Sta. P.O.B. to 3+50

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
11-19-20	G.I. SUBMITTAL
07-26-21	UPDATED PER OWNER
05-06-22	REVISED PER G.I. REVIEW
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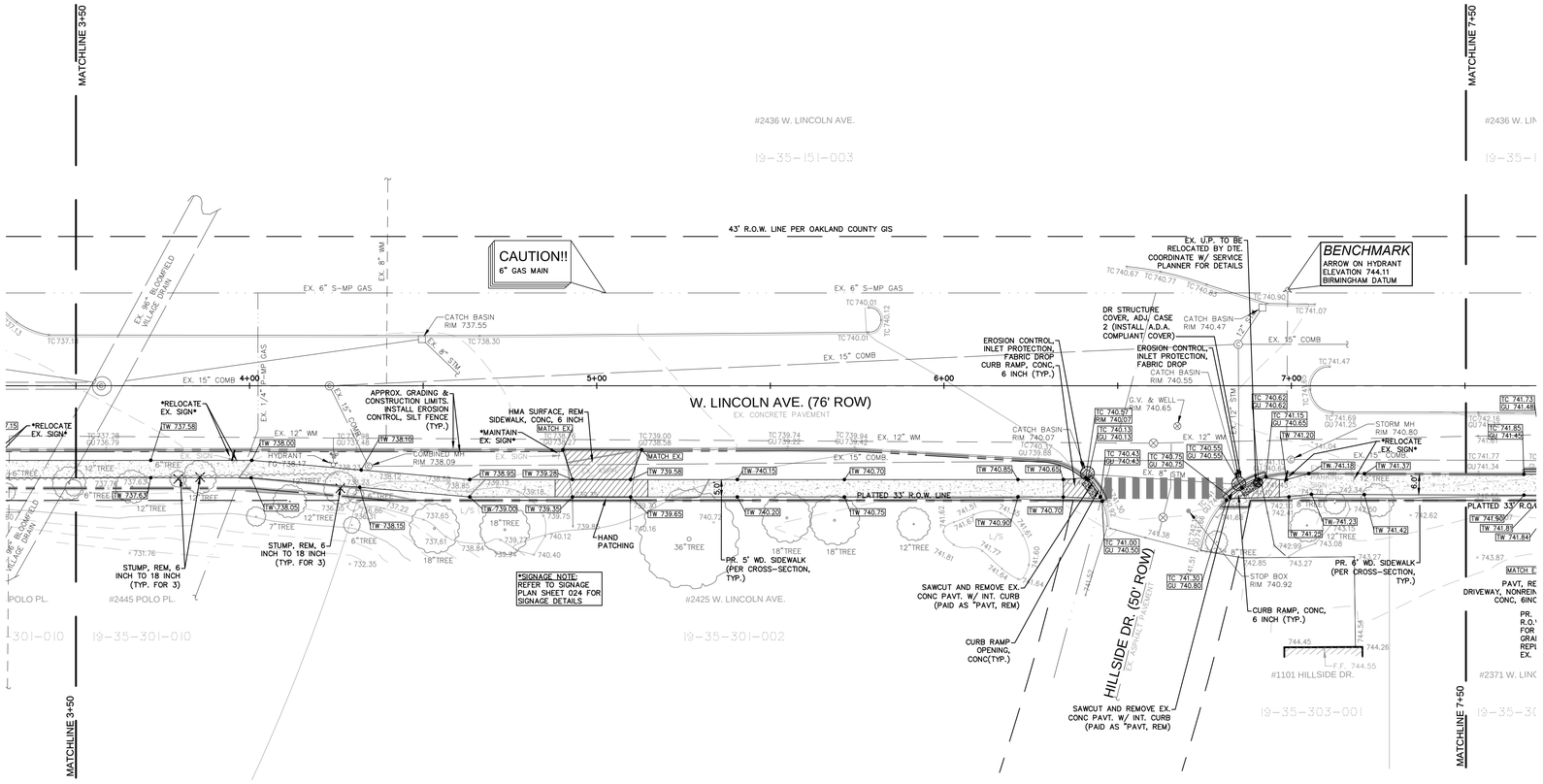
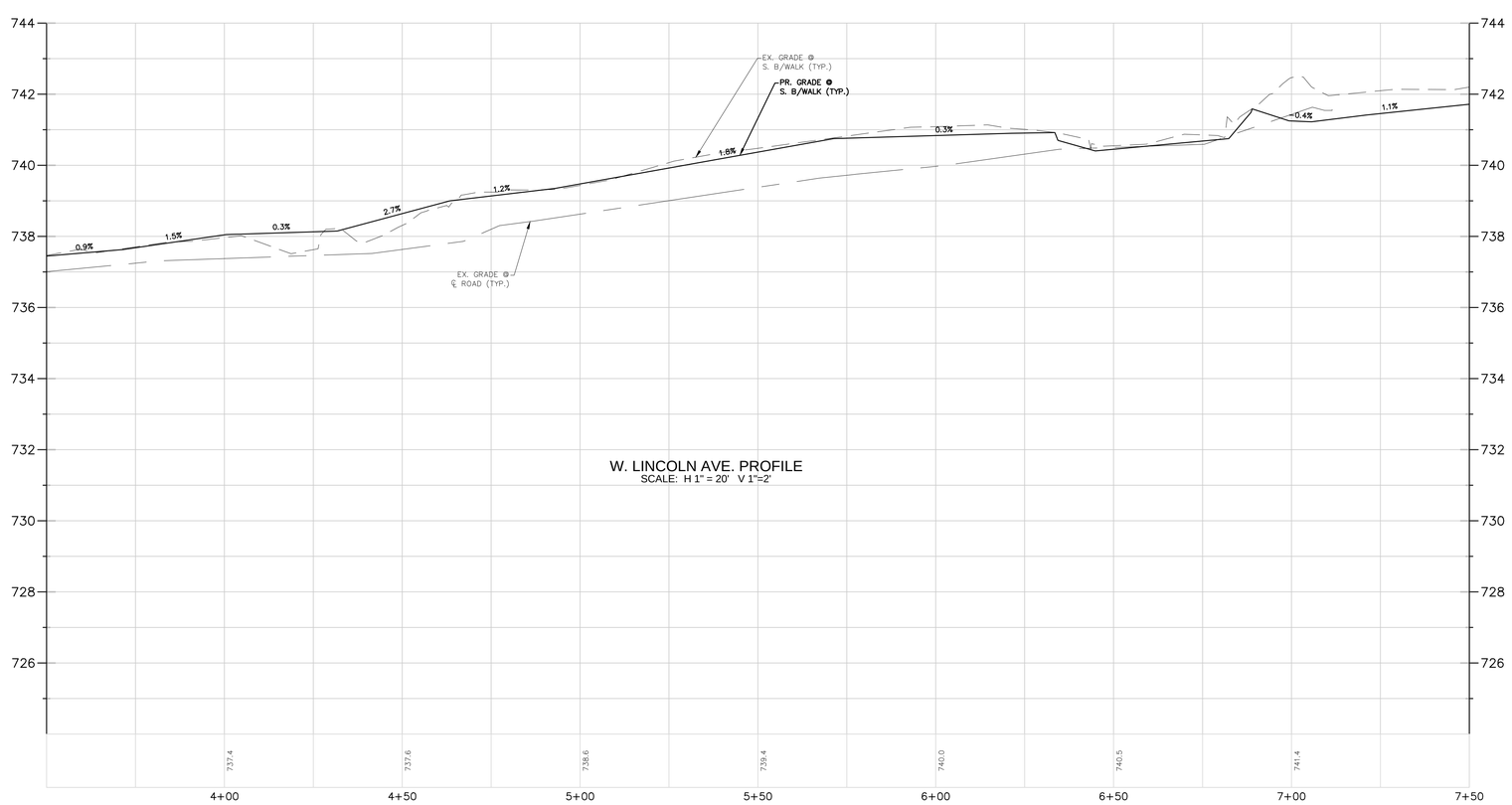
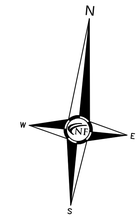
10-14-22	REVISED PER R.C.O.C.
11-16-22	REVISED PER R.C.O.C.
11-22-22	LAP BID PACKAGE
12-09-22	REVISED PER M.D.O.T. LAP REVIEW

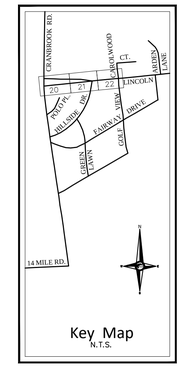
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. L871
SHEET NO. 20









LAWN RESTORATION NOTES

ALL DISTURBED LAWN AREAS SHALL BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", "SEEDING MIXTURE THV", "MULCH", AND "MULCH ANCHORING" PAY ITEMS.

LAWN AREAS WITH DRAINAGE DITCHES AND/OR SIDE SLOPES EXCEEDING A 1:4 SLOPE SHALL ALSO BE RESTORED USING "TOPSOIL SURFACE, FURN, 3 INCH", SEEDING MIXTURE THV", AND "MULCH BLANKET, MODIFIED" PAY ITEMS (MULCH BLANKET SHALL BE CURLEX NETFREE BY AMERICAN EXCELSIOR COMPANY, FUTERRA F4 NETLESS BY PROFILE PRODUCTS, LLC AND NORTH AMERICAN GREEN S150BN).

ESTIMATED QUANTITIES	UNIT	SHEET 21
Erosion Control, Inlet Protection, Fabric Drop	Each	2
Erosion Control, Silt Fence	Foot	677
Pavt, Rem	Square Yard	6
HMA Surface, Rem	Square Yard	8
Stump, Rem, 6 inch to 18 inch	Each	3
Station Grading	Sta	4.0
Dr Structure Cover, Adj, Case 2	Each	1
Subbase, CIP	Cubic Yard	62
Aggregate Base, 8 inch	Square Yard	6
Curb, Ramp, Conc, 6 inch	Square Foot	110
Driveway, Nonreinf Conc, 6 inch	Square Yard	19
Sidewalk, Conc, 6 inch	Square Foot	134
Sidewalk, Conc, 4 inch	Square Foot	1,560
Hand Patching	Ton	1
Detectable Warning Surface, Cast Iron	Foot	10
Curb Ramp Opening, Conc	Foot	22
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	54
Sign, Type II , Erect, Salv	Each	2
Topsoil Surface, Furn, 3 inch	Square Yard	264
Seeding, Mixture THV	Pound	13
Mulch	Square Yard	264
Mulch Anchoring	Square Yard	264
Water, Sodding/Seeding	Unit	2

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LEGEND

- CLEAN-OUT / MANHOLE COMB SAN — EXISTING SAN/COMB SEWER
- GVB GVW HYDRANT — EXISTING WATER MAIN
- RYCB MANHOLE CB END SECTION — EXISTING STORM SEWER
- ELEC. METER / TELEPHONE MANHOLE — EXISTING BURIED CABLES
- GAS METER / GAS MANHOLE / GAS MARKER / GAS VALVE — EXISTING GAS MAIN
- UTILITY POLE / LIGHT POLE / STRAIN POLE / GUY WIRE — 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
- DOWNSPOUT
- ×000.00 GROUND ELEVATION
- DETECTABLE WARNING SURFACE, CAST IRON
- CURB AND GUTTER, CONC, DET F1
- CURB RAMP OPENING, CONC
- HMA SURFACE, REM HAND PATCHING
- SIDEWALK, CONC, 4" S.U. PATH, CONC, 4"
- CURB, RAMP, CONC, 6" SIDEWALK, CONC, 6"

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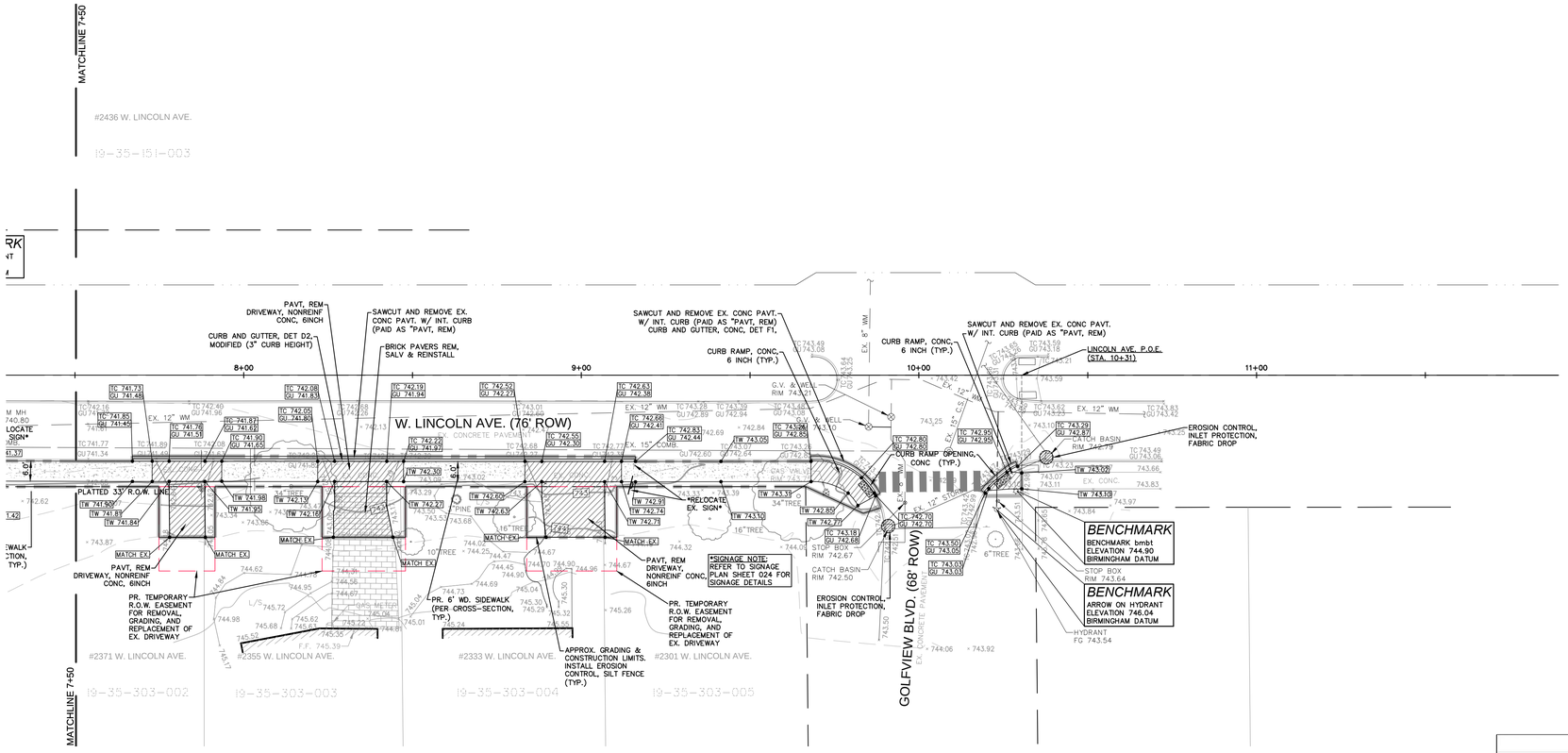
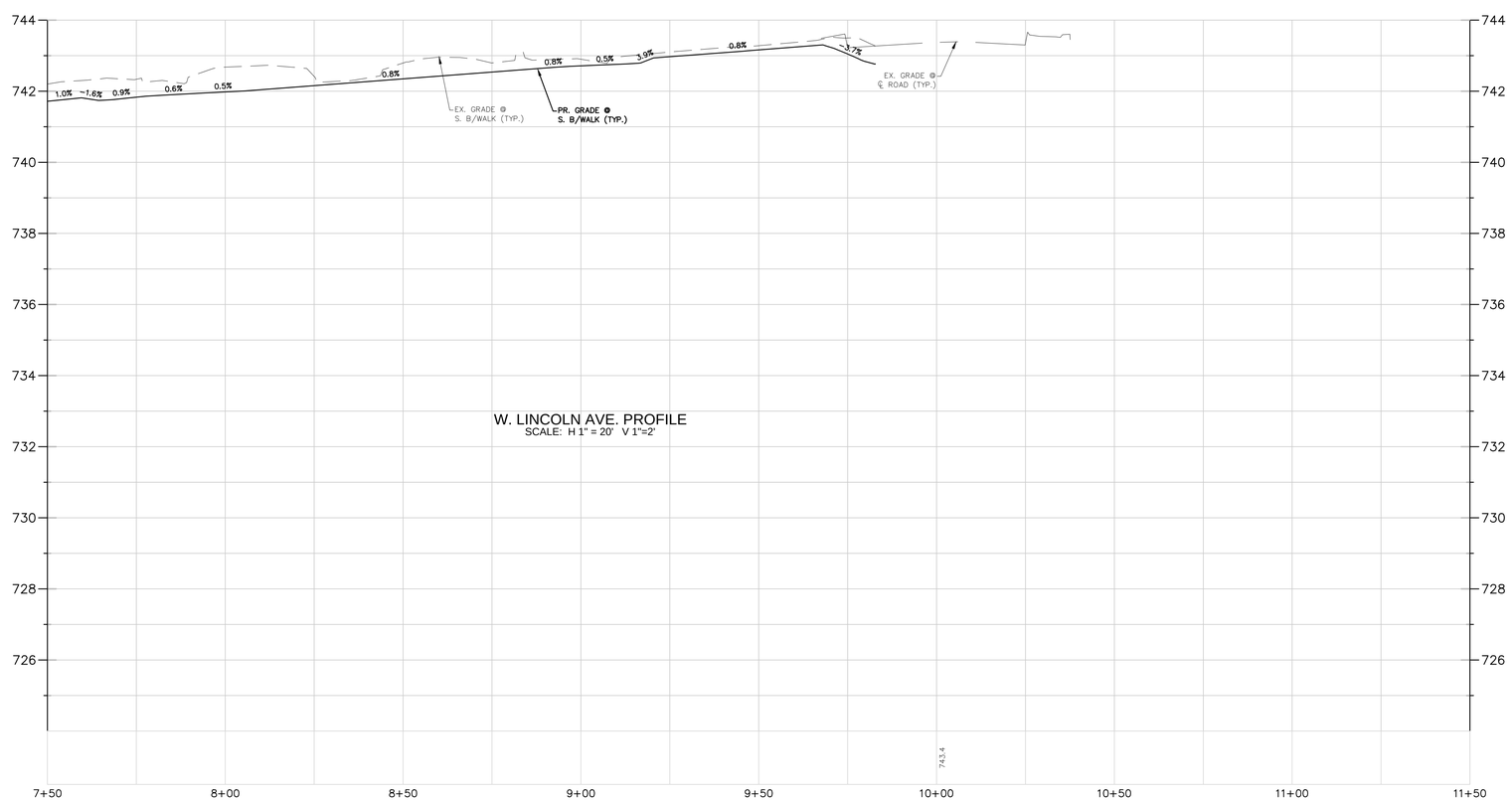
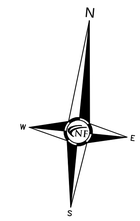
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. L871
SHEET NO. 21





W. LINCOLN AVE. PROFILE
SCALE: H 1" = 20' V 1"=2'



Key Map
N.T.S.

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ESTIMATED QUANTITIES	UNIT	SHEET 22
Erosion Control, Inlet Protection, Fabric Drop	Each	2
Erosion Control, Silt Fence	Foot	284
Pavt, Rem	Square Yard	167
Brick Pavers, Rem, Salv & Reinstall	Square Foot	213
Station Grading	Sta	2.8
Subbase, CIP	Cubic Yard	42
Aggregate Base, 8 inch	Square Yard	52
Curb, Ramp, Conc, 6 inch	Square Foot	158
Driveway, Nonreinf Conc, 6 inch	Square Yard	59
Sidewalk, Conc, 6 inch	Square Foot	448
Sidewalk, Conc, 4 inch	Square Foot	855
Detectable Warning Surface, Cast Iron	Foot	10
Curb and Gutter, Conc, Det F1	Foot	15
Curb and Gutter, Conc, Det D2, Modified	Foot	149
Curb Ramp Opening, Conc	Foot	21
Pavt Mrkg, Ovly Cold Plastic , 24 inch, Crosswalk	Foot	48
Sign, Type II , Erect, Salv	Each	1
Topsoil Surface, Furn, 3 inch	Square Yard	85
Seeding, Mixture THV	Pound	4
Mulch	Square Yard	85
Mulch Anchoring	Square Yard	85
Water, Sodding/Seeding	Unit	3

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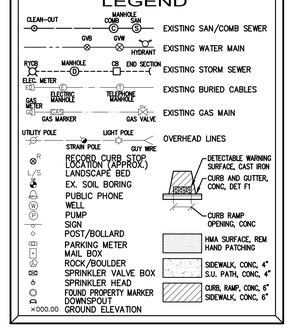
LEGEND



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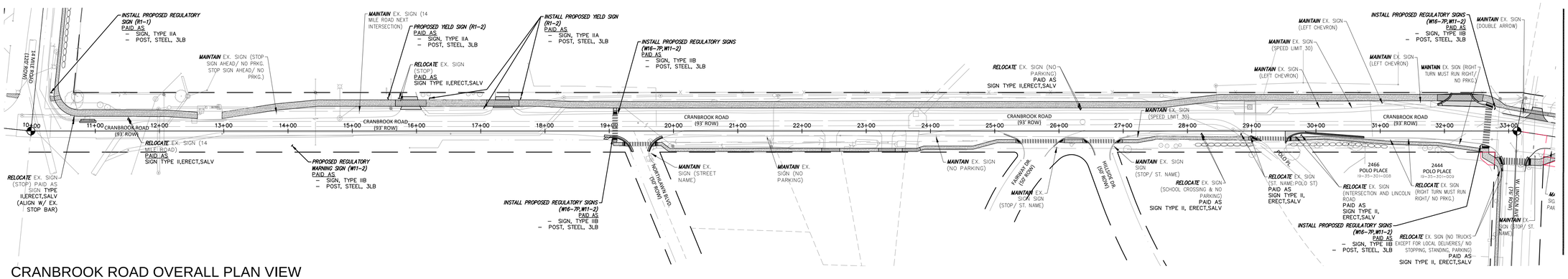
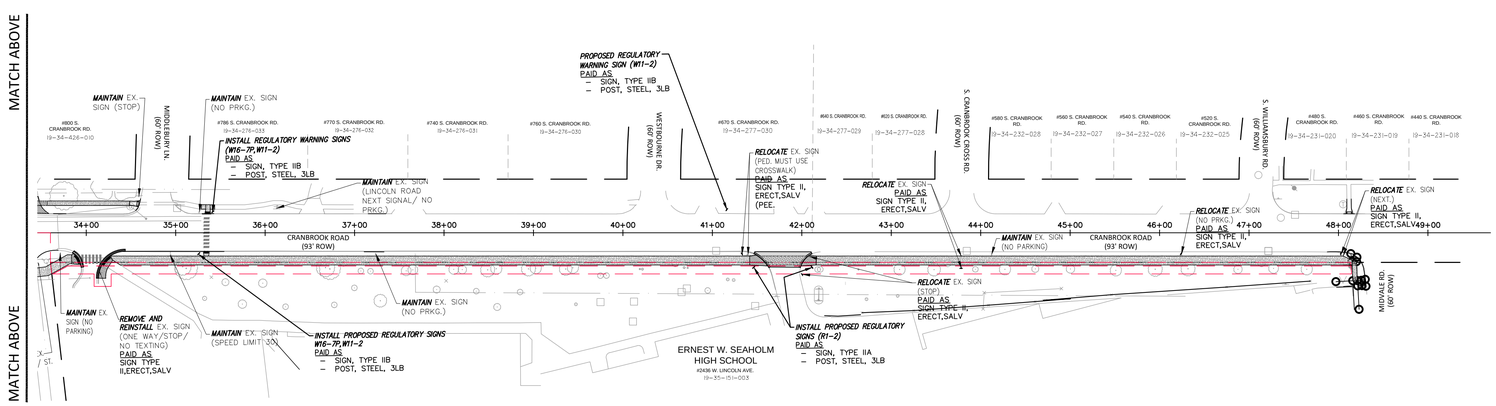
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: July 27, 2021
SCALE: 1" = 20' / 1"=2'
20 10 0 10 20 30

NFE JOB NO. L871
SHEET NO. 22



CRANBROOK ROAD OVERALL PLAN VIEW

SCALE: 1" = 80'



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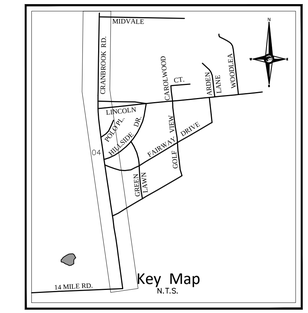

SIGN TYPE IIA

SIGN DETAIL-R1-1
(30" x 30")

SIGN DETAIL-R1-2
(18" x 18"x18")

SIGN TYPE IIB

SIGN DETAIL W16-7p DETAIL
(30" x 18")

SIGN DETAIL W11-2 DETAIL
(30" x 30")

SIGNAGE INSTALLATION NOTES

THE OUTER EDGE OF ALL ROADWAY SIGNAGE INSTALLED SHALL BE A MINIMUM OF 1' FROM THE BACK EDGE OF THE CURB AND 1' FROM THE INSIDE EDGE OF THE PATHWAY OR THE SIDEWALK.

ESTIMATED QUANTITIES	UNIT	TOTAL QUANTITY
Sign, Type II , Erect, Salv	Each	21
Sign, Type II A	Square Foot	40
Sign, Type II B	Square Foot	76
Post, Steel, 3lb	Foot	192

*QUANTITIES ARE FOR THE ENTIRE PROJECT (INCL. SIGNS ON S. CRANBROOK ROAD, 14 MILE ROAD & LINCOLN STREET)

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Signage Plan - Cranbrook Road

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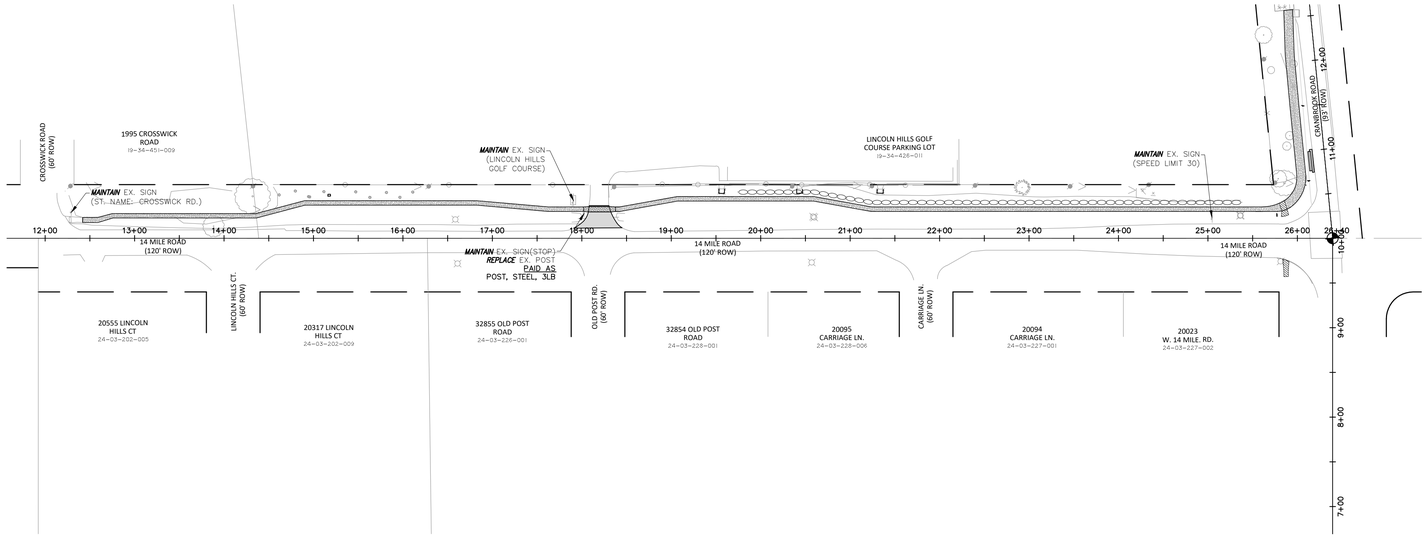
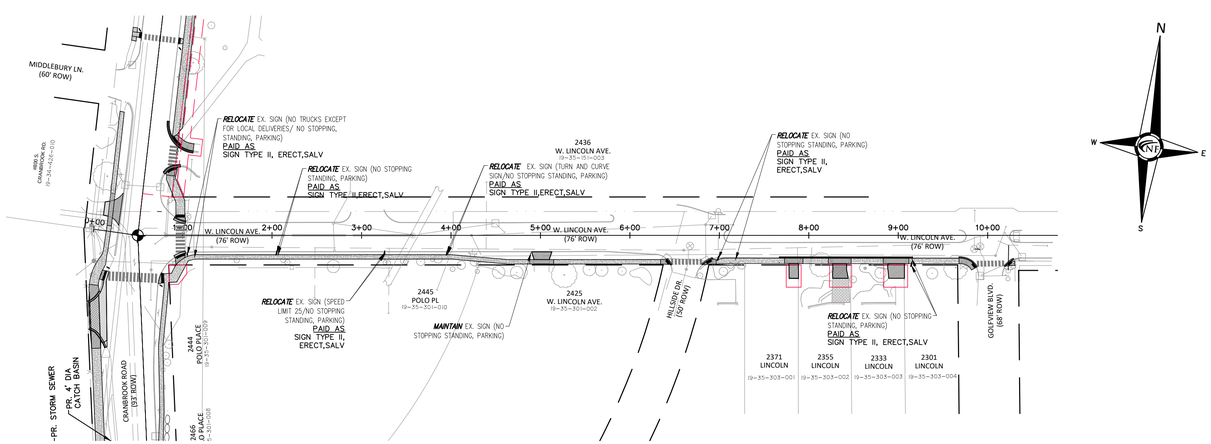
NFE JOB NO. L871
SHEET NO. 23



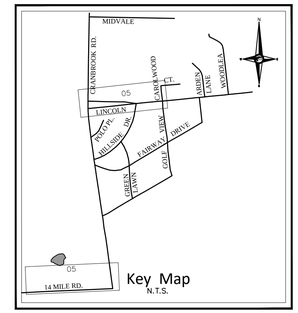
14 MILE ROAD OVERALL PLAN VIEW

SCALE: 1" = 80'



W. LINCOLN AVENUE OVERALL PLAN VIEW

SCALE: 1" = 80'



Key Map
N.T.S.

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LEGEND

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- CMB GVW HYDRANT — EXISTING WATER MAIN
- R/CB MANHOLE CB END SECTION — EXISTING STORM SEWER
- ELEC. METER ELECTRIC MANHOLE TELEPHONE MANHOLE — EXISTING BURIED CABLES
- GAS METER GAS MARKER GAS VALVE — EXISTING GAS MAIN
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DESIGNED BY:
P. Tulikangas

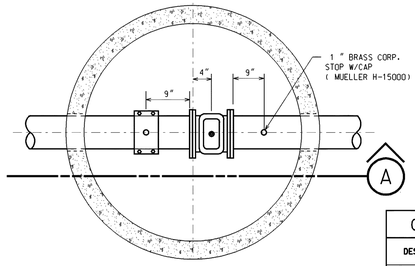
APPROVED BY:
B. Buchholz

DATE:
July 27, 2021

SCALE: 1" = 80'
80 40 0 40 80 120

NFE JOB NO. L871

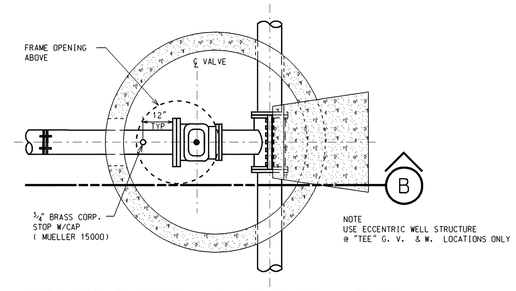
SHEET NO. 24



GATE WELL PLAN

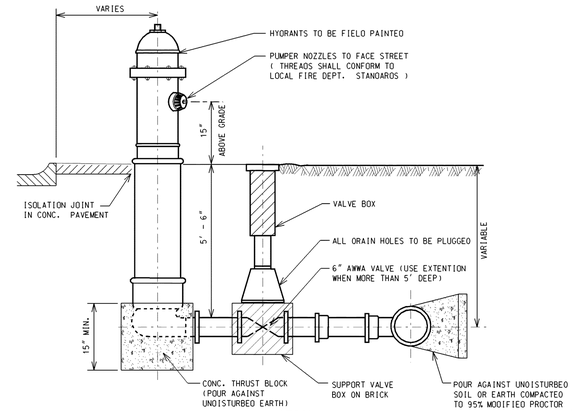
NO SCALE

GATE WELL SCHEDULE				
		PIPE DIA. INCHES		
DESCRIPTION	DIM.	6" & 8"	12"	16"
INSIDE DIA.	A	60"	72"	72"
WALL THICK.	B	5"	7"	7"
VALVE BLOCK THICK.	C	4"	4"	4"

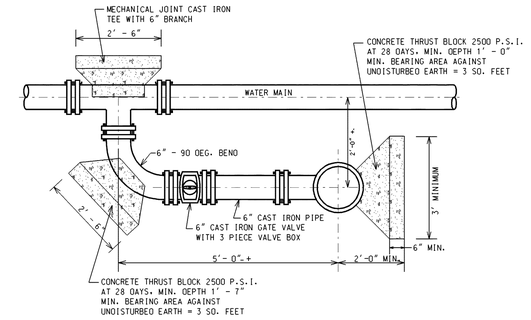


TAPPING SLEEVE, VALVE & WELL PLAN

NO SCALE



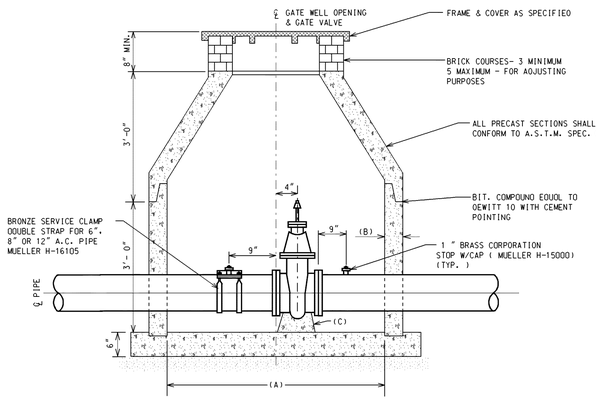
ELEVATION



"L" HYDRANT CONNECTION

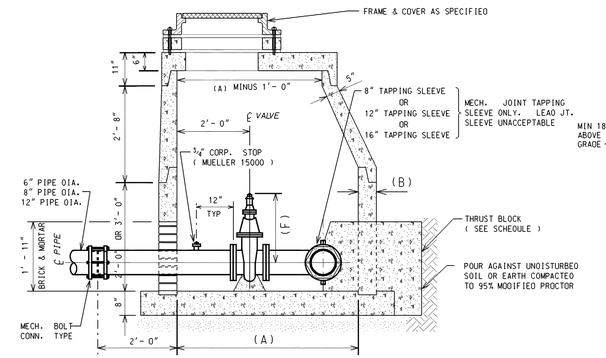
NO SCALE
W-9

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 .



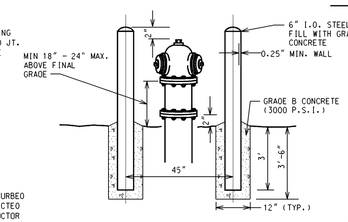
SECTION "A" GATE WELL

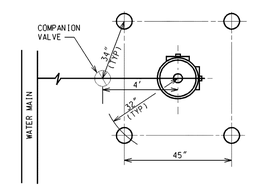
NO SCALE
W-1 & W-3



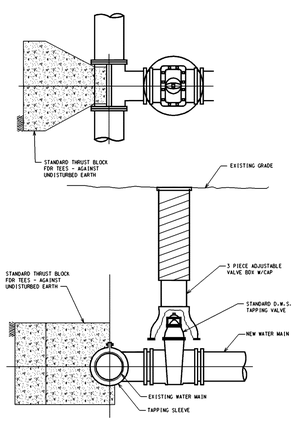
SECTION "B" TAPPING SLEEVE, VALVE & WELL

NO SCALE
W-4

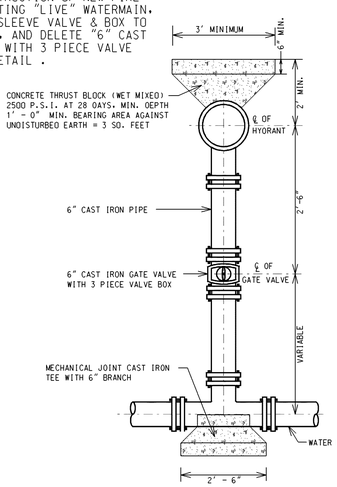




FIRE HYDRANT GUARD POSTS DETAIL



TAPPING SLEEVE & VALVE W/VALVE BOX

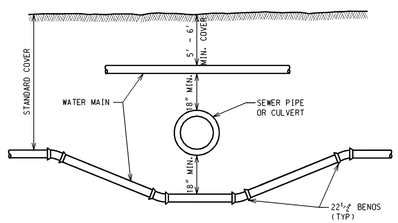


STRAIGHT HYDRANT CONNECTION

NO SCALE
W-10

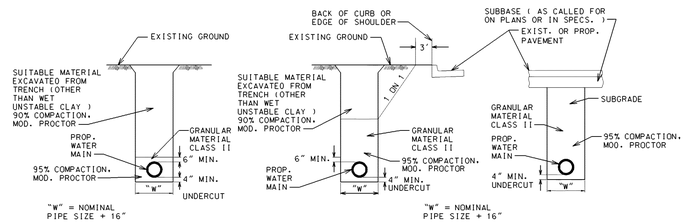
DITCH AND STREAM CROSSING

NO SCALE



SEWER OR CULVERT CROSSING

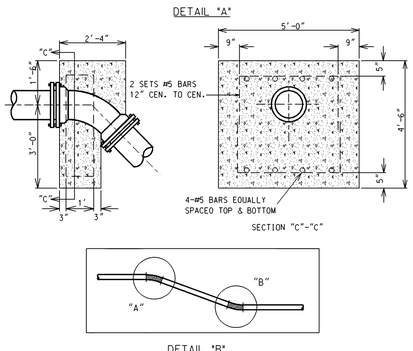
NO SCALE



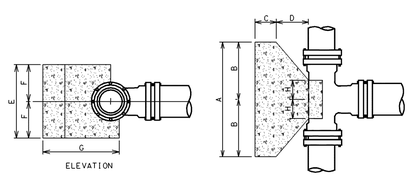
PROP. WATER MAINS NOT UNDER PAVED SURFACE

PROP. WATER MAINS UNDER PAVED SURFACE OR WITHIN INFLUENCE OF PAVED SURFACE

BEDDING DETAILS



VERTICAL BEND THRUST BLOCKS FOR 8"-12" MAINS



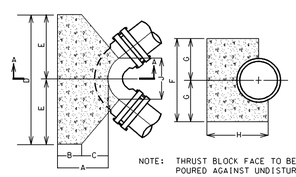
THRUST BLOCK FACE SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SCHEDULE OF THRUST BLOCK DIMENSIONS			
	TEE SIZE		
CODE	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"
	24"	3'-3"	3'-7"
H	8"	0'-6"	
	12"	0'-6"	0'-10"
	16"	0'-6"	0'-10"
	24"	0'-6"	0'-10"

CONCRETE THRUST BLOCK FOR TEES

N.T.S.



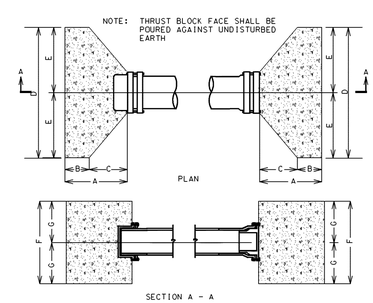
NOTE: THRUST BLOCK FACE TO BE POURED AGAINST UNDISTURBED EARTH

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"

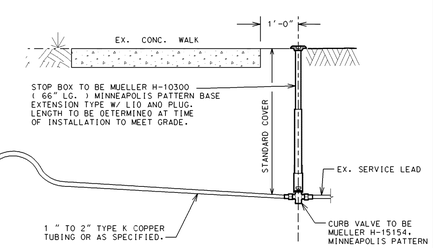
CONCRETE THRUST BLOCK FOR BENDS

N.T.S.



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



WATER SERVICE CONNECTION (TYP)

NO SCALE

City of Birmingham
A Walkable Community

151 MARTIN STREET BIRMINGHAM, MICHIGAN 48102

WATER MAIN STANDARD DETAILS

DATE:	ADDITION AND/OR REVISION	DRAWN	PROJECT NO.	SHEET NO.
		DESIGNED	DATE APRIL 2005	WM-1
		APPROVED	SCALE	

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Engineering Department

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Melissa A. Coatta, City Engineer**

SUBJECT: **2023 Quarton Lake Estates Phase 2 Project- Westwood, Raynale, and Oak Street**
Contract #1-23 (P) Contract Award

INTRODUCTION:
Bids for 2023 Quarton Lake Estates Phase 2 Project- Westwood, Raynale, and Oak Street #1-23 (P) were opened on January 11, 2023. Four (4) bids were received for consideration, and the Engineering Department is recommending the award of the project to FDM Contracting, Inc.

BACKGROUND:
This project was presented to the City Commission at the regular meeting on June 27, 2022. At that meeting, the City Commission adopted a resolution for the Engineering Department to proceed with the final design of the Westwood, Raynale & Oak Street Project to include the planned improvements to the sewer and water systems, and the replacement of pavement surfaces disturbed by the utility construction with a full cape-seal treatment to be completed upon the conclusion of the other construction. The public hearing of the necessity for a Special Assessment District (SAD) on water and sewer laterals and cape sealing was August 15, 2022, and the public hearing to confirm the assessment rolls was August 29, 2022.

The Engineering Department opened and read bids on January 11, 2023. Four (4) bids were received, as listed in the attached summary. The Engineering Department recommends awarding this contract to FMD Contracting, Inc. The letter recommending the award of the project from our engineering consultant, Nowak and Fraus, is attached for reference.

FDM Contracting, Inc. has previously worked on the City's projects that included underground utilities and roads and has shown an understanding of the needs and expectations related to schedule, and coordination with residents.

As required for all of the City's construction projects, FDM Contracting, Inc., has submitted a 5% bid security with their bid which will be forfeited if they do not provide signed contracts, bonds and insurance required following the award by the City Commission.

LEGAL REVIEW:
The City's standard contract language was used for this bidding document which the City Attorney had reviewed and approved. No legal issues exist based on the documentation.

FISCAL IMPACT:
This project was budgeted for in the 2022/2023 budget across the Major Street Fund, Local Street Fund, Sewer Fund, and Water Fund. The total construction cost of the project is estimated to be $1,169,282.68 which includes FMD Contracting, Inc. bid amount of $1,062,984.25 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	$81,505.46	$8,150.55	$89,656.01
Local Street Fund	203.0-449.001-981.0100	$128,234.19	$12,823.42	$141,057.61
Sewer Fund	590.0-537.000-981.0100	$460,485.16	$46,048.52	$506,533.68
Water Fund	591.0-544.000-981.0100	$392,759.44	$39,275.94	$432,035.38
Total Construction Costs		$1,062,984.25	$106,298.43	$1,169,282.68

No amendment to the 2022/2023 fiscal year budget is required for this work as there are adequate funds in the Major Street Fund, Local Street Fund, Sewer Fund, and Water Fund to accommodate this request.

PUBLIC COMMUNICATIONS:
Communication with residents started in the Spring of 2022, and they received notifications on SAD for water and sewer laterals and cape sealing in August 2022. A resident meeting was held on Thursday, February 9, 2023, from 5:00 – 7:00 pm providing an update on the project and reviewing construction plans.

Construction communication with property owners in the project area will include a project announcement with the project start date and regular updates. Residents will be encouraged to sign up for the City's Constant Contact to receive additional information during the project.

SUMMARY:
It is recommended that the 2023 Quarton Lake Estates Phase 2 Project- Westwood, Raynale, and Oak Street #1-23 (P), be awarded to FMD Contracting, Inc.

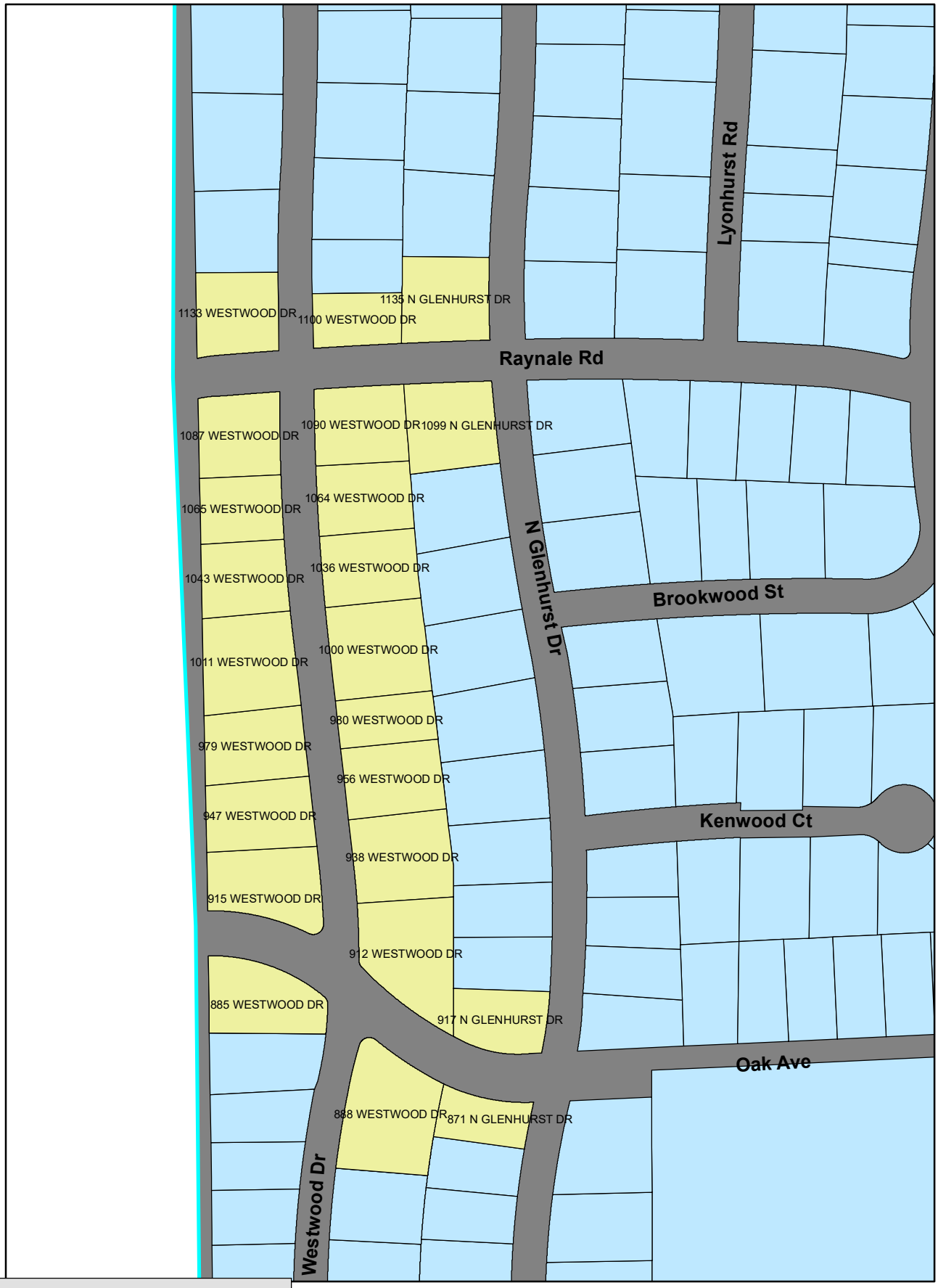
ATTACHMENTS:

- Project Area Map (one page)
- Bid Summary (2 pages)
- Nowak and Fraus Recommendation Letter
- Contract Book (214 pages)
- Plans (21 pages)

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the construction project budget and award the 2023 Quarton Lake Estates Phase 2 Project- Westwood, Raynale, and Oak Street #1-23 (P) to FDM Contracting, Inc. in the amount of $1,062,984.25. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for this project has been budgeted in the following accounts:

Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Major Street Fund	202.0-449.001-981.0100	$81,505.46	$8,150.55	$89,656.01
Local Street Fund	203.0-449.001-981.0100	$128,234.19	$12,823.42	$141,057.61
Sewer Fund	590.0-537.000-981.0100	$460,485.16	$46,048.52	$506,533.68
Water Fund	591.0-544.000-981.0100	$392,759.44	$39,275.94	$432,035.38
Total Construction Costs		$1,062,984.25	$106,298.43	$1,169,282.68

WESTWOOD, RAYNALE & OAK ST PROJECT AREA



Legend

Affected Addresses in Work Area

City of Birmingham

Contract #1-23(P)

NO.	ITEM DESCRIPTION	Qty	Units	FDM		DiPonio		D'Angelo		Pamar	
				Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
	SEWER PAY ITEMS										
1	21" Combined Sewer, C76, CL-IV, Trench A	311	LF	$ 170.00	$ 52,870.00	$ 135.00	$ 41,985.00	$ 155.00	$ 48,205.00	$ 250.00	$ 77,750.00
2	18" Storm Sewer, C76, CL-IV, Trench A	271	LF	$ 165.00	$ 44,715.00	$ 125.00	$ 33,875.00	$ 148.00	$ 40,108.00	$ 235.00	$ 63,685.00
3	12" Storm Sewer, C76, CL-IV, Trench A	1,180	LF	$ 110.00	$ 129,800.00	$ 95.00	$ 112,100.00	$ 95.00	$ 112,100.00	$ 191.00	$ 225,380.00
4	Sewer Service, 6" PVC SDR 23.5	368	LF	$ 150.00	$ 55,200.00	$ 110.00	$ 40,480.00	$ 145.00	$ 53,360.00	$ 259.00	$ 95,312.00
5	New 5'-0" Diameter Manhole w/ 2' Sump	1	EA	$ 5,500.00	$ 5,500.00	$ 4,300.00	$ 4,300.00	$ 5,800.00	$ 5,800.00	$ 7,500.00	$ 7,500.00
6	New 4'-0" Diameter Manhole w/ 2' Sump	3	EA	$ 4,000.00	$ 12,000.00	$ 3,300.00	$ 9,900.00	$ 3,988.00	$ 11,964.00	$ 5,500.00	$ 16,500.00
7	New 4'-0" Diameter Storm Sewer Manhole	4	EA	$ 4,000.00	$ 16,000.00	$ 3,200.00	$ 12,800.00	$ 4,500.00	$ 18,000.00	$ 5,500.00	$ 22,000.00
8	New 4'-0" Diameter Catch Basin w/ 2' Sump	2	EA	$ 4,000.00	$ 8,000.00	$ 3,200.00	$ 6,400.00	$ 4,800.00	$ 9,600.00	$ 4,500.00	$ 9,000.00
9	New 2'-0" Diameter Inlet	10	EA	$ 2,500.00	$ 25,000.00	$ 2,050.00	$ 20,500.00	$ 2,580.00	$ 25,800.00	$ 3,800.00	$ 38,000.00
10	6" Perforated Pipe Underdrain (No sock)	560	LF	$ 30.00	$ 16,800.00	$ 22.00	$ 12,320.00	$ 22.00	$ 12,320.00	$ 24.00	$ 13,440.00
11	Sewer Service Tap, 6"	2	EA	$ 750.00	$ 1,500.00	$ 900.00	$ 1,800.00	$ 4,800.00	$ 9,600.00	$ 6,600.00	$ 13,200.00
12	Sewer Service Connection, 6"	13	EA	$ 750.00	$ 9,750.00	$ 600.00	$ 7,800.00	$ 2,300.00	$ 29,900.00	$ 3,500.00	$ 45,500.00
13	Reconstruct Manhole (if and where needed)	15	VF	$ 150.00	$ 2,250.00	$ 300.00	$ 4,500.00	$ 225.00	$ 3,375.00	$ 650.00	$ 9,750.00
14	Remove & Replace Structure Cover (as directed by City)	1,375	LB	$ 3.00	$ 4,125.00	$ 2.00	$ 2,750.00	$ 7.00	$ 9,625.00	$ 5.00	$ 6,875.00
15	Remove Ex. Drainage Structure	12	EA	$ 750.00	$ 9,000.00	$ 700.00	$ 8,400.00	$ 600.00	$ 7,200.00	$ 650.00	$ 7,800.00
16	Bulkhead Structure 12"	2	EA	$ 300.00	$ 600.00	$ 450.00	$ 900.00	$ 300.00	$ 600.00	$ 250.00	$ 500.00
17	Bulkhead Structure 10"	5	EA	$ 250.00	$ 1,250.00	$ 350.00	$ 1,750.00	$ 300.00	$ 1,500.00	$ 225.00	$ 1,125.00
18	CCTV Sewer Acceptance Inspection	1	LS	$ 5,000.00	$ 5,000.00	$ 1,155.00	$ 1,155.00	$ 10,500.00	$ 10,500.00	$ 5,000.00	$ 5,000.00
	SUBTOTAL SEWER PAY ITEMS				**$ 399,360.00**		**$ 323,715.00**		**$ 409,557.00**		**$ 658,317.00**
	WATER MAIN PAY ITEMS										
19	Remove Hydrant	2	EA	$ 700.00	$ 1,400.00	$ 700.00	$ 1,400.00	$ 800.00	$ 1,600.00	$ 780.00	$ 1,560.00
20	Remove Existing Gate Valve well	4	EA	$ 750.00	$ 3,000.00	$ 850.00	$ 3,400.00	$ 800.00	$ 3,200.00	$ 780.00	$ 3,120.00
21	Fire Hydrant Assembly, Complete	5	EA	$ 6,000.00	$ 30,000.00	$ 6,200.00	$ 31,000.00	$ 8,350.00	$ 41,750.00	$ 8,800.00	$ 44,000.00
22	8" Gate Valve & Box	8	EA	$ 2,500.00	$ 20,000.00	$ 2,300.00	$ 18,400.00	$ 6,900.00	$ 55,200.00	$ 3,500.00	$ 28,000.00
23	8" D.I. CL 52 Water Main W/Poly Wrap, Trench A	1,832	LF	$ 130.00	$ 238,160.00	$ 166.00	$ 304,112.00	$ 185.00	$ 338,920.00	$ 215.00	$ 393,880.00
24	6" D.I. CL 52 Water Main W/Poly Wrap, Trench A	81	LF	$ 125.00	$ 10,125.00	$ 163.00	$ 13,203.00	$ 150.00	$ 12,150.00	$ 213.00	$ 17,253.00
25	8" Water Main Connection to Ex. 8" Water Main	2	EA	$ 4,800.00	$ 9,600.00	$ 4,000.00	$ 8,000.00	$ 5,000.00	$ 10,000.00	$ 7,700.00	$ 15,400.00
26	6" Water Main Connection to Ex. 6" Water Main	2	EA	$ 4,500.00	$ 9,000.00	$ 3,500.00	$ 7,000.00	$ 5,000.00	$ 10,000.00	$ 7,500.00	$ 15,000.00
27	New Water Service, 1", Trench A, Copper	53	LF	$ 50.00	$ 2,650.00	$ 60.00	$ 3,180.00	$ 50.00	$ 2,650.00	$ 65.00	$ 3,445.00
28	Water Service Connection, 1.5"	1	EA	$ 1,500.00	$ 1,500.00	$ 1,000.00	$ 1,000.00	$ 3,500.00	$ 3,500.00	$ 3,450.00	$ 3,450.00
29	Water Service Connection, 1"	16	EA	$ 600.00	$ 9,600.00	$ 600.00	$ 9,600.00	$ 2,800.00	$ 44,800.00	$ 1,870.00	$ 29,920.00
30	Install Curb Stop & Box (Materials Provided by City), 1"	1	EA	$ 350.00	$ 350.00	$ 200.00	$ 200.00	$ 800.00	$ 800.00	$ 550.00	$ 550.00
31	Hydra-Stop, 8"	2	EA	$ 100.00	$ 200.00	$ 500.00	$ 1,000.00	$ 5,500.00	$ 11,000.00	$ 500.00	$ 1,000.00
32	Hydra-Stop, 6"	2	EA	$ 100.00	$ 200.00	$ 500.00	$ 1,000.00	$ 5,000.00	$ 10,000.00	$ 500.00	$ 1,000.00
33	Abandon Water Mains, Entire Project	1	LS	$ 2,000.00	$ 2,000.00	$ 4,000.00	$ 4,000.00	$ 17,000.00	$ 17,000.00	$ 2,500.00	$ 2,500.00
	SUBTOTAL WATER MAIN PAY ITEMS				**$ 337,785.00**		**$ 406,495.00**		**$ 562,570.00**		**$ 560,078.00**
	PAVING PAY ITEMS										
34	Subgrade Undercutting	350	CY	$ 35.00	$ 12,250.00	$ 54.00	$ 18,900.00	$ 48.00	$ 16,800.00	$ 77.00	$ 26,950.00
35	Removing Concrete Drive Approach	13	SY	$ 15.00	$ 195.00	$ 35.00	$ 455.00	$ 25.00	$ 325.00	$ 20.00	$ 260.00
36	Removing Concrete Sidewalk & Ramp (sawcutting included)	190	SY	$ 10.00	$ 1,900.00	$ 25.00	$ 4,750.00	$ 25.00	$ 4,750.00	$ 12.00	$ 2,280.00
37	Removing Pavement Full Depth (Curb & Gutter included)	48	SY	$ 20.00	$ 960.00	$ 40.00	$ 1,920.00	$ 25.00	$ 1,200.00	$ 24.00	$ 1,152.00
38	Aggregate Base, MDOT 21AA Limestone, 8"	48	SY	$ 20.00	$ 960.00	$ 30.00	$ 1,440.00	$ 25.00	$ 1,200.00	$ 77.00	$ 3,696.00
39	Concrete Pavement, Non-reinforced, 7", incl. integral 6" Curb	48	SY	$ 77.00	$ 3,696.00	$ 90.00	$ 4,320.00	$ 120.00	$ 5,760.00	$ 92.00	$ 4,416.00
40	Remove & Replace Concrete Curb & Gutter, "Birmingham Roll"	415	LF	$ 42.00	$ 17,430.00	$ 70.00	$ 29,050.00	$ 55.00	$ 22,825.00	$ 72.50	$ 30,087.50
41	Pulverize and Reshape Ex. Bituminous Pavement	7,300	SY	$ 3.25	$ 23,725.00	$ 2.60	$ 18,980.00	$ 4.00	$ 29,200.00	$ 12.00	$ 87,600.00
42	Capeseal Surface	7,300	SY	$ 12.50	$ 91,250.00	$ 11.60	$ 84,680.00	$ 14.50	$ 105,850.00	$ 16.00	$ 116,800.00

43	Concrete Drive Approach, 6"	14	SY	$ 80.00	$ 1,120.00	$ 120.00	$ 1,680.00	$ 120.00	$ 1,680.00	$ 95.00	$ 1,330.00
44	Concrete Sidewalk, 6" (Includes Ramps)	430	SF	$ 7.50	$ 3,225.00	$ 11.00	$ 4,730.00	$ 10.00	$ 4,300.00	$ 17.00	$ 7,310.00
45	Concrete Sidewalk, 4"	1,925	SF	$ 7.20	$ 13,860.00	$ 8.50	$ 16,362.50	$ 8.00	$ 15,400.00	$ 7.00	$ 13,475.00
46	Handicap Ramp Truncated Domes	155	SF	$ 50.00	$ 7,750.00	$ 50.00	$ 7,750.00	$ 20.00	$ 3,100.00	$ 52.00	$ 8,060.00
47	Adjust Structure Cover	5	EA	$ 400.00	$ 2,000.00	$ 350.00	$ 1,750.00	$ 800.00	$ 4,000.00	$ 880.00	$ 4,400.00
48	Maintenance Aggregate for Entire Project	1	LS	$ 2,000.00	$ 2,000.00	$ 3,000.00	$ 3,000.00	$ 68,585.00	$ 68,585.00	$ 2,500.00	$ 2,500.00
	SUBTOTAL PAVING PAY ITEMS				**$ 182,321.00**		**$ 199,767.50**		**$ 284,975.00**		**$ 310,316.50**
	GENERAL PAY ITEMS										
49	Mobilization	1	LS	$ 50,000.00	$ 50,000.00	$ 53,000.00	$ 53,000.00	$ 65,858.00	$ 65,858.00	$ 86,000.00	$ 86,000.00
50	Pavement Marking, Waterborne, 24 inch Stop Bar, White	30	LF	$ 6.00	$ 180.00	$ 6.00	$ 180.00	$ 18.00	$ 540.00	$ 4.75	$ 142.50
51	Pavement Marking, Waterborne, 24 inch Crosshatching, White	250	LF	$ 5.50	$ 1,375.00	$ 5.00	$ 1,250.00	$ 18.00	$ 4,500.00	$ 4.75	$ 1,187.50
52	Pavement Marking, Waterborne, 4 inch, Yellow	805	LF	$ 1.25	$ 1,006.25	$ 1.50	$ 1,207.50	$ 6.00	$ 4,830.00	$ 0.95	$ 764.75
53	Water and Sewer Allowance	1	LS	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00	$ 30,000.00
54	Salvage Existing Signs	1	LS	$ 500.00	$ 500.00	$ 600.00	$ 600.00	$ 500.00	$ 500.00	$ 1,000.00	$ 1,000.00
55	Sign Post, U-Channel	48	LF	$ 10.00	$ 480.00	$ 25.00	$ 1,200.00	$ 50.00	$ 2,400.00	$ 25.00	$ 1,200.00
56	Tree Protection, 3" Dia. Or Greater	27	EA	$ 125.00	$ 3,375.00	$ 125.00	$ 3,375.00	$ 300.00	$ 8,100.00	$ 55.00	$ 1,485.00
57	Mulch, 3"	25	SY	$ 10.00	$ 250.00	$ 15.00	$ 375.00	$ 40.00	$ 1,000.00	$ 22.00	$ 550.00
58	Topsoil, 3"	240	SY	$ 8.00	$ 1,920.00	$ 9.00	$ 2,160.00	$ 6.00	$ 1,440.00	$ 18.50	$ 4,440.00
59	Sod, Class A	240	SY	$ 8.00	$ 1,920.00	$ 8.00	$ 1,920.00	$ 15.00	$ 3,600.00	$ 17.50	$ 4,200.00
60	Inlet Filter	12	EA	$ 125.00	$ 1,500.00	$ 100.00	$ 1,200.00	$ 200.00	$ 2,400.00	$ 100.00	$ 1,200.00
61	Inlet Sediment Pit	12	EA	$ 1.00	$ 12.00	$ 100.00	$ 1,200.00	$ 200.00	$ 2,400.00	$ 55.00	$ 660.00
62	Traffic Maintenance & Control	1	LS	$ 15,000.00	$ 15,000.00	9,000	$ 9,000.00	15,888	$ 15,888.00	57,500	$ 57,500.00
63	Inspector Crew Days	600	Day	$ 60.00	$ 36,000.00	$ 59.00	$ 35,400.00	$ 40.00	$ 24,000.00	$ 65.00	$ 39,000.00
	SUBTOTAL GENERAL PAY ITEMS				**$ 143,518.25**		**$ 142,067.50**		**$ 167,456.00**		**$ 229,329.75**
	TOTAL				$ 1,062,984.25		$ 1,072,045.00		$ 1,424,558.00		$ 1,758,041.25

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

January 12, 2023

City of Birmingham
151 Martin Street
Birmingham, MI 48012

Attn: Ms. Melissa A. Coatta, P.E.
City Engineer

Re: Recommendation for Bid Award
Quarton Lake Estates Phase 2 – Contract #1-23P
NFE Job #L733

Dear Ms. Coatta,

Bids for the subject project were received, opened, and read on Wednesday, January 11, 2023, at 2:00 p.m. at City Hall. A total of four (4) bids were received and read. The bids have been tabulated, checked, and are in order. The low bidder for the project is FDM Contracting, Inc. of Shelby Township, Michigan, with a total bid amount of $1,062,984.25. We note that the bid amount is greater than the Engineer's Opinion of Probable Cost, which was $1,019,207.50, by an amount of $43,776.75 which represents an approximate 4.3% increase over the estimated cost for the project.

Our office has experience working with FDM Contracting on many previous, successful projects in Birmingham and other surrounding communities. We have also reviewed the references included with the bid and find them to be reputable and acceptable. Based on previous experience we are confident in FDM Contracting's ability to perform the scope of work for this project.

In our capacity as Design and Consulting Engineers for the City of Birmingham, we recommend that Contract #1-23P for the Quarton Lake Estates Phase 2 Project be awarded to FDM Contracting, Inc. in the amount of **$1,062,984.25**

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

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MI 48342-5032
WWW.NOWAKFRAUS.COM
VOICE: 248.332.7931
FAX: 248.332.8257

Quarton Lake Estates Phase 2
CONTRACT # 1-23(P)

CITY OF BIRMINGHAM

ENGINEERING DEPARTMENT

Contractor's Name: F.D.M. Contracting, Inc. **Copy #** 4

5J

QUARTON LAKE ESTATES PHASE 2
CONTRACT # 1-23(P)
INDEX

95	Sworn Statement (including attachments)	13 Pages
100	Proposal (including attachments and Addenda No. 1 and No. 2 write-ups)	16 Pages
110	Contract	2 Pages
120	Performance Bond	2 Pages
130	Payment Bond	2 Pages
140	Payment Forms	6 Pages
	Request For Partial Payment Request For Final Payment Sworn Statement Work Directive	
200	Advertisement	2 Pages
301	Supplemental Instructions to Bidders	3 Pages
310	General Instructions to Bidders	4 Pages
400	General Requirements	16 Pages
410	Iran Sanctions Act Certification	1 Page
500	Water Main	13 Pages
600	Sewers and Related Structures	12 Pages
605	Internal Sewer Inspection	9 Pages
610	Flowable Fill	2 Pages
710	Portland Cement Concrete Pavement	9 Pages
711	Concrete Durability Requirements	5 Pages
712	Concrete Sidewalk Construction	8 Pages
762	Capeseal Surface	8 Pages
900	Supplemental Specifications	15 Pages

Appendices:

A: G2 Consulting Group – Soil Boring & Pavement Core Information_____ 40 Pages

B: MDOT Sidewalk Ramp and Detectable Warning Details R-28-J _____ 7 Pages

QUARTON LAKE ESTATES PHASE 2 PROJECT - CONTRACT # 1-23(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., Wednesday, January 4, 2023**. 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: F.D.M. Contracting, Inc.

Address: 49150 Van Dyke
Shelby Twp., MI 48317

Telephone: 586-739-8400 Fax: 586-739-8402 Email: Dan@fdmcontracting.net Website: fdmcontracting.net

Number of Years Operating Under Your Present Name: 24 yrs.

General Nature of Work Performed: Underground Utilities + Excavating Construction Company, Site Grading + Balancing.

Number of construction crews **employed by your company** relating to the type of work under this contract: 3 crews

Number of construction personnel that constitutes a crew (foreman, pipe layers, excavator, and loader operators, etc.): 6 construction personnels plus Truck Drivers

Number of construction crews the company **will place on site full-time** in order to complete this project, in its entirety, within the designated time frame: 1-2 crews

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: See attachment

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $ _____

Final Contract Price: $ _____

Date Completed: _____

Description of Work Performed:

_____

_____

_____

_____

_____

REFERENCE PROJECT#2:

Project Name: _____

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $ _____

Final Contract Price: $ _____

Date Completed: _____

Description of Work Performed:

_____

_____

_____

_____

_____

REFERENCE PROJECT #3:

Project Name: _____

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $_____

Final Contract Price: $_____

Date Completed: _____

Description of Work Performed:

_____

_____

_____

_____

_____

List major work presently under contract:

Name of Project	Percent Complete	Owner	Engineer	Contract Amount
Staybridge Ste	50 %	Midwest Lodging	Stellar Dev.	$ 1,020,000.00
Ferndale 22WM	50 %	City of Ferndale	Giffels Webster	$ 2,180,219.00
note the 50% completion is on the Extension Contract Mod. Awarded 12/21/22	%			$
	%			$
	%			$

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
None for 25% or More		

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 22 day of DEC., 2022

By: Don M

Signature and Title: V.P.

Written Name: DON MERAM

Address: 49156 VAN DYKE, SHELBY TWP. MI 48317

STATE OF MICHIGAN)
) SS
County of Macomb)

Subscribed and Sworn to before me, a Notary Public, in and for Macomb County, Michigan,

on this 22 day of December, 2022.

Susan C. Bellew
Notary Public Susan C. Bellew

In and for the County of Macomb, MI.

My commission Expires: 01/05/2027

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., Wednesday, January 4, 2023.**

Fax: (248) 530-1290
Email: mcoatta@bhamgov.org

Receipt of the form may be confirmed by calling (248) 530-1850.

Copies of this Sworn Statement form will be sent by facsimile or email to prospective bidders upon request.

F.D.M. Contracting, Inc.
Project References - Current & Past

Charter Twp. of Bloomfield Twp. Porters Lane Emergency Sanitary Sewer Replacement

Bloomfield Twp. (Owner)
Hubbell, Roth & Clark, Inc., P.E. (248) 454-6300
4200 Telegraph Road
Bloomfield Twp., MI 48302
Contract Amount: $872,925.00
Start Date: Approx. 03/21/2022
Completion Date: 10/10/2022
Description: Emergency Sewer Repair.

City of Farmington Hills Normandy Hills Subdivision Water Main Project

City of Farmington Hills (Owner)
City of Farmington Hills Engineering Dept.
31555 Eleven Mile Road
Farmington Hills, MI 48336-1165
Contract Amount: $2,257,426.30
Start Date: 04/04/2022
Completion Date: 09/23/2022
Description: Normandy Hills Water Main Construction Project

Orchard Lake Rd. - City of Farmington Hills / MDOT #20402 (we are the Subcontractors)

City of Farmington Hills (Owner)
City of Farmington Hills Engineering Dept.
31555 Eleven Mile Road
Farmington Hills, MI 48336-1165
Contract Amount: $385,460.00
Start Date: 04/05/2022
Completion Date: 05/13/2022
Description: Installation of Water Mains & Connection to Existing WM, Gate Valves & Wells, Fire Hydrant and Removal of Fire Hydrant.

City of Ferndale - 2022 Water Main Improvement Program & Contract Mod. Extension

City of Ferndale (Owner)
Giffels Webster, Engineer
1025 E. Maple Road, Suite 100
Birmingham, MI 48009
Contract Amount: $2,180,219.00
Start Date: 05/16/2022
Completed: 09/30/2023
Description: Installing 2,000 feet of Ductile Iron Water Main, R.R. Gate Valves, Fire Hydrants, Domestic Water Services, Concrete Pavement, Sidewalks, Ramps, Curbs, Gutters, HMA Cold Milling & HMA Surface, Paving, Lawn Restoration and Other Associated Work Items.

F.D.M. Contracting, Inc.
Project References - Current & Past

Woodspring Suites Dearborn – Concord Hospitality Enterprises, Co. (we are a subcontractor on this project)

Concord Hospitality Enterprises Co. (Owner)
NRC Builders (General Contractor)
Nowak & Fraus Engineering 248-332-7931
11410 Common Oaks Drive
Raleigh, NC 27614
Contract Amount: $863,576.00
Start Date: 06/27/2022
Completion Date: 11/15/2022
Description: Sanitary, Storm, Water Main & Grading

Grand Square of Orion - Brown Road RE Holdings, LLC

Brown Road RE Holdings, LLC (Owner)
OHM Orchard, Hills & McCliment, Inc.
30201 Orchard Lake Rd., Suite #110, Farmington Hills, MI 48334
Contract Amount: $1,700,000.00
Start Date: 03/28/2022
Completion Date: 12/22/2022
Description: Installation of Water Main, Sanitary Sewer, Storm Sewer, Site Grading & Balancing

Staybridge Suites Royal Oak – Midwest Lodging Group

Midwest Lodging Group (Owner)
Stellar Development, LLC, (248) 419-5550
2600 Auburn Road
Auburn Hills, MI 48326
Contract Amount: $1,020,000.00
Start Date: 10/26/2022
Completion Date: 02/28/2023
Description: Site Grading & Underground Utilities for Storm, Water & Sewer

City of Royal Oak 2021 Water Main Improvements Contract CAP2110

City of Royal Oak (Owner)
Holly Donoghue, P.E., (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067
Contract Amount: $3,398,893.00
Start Date: 05/10/2021
Completed: 11/05/2021
Description: Installation of sanitary, storm, ductile iron water main, concrete removal & paving, Asphalt paving, and Restoration

F.D.M. Contracting, Inc.
Project References - Current & Past

City of Ferndale 2021 Water Main Improvement Program

City of Ferndale (Owner)
Giffels Webster, Engineer
1025 E. Maple Road, Suite 100
Birmingham, MI 48009
Contract Amount: $1,597,242.00
Start Date: 05/03/2021
Completed: 11/01/2021
Description: Install Sanitary Sewer, New Water Main with all appurtenances. R&R Concrete Curb, R.R. Concrete pavement, Cold Milling HMA Surface, HMA paving.

Charter Twp., of Chesterfield Twp., 23 Mile Rd 2021 Water Main

Charter Twp., of Chesterfield (Owner)
OHM Advisors, 34000 Plymouth Road, Livonia, MI 48150
Contract Amount: $1,545,889.00
Start Date: 03/22/2021
Completed: 07/19/2021
Description: Installation of New Ductile Iron, & Directional Drill HDPE Water Main

City of Southfield / MDOT #2104-22 - 12 Mile Road WM

City of Southfield / MDOT #2104-22
HRC - Matt Slicker, P.E., (248) 454-6300
Contract Amount: $427,123.00
Start Date: 09/22/2021
Completed: 10/29/2021
Description: Installation of 1,677 LF of 12", Directional Drill C-900 Fusible PVC Pipe, 8" – 16" Ductile Iron Pipe, Gate Valves & Hydrants.

Groesbeck Retail – M-97 RE Holdings, LLC

M-97 RE Holdings, LLC (Owner)
Triumph Engineering (Engineer)
3021 Orchard Lake Road
Farmington Hills, MI 48334
Contract Amount: $304,365.74
Start Date: 08/10/2021
Completed: 11/30/2021
Description: Site Grading & Balancing, Sanitary Sewer, Storm Sewer, and Water Services

Detroit PW-7018 - City of Detroit / Fort Wayne Contracting (we were the subcontractors)

City of Detroit & Fort Wayne Contracting (Owner)
Ian Duncan, P.E., (313) 202-1174
300 East Seven Mile Road
Detroit, MI 48203

Contract Amount: $170,675.00
Start Date: 09/02/2021
Completed: 11/09/2021
Description: Storm Sewer Tap, RCP Pipe, Manholes, and Catch Basins

City of Royal Oak 2020 Water Main Improvements Contract CAP2010

City of Royal Oak (Owner)
Holly Donoghue, P.E.: (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067
Contract Amount: $3,309,918.75
Start Date: 05/22/2020
Completed: 11/05/2020
Description: Installation of sanitary, storm, ductile iron water main, concrete removal & paving, Asphalt paving, and Restoration

City of Ferndale 2020 Water Main Improvement Program Contract WM-2020-01

City of Ferndale (Owner)
Giffels Webster, Engineer
1025 E. Maple Road, Suite 100
Birmingham, MI 48009
Contract Amount: $1,367,057.21
Start Date: 05/11/2020
Completed: 10/08/2021
Description: R&R Sanitary Sewer Install, New Water Main with all appurtenances. R&R Concrete Curb, R.R. Concrete pavement, Cold Milling HMA Surface, HMA Paving.

Hampton Inn/Staybridge Suites–Southfield (we were the subcontractors on this project)

Avanti Development Group, L.L.C. (Owner)
35 W. Long Lake Road, Bloomfield Hills, MI 48304
Triumph Engineering & Design, Inc.
Contract Amount: $880,000.00
Start Date: 09/23/2020
Completed: 11/27/2020
Description: Install all Sanitary Sewer, Storm Sewer and Water Main Site Utilities

Meijer Outlot at 26 & Van Dyke (we were the subcontractors on this project)

Big Daddy Investments (Owner)
Commercial Construction Management, L.L.C. (General Contractor)
Stonefield Engineering & Design (Engineer)
607 Shelby, Suite 200
Detroit, MI 48226

Contract Amount: $313,000.00
Start Date: 06/29/2020
Completed: 09/29/2020
Description: Install 90 L.F. 20" Horizontal Casing Bore and all Sanitary Sewer, Storm Sewer and Water Main Utilities

Cranbrooke Drive – Novi (we were the subcontractors on this project)

City of Novi (Owner)
Florence Cement (Prime Contractor)
AECOM - Mark Koskinen, Engineering
27777 Franklin Rd., Ste # 2000, Southfield, MI 48034
Contract Amount: $149,012.00
Start Date: 07/28/2020
Completed: 09/04/2020
Description: Installation Storm Sewer & all related Storm Structures

City of Birmingham Bowers St. Water Main Replacement Project Contract# 2-19(W)

City of Birmingham (Owner)
Nowak & Fraus Engineers: (248) 332-7931
46777 Woodward Ave, Pontiac, MI 48342
Contract Amount: $727,291.25
Start Date: 07/8/2019
Completed: 10/11/2019
Description: Installation of sanitary, storm, ductile iron water main, concrete removal & paving.

City of Royal Oak 2019 Water Main Improvements Contract CAP1910

City of Royal Oak (Owner)
Holly Donoghue, P.E. & A/E: (248) 246-3266
211 William Street, Royal Oak, MI 48068
Contract Amount: $3,562,412.00
Start Date: 04/15/19
Completed: 05/15/2020
Description: Installation of sanitary, storm, ductile iron water main, concrete removal & paving

City of Royal Oak 2019 Road Reconstruction Improvements Contract CAP1935

City of Royal Oak (Owner)
Holly Donoghue, P.E. & A/E: (248) 246-3266
211 William Street, Royal Oak, MI 48068
Contract Amount: $2,721,745.17
Start Date: 04/15/19
Completed: 10/11/2019
Description: Installation of sanitary, storm, ductile iron water main, concrete removal & paving

F.D.M. Contracting, Inc.
Project References - Current & Past

City of Royal Oak 2019 Asphalt Resurfacing Improvements CAP1715 (we were a subcontractor)

City of Royal Oak (Owner)
Holly Donoghue, P.E. & A/E: (248) 246-3266
211 William Street, Royal Oak, MI 48068
Contract Amount: $70,350.00
Start Date: 04/15/19
Completed: 05/2019

Clinton Township - Twin Rivers Phase II

Twin River Development Ltd.
45343 Market Street, Shelby Township, MI 48315
Gateway Engineering and Surveying, Inc., A/E
Contract Amount: $465,852.00
Start Date: 8/15/18
Completed: 11/16/2018
Description: Installation of sanitary, storm, water, site grading & balancing

Allen Park - Town Place Suites

Midwest Lodging Group / Stellar Development LLC
2600 Auburn Road, Suite 240, Auburn Hills, MI 48326
Stellar Development, A/E
Contract Amount: $780,000.00
Start Date: 11/19/18
Completed: 10/18/2019
Description: Installation of sanitary, storm, water, site grading & balancing

Shelby Township - Westwood Subdivision

Westwood Park North LLC
48635 Van Dyke Ave. Shelby Township, MI 48317
Fenn and Associates, A/E
Contract Amount: $805,000.00
Start Date: 10/15/18
Completed: 02/22/2019
Description: Installation of sanitary, storm & water

Clinton Township - Residence Inn & Hilton Garden Inn

Stellar Hospitality Hall Road, LLC (Owner)
44600 & 44700 Hayes Rd., Clinton Twp., MI 48038
Base 4, A/E: (888) 901-8008
Contract Amount: $1,050,000.00
Start Date: 04/26/2018
Completed: 12/06/2019
Description: Installation of underground utilities

F.D.M. Contracting, Inc.
Project References - Current & Past

Macomb Township - 2018 Brookridge Estates Site Condominiums

Macomb Township (Owner)
51650 Card Rd, Macomb, MI 48042
Fazal Kahn & Associates, A/E: (586) 739-8007
Contract Amount: $258,000.00
Start Date: 03/19/2018
Completed: 06/05/2018
Description: Installation of underground utilities

Macomb Township - 2018 23 Mile Road Water Main - North Ave Water Main

Macomb Township (Owner)
Anderson Eckstein & Westrick, A/E: (586) 726-1234
51301 Schoenherr Road, Shelby Township, MI 48315
Contract Amount: $1,156,164.00
Start Date: 03/12/2018
Completed: 06/29/2018
Description: Installation of 4,215 LF of 16", 12" & 8" water main.

Town Place Suites – City of Van Buren (we are a subcontractor on this project)

Belleville Development (Owner)
Bud Design & Engineering Services, A/E
311 Stephenson Hwy., Madison Heights, MI 48071
Malik Abdulnoor, Owner Representative: 248-544-2900
Contract Amount: $480,000.00
Start Date: 11/01/2017
Completed: 03/23/2018
Description: Installation of all underground utilities

PROPOSAL

QUARTON LAKE ESTATES PHASE 2

CONTRACT #1-23(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 **Quarton Lake Estates Phase 2 Project, Contract #1-23(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
01-03-23		Addendum #1
01-06-23		Addendum #2

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.	21" Storm Sewer, C76, CL-IV, Trench A @ONE HUNDRED SEVENTY	311	LF	170.00	52,870.00
2.	18" Storm Sewer, C76, CL-IV, Trench A @ONE HUNDRED SIXTY FIVE	271	LF	165.00	44,715.00
3.	12" Storm Sewer, C76, CL-IV, Trench A @ ONE HUNDRED TEN	1180	LF	110.00	129,800.00
4.	Sewer Service, 6" PVC SDR 23.5 @ ONE HUNDRED FIFTY	368	LF	150.00	55,200.00

PROPOSAL

FDM CONTRACTING

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
5.	New 5'-0" Diameter Storm Sewer Manhole w/ 2' Sump @FIVE THOUSAND FIVE HUNDRED	1	EA	5,500.00	5,500.00
6.	New 4'-0" Diameter Storm Sewer Manhole w/ 2' Sump @ FOUR THOUSAND	3	EA	4,000.00	12,000.00
7.	New 4'-0" Diameter Storm Sewer Manhole @ FOUR THOUSAND	4	EA	4,000.00	16,000.00
8.	New 4'-0" Diameter Catch Basin w/ 2' Sump @ FOUR THOUSAND	2	EA	4,000.00	8,000.00
9.	New 2'-0" Diameter Inlet @ TWO THOUSAND FIVE HUNDRED	10	EA	2,500.00	25,000.00
10.	6" Perforated Pipe Underdrain (No sock) @ THIRTY	560	LF	30.00	16,800.00
11.	Sewer Service Tap, 6" @ SEVEN HUNDRED FIFTY	2	EA	750.00	1,500.00
12.	Sewer Service Connection, 6" @ SEVEN HUNDRED FIFTY	13	EA	750.00	9,750.00
13.	Reconstruct Manhole (if and where needed) @ ONE HUNDRED FIFTY	15	VF	150.00	2,250.00
14.	Remove & Replace Structure Cover (as directed by City) @ THREE	1375	LB	3.00	4,125.00
15.	Remove Ex. Drainage Structure @ SEVEN HUNDRED FIFTY	12	EA	750.00	9,000.00
16.	Bulkhead Structure, 12" @ ~~FIFTY~~ THREE HUNDRED	2	EA	300.00	600.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
17.	Bulkhead Structure, 10" @ TWO HUNDRED FIFTY	5	EA	250.00	1,250.00
18.	CCTV Sewer Acceptance Inspection @ FIVE THOUSAND	1	LS	5,000.00	5,000.00
	SUBTOTAL SEWER PAY ITEMS				$ 399,360.00

WATER MAIN PAY ITEMS

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
19.	Remove Hydrant @ SEVEN HUNDRED	2	EA	700.00	1,400.00
20.	Remove Existing Gate Valve Well @ SEVEN HUNDRED FIFTY	4	EA	750.00	3,000.00
21.	Fire Hydrant Assembly, Complete @ SIX THOUSAND	5	EA	6,000.00	30,000.00
22	8" Gate Valve & Box @ TWO THOUSAND FIVE HUNDRED	8	EA	2,500.00	20,000.00
23.	8" D.I. CL 52 Water Main w/ Polywrap, Trench A @ ONE HUNDRED THIRTY	1832	LF	130.00	238,160.00
24.	6" D.I. CL 52 Water Main w/ Polywrap, Trench A @ ONE HUNDRED TWENTY FIVE	81	LF	125.00	10,125.00
25.	8" Water Main Connection to Ex. 8" Water Main @ FOUR THOUSAND EIGHT HUNDRED	2	EA	4,800.00	9,600.00

F D M Contracting

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
26.	6" Water Main Connection to Ex. 6" Water Main @ Four Thousand Five Hundred D.M.	2	EA	4,500.00	9,000.00
27.	New Water Service, 1", Trench A, Copper @ Fifty	53	LF	50.00	2,650.00
28.	Water Service Connection, 1.5" @ One Thousand Five Hundred	1	EA	1,500.00	1,500.00
29.	Water Service Connection, 1" @ Six Hundred	16	EA	600.00	9,600.00
30.	Install Curb Stop & Box (Materials Provided by City), 1" @ Three Hundred Fifty	1	EA	350.00	350.00
31.	Hydra-Stop, 8" @ One Hundred	2	EA	100.00	200.00
32.	Hydra-Stop, 6" @ One Hundred	2	EA	100.00	200.00
33.	Abandon Existing Water Mains, Entire Project @ Two Thousand	1	LS	2,000.00	2,000.00
	SUBTOTAL WATER MAIN PAY ITEMS				$ 337,785.00

PAVING PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
34	Subgrade Undercutting @ Thirty Five	350	CY	35.00	12,250.00

CITY OF BIRMINGHAM
CONTRACT #1-23(P)

PROPOSAL

FDM Contracting

100-5

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
35.	Removing Concrete Drive Approach @ FIFTEEN	13	SY	15.00	195.00
36.	Removing Concrete Sidewalk & Ramp (sawcutting included) @ TEN	190	SY	10.00	1,900.00
37.	Removing Pavement Full Depth (Curb & Gutter included) @ TWENTY	48	SY	20.00	960.00
38.	Aggregate Base, MDOT 21AA Limestone, 8" @ TWENTY	48	SY	20.00	960.00
39.	Concrete Pavement, Non-reinforced, 8", Incl. integral 6" curb @ SEVENTY SEVEN	48	SY	77.00	3,696.00
40.	Remove & Replace Concrete Curb & Gutter, "Birmingham Roll" @ FORTY TWO	415	LF	42.00	17,430.00 D.M.
41.	Pulverize and Reshape Ex. Bituminous Pavement @ THREE TWENTY FIVE	7300	SY	3.25	23,725.00
42.	Capeseal Surface @ TWELVE FIFTY	7300	SY	12.50	91,250.00
43.	Concrete Drive Approach, 6" @ EIGHTY	14	SY	80.00	1,120.00
44.	Concrete Sidewalk, 6" (Includes Ramps) @ SEVEN FIFTY	430	SF	7.50	3,225.00
45.	Concrete Sidewalk, 4" @ SEVEN TWENTY	1925	SF	7.20	13,860.00

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
46.	Handicap Ramp Truncated Domes @ FIFTY	155	SF	50.00	7,750.00
47.	Adjust Structure Cover @ FOUR HUNDRED	5	EA	400.00	2,000.00
48.	Maintenance Aggregate for Entire Project @ TWO THOUSAND	1	LS	2,000.00	2,000.00
	SUBTOTAL PAVING PAY ITEMS			$_____	
				$ 182,321.00	

GENERAL PAY ITEMS					
No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
49.	Mobilization (Max 5% of Bid) @ FIFTY THOUSAND	1	LS	50,000.00	50,000.00
50.	Pavement Marking, Waterborne, 24 inch Stop Bar, White @ SIX	30	LF	6.00	180.00
51.	Pavement Marking, Waterborne, 24 inch Crosshatching, White @ FIVE FIFTY	250	LF	5.50	1,375.00
52.	Pavement Marking, Waterborne, 4 inch, Yellow @ ONE TWENTY FIVE	805	LF	1.25	1006.25

PROPOSAL

FDM CONTRACTING

No.	ITEMS FOR BID	QTY	UNITS	UNIT PRICE	AMOUNT
53.	Water and Sewer Allowance @ THIRTY THOUSAND	1	LS	$30,000	30,000.00
54.	Salvage Existing Signs @ FIVE HUNDRED	1	LS	500.00	500.00
55.	Sign Post, U-Channel @ TEN	48	LF	10.00	480.00
56.	Tree Protection, 3" Dia. Or Greater @ ONE HUNDRED TWENTY FIVE	27	EA	125.00	3,375.00
57.	Mulch, 3" @ TEN	25	SY	10.00	250.00
58.	Topsoil, 3" @ EIGHT	240	SY	8.00	1,920.00
59.	Sod, Class A @ EIGHT	240	SY	8.00	1,920.00
60.	Inlet Filter @ ONE HUNDRED TWENTY FIVE	12	EA	125.00	1,500.00
61.	Inlet Sediment Pit @ ONE	12	EA	1.00	12.00
62.	Traffic Maintenance & Control @ FIFTEEN THOUSAND	1	LS	15,000.00	15,000.00
63.	Inspector Crew Days @ 60 / SIXTY	-	DAYS	$600	36,000.00
	SUBTOTAL GENERAL PAY ITEMS	$____			
					$ 143,518.25

PROPOSAL

F D M CONTRACTING

TOTAL BID:	$1,062,984.25

TOTAL BID (WRITE OUT IN WORDS):

ONE MILLION, SIXTY TWO THOUSAND, NINE HUNDRED EIGHTY FOUR DOLLARS AND TWENTY FIVE CENTS.

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 F.D.M. Contracting, Inc.

Street Address 49150 Van Dyke

City Shelby Twp. County Macomb

State/Zip Code MI 48317

Telephone 586-739-8400 Fax 586-739-8402

Date 01/05/2023

Signed by

Print Name: Don Meram

Title: Vice President

If a corporation, give state in which incorporated: Michigan

Witnessed: Susan C. Ratliff

Print Name: Susan C. Ratliff

Name of Superintendent DON MERAM
Supervision & time sequence according to the General Requirements

Give below at least three (3) references as to ability to do work proposed.

Name See attached Address

Firm Telephone

Name Address

Firm Telephone

Name Address

Firm Telephone

Give below the last five (5) projects worked on, including those currently in progress, in chronological order. The names need not all be different from those listed above:

Project #1: Name of Project: See attached

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #2: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #3: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #4: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #5: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

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 Jeff Demek Address PO Box 94411, Romulus, MI 48174-0411

Firm Highway, Maint. + Construction Co. Telephone 734-941-8885

Type of Work to be Performed: Pulverize, Re-Shape + Capeseal

Name Larry Forgione Address 11085 Lisa Lane, Shelby Twp. Mi 48316

Firm L Anthony Construction, Inc. Telephone 586-992-9588

Type of Work to be Performed: Concrete work

Name Greg Moody Address 1965 Barrett, Troy, MI 48084

Firm PK Contracting, Inc. Telephone 248-362-2130

Type of Work to be Performed: Pavement Marking

Name Tony Maggiano Address 24806 Industrial Hwy, Warren, MI 48089

Firm State Barricades Telephone 586-756-8282

Type of Work to be Performed: Traffic Control + Signage

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

END OF SECTION

F.D.M. CONTRACTING INC. 49156 Van Dyke | Shelby Twp., MI 48317

Office (586) 739-8400 | Fax (586) 739-8402

To: **City of Birmingham, Oakland County, MI – 2023 Quarton Lake Estates Phase 2 Project Contract #11-23(P)**

From: **Don Meram, Vice President**

Date: **01/05/2023**

Re: **Proposal, page 100-9, Give below at least (3) references as to ability to do work proposed.**

Charter Twp. of Bloomfield Twp. Porters Lane Emergency Sanitary Sewer Replacement

Bloomfield Twp. (Owner)
Hubbell, Roth & Clark, Inc. P.E. 248-454-6300
4200 Telegraph Road
Bloomfield Twp., MI 48302
Contract Amount: $872,925.00
Start Date: Approx. 03/21/2022
Completion Date: 10/10/2022
Description: Emergency Sewer Repair.

City of Farmington Hills Normandy Hills Subdivision Water Main Project

City of Farmington Hills (Owner)
City of Farmington Hills Engineering Dept.
31555 Eleven Mile Road
Farmington Hills, MI 48336-1165
Contract Amount: $2,257,426.30
Start Date: 04/04/2022
Completion Date: 09/23/2022
Description: Normandy Hills Water Main Construction Project

City of Ferndale - 2022 Water Main Improvement Program

City of Ferndale (Owner)
Giffels Webster, Engineer
1025 E. Maple Road, Suite 100
Birmingham, MI 48009
Contract Amount: $1,181.281.00
Start Date: 05/16/2022
Completed: 09/10/2022
Description: Installing 2,000 feet of Ductile Iron Water Main, R.R. Gate Valves, Fire Hydrants, Domestic Water Services, Concrete Pavement, Sidewalks, Ramps, Curbs, Gutters, HMA Cold Milling & HMA Surface, Paving, Lawn Restoration and Other Associated Work Items.

F.D.M. CONTRACTING INC. 49156 Van Dyke | Shelby Twp., MI 48317

Office (586) 739-8400 | Fax (586) 739-8402

To: City of Birmingham, Oakland County, MI – 2023 Quarton Lake Estates Phase 2 Project Contract #11-23(P)

From: Don Meram, Vice President

Date: 01/05/2023

Re: Proposal, page 100-10, Give below the last five (5) projects worked on, including those currently in progress, in chronological order. The names need not all be different from those listed above:

City of Ferndale 2021 Water Main Improvement Program

City of Ferndale (Owner)
Giffels Webster, Engineer
1025 E. Maple Road, Suite 100
Birmingham, MI 48009
Contract Amount: $1,597,242.00
Start Date: 05/03/2021
Completed: 11/01/2021
Description: Install Sanitary Sewer, New Water Main with all appurtenances. R&R Concrete Curb, R.R. Concrete pavement, Cold Milling HMA Surface, HMA paving.

City of Royal Oak 2021 Water Main Improvements Contract CAP2110

City of Royal Oak (Owner)
Holly Donoghue, P.E., (248) 246-3266
203 S. Troy Street, Royal Oak, MI 48067
Contract Amount: $3,398,893.00
Start Date: 05/10/2021
Completed: 11/05/2021
Description: Installation of sanitary, storm, ductile iron water main, concrete removal & paving, Asphalt paving, and Restoration

Charter Twp. of Bloomfield Twp. Porters Lane Emergency Sanitary Sewer Replacement

Bloomfield Twp. (Owner)
Hubbell, Roth & Clark, Inc. P.E. 248-454-6300
4200 Telegraph Road
Bloomfield Twp., MI 48302
Contract Amount: $872,925.00
Start Date: Approx. 03/21/2022
Completion Date: 10/10/2022
Description: Emergency Sewer Repair.

F.D.M. CONTRACTING INC. 49156 Van Dyke | Shelby Twp., MI 48317

Office (586) 739-8400 | Fax (586) 739-8402

City of Farmington Hills Normandy Hills Subdivision Water Main Project

City of Farmington Hills (Owner)
City of Farmington Hills Engineering Dept.
31555 Eleven Mile Road
Farmington Hills, MI 48336-1165
Contract Amount: $2,257,426.30
Start Date: 04/04/2022
Completion Date: 09/23/2022
Description: Normandy Hills Water Main Construction Project

City of Ferndale - 2022 Water Main Improvement Program

City of Ferndale (Owner)
Giffels Webster, Engineer
1025 E. Maple Road, Suite 100
Birmingham, MI 48009
Contract Amount: $1,181.281.00
Start Date: 05/16/2022
Completed: 09/10/2022
Description: Installing 2,000 feet of Ductile Iron Water Main, R.R. Gate Valves, Fire Hydrants, Domestic Water Services, Concrete Pavement, Sidewalks, Ramps, Curbs, Gutters, HMA Cold Milling & HMA Surface, Paving, Lawn Restoration and Other Associated Work Items.

CITY OF BIRMINGHAM
QUARTON LAKE ESTATES PHASE 2
PROJECT
CONTRACT #1-23(P)

ADDENDUM
NO. 1

Tuesday January 3, 2023

The following addenda items are to be included by all bidders in the work of this Project:

1. All bidders shall note receipt of this Addendum No. 1 on the outside of the envelope containing their bid and on the proposal form. This addendum contains the following write-up and other documents as noted below:
2. As part of the MI EGLE water main permit review, initial comments were received that required changes to the proposed water main design on Westwood Drive, sheet C6 of the plans, as well as miscellaneous revisions to other plan sheets. An additional gate valve, hydrant, and 6" water main piping for the hydrant have been added near STA 6+40 on Westwood Drive.
3. An updated proposal form is being issued to reflect revised quantities for 8" gate valve, hydrant assembly, and 6" water main pay items.
4. The following is a list of changes to design drawing sheets (all drawing sheets bear a revision date/title of 01-03-23 "Revised Per EGLE Review"):
    a. Cover Sheet – Updated Cover Sheet w/ revised issuance date.
    b. Sheets C1 thru C8 – Updated & added miscellaneous profile-view callouts related to proposed utility crossings. Added utility crossing callouts and tables to plan view to address MI EGLE comments.
    c. Sheet C6 – Aforementioned additional 8" gate valve, hydrant, and 6" water main piping for hydrant lead are reflected on sheet C6.
    d. Sheet C9 – Updated and added miscellaneous storm sewer profile callouts related to proposed utility crossings.
    e. Sheet Q1 – Quantities for pay items 21, 22, and 24 have been updated.

End of Addendum

CITY OF BIRMINGHAM
QUARTON LAKE ESTATES PHASE 2
PROJECT
CONTRACT #1-23(P)

ADDENDUM
NO. 2

Friday January 6, 2023

The following addenda items are to be included by all bidders in the work of this Project:

1. An updated proposal form is being issued to correct the header verbiage under the "Paving Pay Items" category, above pay item #34, on page 4 of the form. Bidders shall use this form for their bid submission, which acknowledges receipt of addendum #1 and #2 on page 1 of the form.

End of Addendum

QUARTON LAKE ESTATES PHASE 2 PROJECT – CONTRACT #1-23(P)

CONTRACT

THIS AGREEMENT made the _____ day of_____, 2023, by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and _____ of _____, County of _____, State of Michigan, hereinafter called the "Contractor", relative to Contract No. 1-23(P), otherwise known as: QUARTON LAKE ESTATES PHASE 2 PROJECT in the amount of $ 1,062,984.25 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. In the event that 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 of the work to be performed by the Contractor shall be completed on or before the Time of Completion, as set forth in the Supplemental Instructions to Bidders. The Contractor shall pay to the City as liquidated damages, the amount per day as set forth under Liquidated Damages in the Supplemental Instructions to Bidders, for each calendar day after the date specified under Time of Completion that the work to be performed by the Contractor is not completed. Liquidated damages are established because of the difficulty in ascertaining actual damages which the City might sustain, and are not intended as a penalty.

4. The City promises and agrees to pay said Contractor for all labor, materials and appliances supplied, and for all work performed under this agreement at the unit prices provided in the attached Proposals and Specifications.

5. For the faithful performances of the terms of this agreement, said parties respectively bind themselves, their successors, heirs, executors, administrators and assigns.

IN WITNESS WHEREOF, the parties execute this agreement as of the day and year first written above.

CITY OF BIRMINGHAM

Attest _____
City Clerk

By: _____
Mayor

Witnessed _____

By: _____
FDM CONTRACTING
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

QUARTON LAKE ESTATES PHASE 2 PROJECT – CONTRACT #1-23(P)

PERFORMANCE BOND Bond #7445208

KNOW ALL MEN BY THESE PRESENTS that we, the undersigned FDM Contracting, Inc. 49156 Van Dyke Avenue, Shelby Township, MI 48317 as Principal, and Old Republic Insurance Company as Sureties, are hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of One Million Sixty-two Thousand Nine Hundred Eighty-four & 25/100---Dollars ($ 1,062,984.25------), in lawful money of the United States, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns this _____ day of _____, 2023.

WHEREAS, the above bounded Principal has entered into a certain written contract with the above named City of Birmingham, Michigan dated _____ day of _____, 2023 for the construction of Quarton Lake Estates Phase 2 Project - Contract #1-23(P) _____, 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:

Susan C. Bellew, Bookkeeper

FDM Contracting, Inc.

By: [signature]

VICE PRESIDENT
Principal

Old Republic Insurance Company

By: [signature]

Holly Nichols, Attorney-in-fact

QUARTON LAKE ESTATES PHASE 2 PROJECT – CONTRACT #1-23(P)

PAYMENT BOND

Bond #7445208

KNOW ALL MEN BY THESE PRESENTS, that we FDM Contracting, Inc. 49156 Van Dyke Avenue, Shelby Township of the State of MI 48317 hereinafter called the "Principal" and Old Republic 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 One Million Sixty-two Thousand Nine Hundred Eighty-four and 25/100---------- Dollars ($ 1,062,984.25-----), in lawful money of the United States, for the payment whereof, we bid ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally this _____ day of _____, 2023.

WHEREAS, the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, 2023, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials for Quarton Lake Estates Phase 2 Project Contract #1-23(P)

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:

Susan C. Billiu, Bookkeeper

FDM Contracting, Inc.

By: Don M

VICE PRESIDENT

Principal

Old Republic Insurance Company

By: Holly Nichols

Holly Nichols, Attorney-in-fact

Surety

OLD REPUBLIC INSURANCE COMPANY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That OLD REPUBLIC INSURANCE COMPANY, a Pennsylvania stock insurance corporation, does make, constitute and appoint:

MICHAEL D LECHNER, ROBERT D HEUER, MARK T MADDEN, HOLLY NICHOLS, NICHOLAS ASHBURN, JASON ROGERS of ROCHESTER, MI

its true and lawful Attorney(s)-in-Fact, with full power and authority for and on behalf of the Company as surety, to execute and deliver and affix the seal of the Company thereto (if a seal is required), bonds, undertakings, recognizances or other written obligations in the nature thereof, (other than self-insurance workers compensation bonds guaranteeing payment of benefits, or black lung bonds), as follows:

ALL WRITTEN INSTRUMENTS

and to bind OLD REPUBLIC INSURANCE COMPANY thereby, and all of the acts of said Attorneys-in-Fact, pursuant to these presents, are ratified and confirmed. This appointment is made under and by authority of the board of directors at a meeting held on December 10, 2019. This Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolutions adopted by the board of directors of the OLD REPUBLIC INSURANCE COMPANY on December 10, 2019.

RESOLVED FURTHER, that the chairman, president or any vice president of the Company's surety division, in conjunction with the secretary or any assistant secretary of the Company, be and hereby are authorized and directed to execute and deliver, to such persons as such officers of the Company may deem appropriate, Powers of Attorney in the form presented to and attached to the minutes of this meeting, authorizing such persons to execute and deliver and affix the seal of the Company to bonds, undertakings, recognizances, and suretyship obligations of all kinds, other than bail bonds, bank depository bonds, mortgage deficiency bonds, mortgage guaranty bonds, guarantees of installment paper and not guaranty bonds. The said officers may revoke any Power of Attorney previously granted to any such person.

RESOLVED FURTHER that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the Company

(i) when signed by chairmen, president or any vice president of the Company's surety division and attested and sealed (if a seal be required) by any secretary or assistant secretary; or

(ii) when signed by a duly authorized Attorney-in-Fact and sealed with the seal of the Company (if a seal be required).

RESOLVED FURTHER, that the signature of any officer designated above, and the seal of the Company, may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, OLD REPUBLIC INSURANCE COMPANY has caused these presents to be signed by its proper officer, and its corporate seal to be affixed this 1st day of June, 2021.

OLD REPUBLIC INSURANCE COMPANY

Karen J. Haffner
Assistant Secretary

Alan Pavlic
Vice President

STATE OF WISCONSIN, COUNTY OF WAUKESHA - SS

On this 1st day of June, 2021, personally came before me, Alan Pavlic and Karen J. Haffner, to me known to be the individuals and officers of the OLD REPUBLIC INSURANCE COMPANY who executed the above instrument, and they each acknowledged the execution of the same, and being by me duly sworn, did severally depose and say: that they are the said officers of the corporation aforesaid, and that the seal affixed to the above instrument is the seal of the corporation, and that said corporate seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority of the board of directors of said organization.

Kathryn R. Pearson
Notary Public

My Commission Expires: September 28, 2022

(Expiration of notary's commission does not invalidate this instrument)

CERTIFICATE

I, the undersigned, assistant secretary of the OLD REPUBLIC INSURANCE COMPANY, a Pennsylvania corporation, CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore, that the Resolutions of the board of directors set forth in the Power of Attorney, are now in force.

Signed and sealed at the City of Brookfield, WI this _____ day of _____, _____.

Karen J. Haffner
Assistant Secretary

46-5332

ORSC 11008 (6-93)

GUY HURLEY INS & SURETY SERV.

5J

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/16/2023

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 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
Guy Hurley, LLC
989 E. South Boulevard
Suite 200
Rochester Hills MI 48307

CONTACT NAME: Christine Phillips
PHONE (A/C, No, Ext): (248)519-1422 FAX (A/C, No): (248)519-1401
E-MAIL ADDRESS: cphillips@ghbh.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: Continental Ins. Co. AXV	35289
INSURER B: Valley Forge Ins. Co AXV	20508
INSURER C: Transportation Ins. Co. AXV	20494
INSURER D: Continental Casualty Co. AXV	20443
INSURER E:	
INSURER F:	

INSURED
FDM Contracting, Inc
49156 Van Dyke Avenue
Shelby Twp MI 48317

COVERAGES **CERTIFICATE NUMBER:** 22-23 w/ short term WC **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	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X XCU Coverage Included X Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY X PRO-JECT LOC OTHER:	X	Y	C6023558299	02/16/2022	02/16/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	X	Y	C6023558268	02/16/2022	02/16/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $ $
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $	X	Y	C6023558285	02/16/2022	02/16/2023	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000 $
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	WC6023558271	1/10/2023	2/16/2023	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C	Inland Marine			C6045621605	02/16/2022	02/16/2023	Installation Floater	100,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Project: Quarton Lakes Esates Phase 2- contract# 1-23P, NFE#L733 .The City of Birmingham, including all elected and appointed officials, all employees and volunteers,all boards, commissions and/or authorities and board members, including employees, consultants,and volunteers thereof, Nowak and Fraus Engineers, PLLC, their owners, directors, officers, consultants, agents, and employees, G2 Consulting Group, LLC, their owners, directors, officers, consultants, agents, and employees are an Additional Insured for General Liability, Auto Liability and Umbrella Liability, when required by written contract. Waiver of Subrogation applies in favor of the Additional Insureds)for General Liability, Auto Liability, Umbrella

CERTIFICATE HOLDER

(248)332-8257 ptulikangas@nfe-engr.com

The City of Birmingham
c/o Nowak & Fraus Engineers
46777 Woodward
Pontiac, MI 48342

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

R McGregor/PHILLI

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MID-CONTINENT CASUALTY COMPANY
1437 S. BOULDER TULSA OK 74119

COMMERCIAL GENERAL LIABILITY POLICY DECLARATION

POLICY NO: 04OCP002004503
RENEWAL NO:

Named Insured and Mailing Address	Agent Name and Mailing Address
City of Birmingham PO BOX 3001 151 Martin St Birmingham, MI 48012	123ocp.com 375502 1285 Drummers Lane Suite 305 Wayne, PA 19087

POLICY PERIOD: FROM 1/16/2023 TO 1/16/2024 at 12:01 A.M. Standard Time at your mailing address shown above

THE NAMED INSURED IS Municipality

BUSINESS DESCRIPTION:

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

THIS POLICY CONSISTS OF THE FOLLOWING COVERAGE PARTS FOR WHICH A PREMIUM IS INDICATED. THIS PREMIUM MAY BE SUBJECT TO ADJUSTMENT.

	PREMIUM
COMMERCIAL GENERAL LIABILITY COVERAGE PART	$
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART	$ 2,167.00
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART	$
RAILROAD PROTECTIVE LIABILITY COVERAGE PART	$
SURCHARGE / TAXES (if applicable)	$
TOTAL	$ 2,167.00

REPORTING BASIS: None

Form(s) and Endorsement(s) made a part of this policy at this time*:

ML1510 (04 97), CG0009 (04 13), CG2031 (12 19), ML1344 (11 04), ML1439 (11 04), CG2838 (04 17), CG3359 (05 14), ML1217 (02 10), IL0021 (09 08), MI9101 (12 21), MI9046 (06 10), CG2951 (12 07), CG3370 (03 05), MI9098 (01 16)

*Omits applicable Forms and Endorsements if shown in specific Coverage Part/Coverage Form Declarations.

Countersigned at: Wayne, PA
Date: 1/16/2023

By Stanley J. Szczyrek
Authorized Representative

INSURED

ML 14 87 (04 03)

Page 1 of 1

040CP 200450300POLICY 00020230116

5J

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART

Policy No. 04OCP002004503

Effective Date: 1/16/2023 **
12:01 A.M., Standard Time

DESIGNATION OF CONTRACTOR

Designation of Contractor and Mailing Address

FDM Contracting Inc.
49156 Van Dyke Ave
Shelby Twp, MI 48317

LOCATION OF COVERED OPERATIONS

various, Birmingham, MI, Contract #: #1-23 P

Quarton Lek Estates Phase 2
#1-23 P

LIMITS OF INSURANCE

Aggregate Limit	$3,000,000
Each Occurrence Limit	$3,000,000

BUSINESS DESCRIPTION

Form of Business: Municipality

Business Description*:

PREMIUM

Classification	Code No.	Premium Basis	Rate Per $1,000 of Cost	Advance Premium
MICHIGAN Construction Operations - Owner (Not Railroads) - Excluding Operations On Board Ships	16292	$1,062,984	0.894	$950

Minimum Premium	Balance to Equal Minimum Premium:		$50
All Other Policywriting	$2,166		$1,167
		Total Advance Premium	$2,167

FORMS AND ENDORSEMENTS (other than applicable Forms and Endorsements shown elsewhere in the policy)

Forms and Endorsements applying to the Coverage Part and made part of this policy at time of issue:

*Information omitted if shown elsewhere in the policy.

**Inclusion of date optional.

These declarations are part of the policy declarations containing the name of the insured and the policy period.

ML 15 10 (04 97)

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE FORM – COVERAGE FOR OPERATIONS OF DESIGNATED CONTRACTOR

Various provisions of this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the company providing this insurance.

The word "insured" means any person or organization qualifying as such under Section **II** – Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section **V** – Definitions.

SECTION I – COVERAGES

BODILY INJURY AND PROPERTY DAMAGE LIABILITY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any "occurrence" and settle any claim or "suit" that may result. But:

(1) The amount we will pay for damages is limited as described in Section **III** – Limits Of Insurance; and

(2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments.

b. This insurance applies to "bodily injury" and "property damage" only if:

(1) The "bodily injury" or "property damage" is caused by an "occurrence" and arises out of:

(a) Operations performed for you by the "contractor" at the location specified in the Declarations; or

(b) Your acts or omissions in connection with the general supervision of such operations;

(2) The "bodily injury" or "property damage" occurs during the policy period; and

(3) Prior to the policy period, no insured listed under Paragraph **1.** of Section **II** – Who Is An Insured and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

c. "Bodily injury" or "property damage" which occurs during the policy period and was not, prior to the policy period, known to have occurred by any insured listed under Paragraph **1.** of Section **II** – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim, includes any continuation, change or resumption of that "bodily injury" or "property damage" after the end of the policy period.

d. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph **1.** of Section **II** – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

(1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;

(2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or

(3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.

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e. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

2. **Exclusions**

This insurance does not apply to:

a. **Expected Or Intended Injury**

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" resulting from the use of reasonable force to protect persons or property.

b. **Contractual Liability**

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages:

(1) That the insured would have in the absence of the contract or agreement; or

(2) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorneys' fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage", provided:

(a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and

(b) Such attorneys' fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

c. **Work Completed Or Put To Intended Use**

"Bodily injury" or "property damage" which occurs after the earlier of the following times:

(1) When all "work" on the project (other than service, maintenance or repairs) to be performed for you by the "contractor" at the site of the covered operations has been completed; or

(2) When that portion of the "contractor's" "work", out of which the injury or damage arises, has been put to its intended use by any person or organization, other than another contractor or subcontractor working directly or indirectly for the "contractor" or as part of the same project.

d. **Acts Or Omissions By You And Your Employees**

"Bodily injury" or "property damage" arising out of your, or your "employees", acts or omissions other than general supervision of "work" performed for you by the "contractor".

e. **Workers' Compensation And Similar Laws**

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

f. **Employer's Liability**

"Bodily injury" to:

(1) An "employee" of the insured arising out of and in the course of:

(a) Employment by the insured; or

(b) Performing duties related to the conduct of the insured's business; or

(2) The spouse, child, parent, brother or sister of that "employee" as a consequence of Paragraph **(1)** above.

This exclusion applies whether the insured may be liable as an employer or in any other capacity and to any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

g. **Damage To Property**

"Property damage" to:

(1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;

(2) Property loaned to you;

(3) Personal property in the care, custody or control of the insured; or

(4) "Work" performed for you by the "contractor".

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h. War

"Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

(1) War, including undeclared or civil war;

(2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or

(3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

i. Mobile Equipment

"Bodily injury" or "property damage" arising out of the use of "mobile equipment" in, or while in practice for, or while being prepared for, any prearranged racing, speed, demolition, or stunting activity.

j. Pollution

(1) "Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

(a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured. However, this subparagraph does not apply to:

(i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot produced by or originating from equipment that is used to heat, cool or dehumidify the building, or equipment that is used to heat water for personal use, by the building's occupants or their guests;

(ii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire";

(b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;

(c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for:

(i) Any insured; or

(ii) Any person or organization for whom you may be legally responsible; or

(d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:

(i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;

(ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by or on behalf of any insured; or

(iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire".

(e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants".

(2) Any loss, cost or expense arising out of any:

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(a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants"; or

(b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of "pollutants".

However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.

k. Damage To Impaired Property Or Property Not Physically Injured

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

(1) A defect, deficiency, inadequacy or dangerous condition in "work" performed for you by the "contractor"; or

(2) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "work" performed for you by the "contractor".

l. Electronic Data

Damages arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data.

However, this exclusion does not apply to liability for damages because of "bodily injury".

As used in this exclusion, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

SUPPLEMENTARY PAYMENTS

1. We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:

   a. All expenses we incur.

   b. Up to $250 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which this insurance applies. We do not have to furnish these bonds.

   c. The cost of bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.

   d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to $250 a day because of time off from work.

   e. All court costs taxed against the insured in the "suit". However, these payments do not include attorneys' fees or attorneys' expenses taxed against the insured.

   f. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.

   g. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

   h. Expenses incurred by the insured for first aid administered to others at the time of an accident for "bodily injury" to which this insurance applies.

   These payments will not reduce the limits of insurance.

2. If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:

   a. The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";

   b. This insurance applies to such liability assumed by the insured;

   c. The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";

   d. The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interests of the indemnitee;

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e. The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and

f. The indemnitee:

(1) Agrees in writing to:

(a) Cooperate with us in the investigation, settlement or defense of the "suit";

(b) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";

(c) Notify any other insurer whose coverage is available to the indemnitee; and

(d) Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and

(2) Provides us with written authorization to:

(a) Obtain records and other information related to the "suit"; and

(b) Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee, necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as Supplementary Payments. Notwithstanding the provisions of Paragraph **2.b.(2)** of Section **I** – Coverages – Bodily Injury And Property Damage Liability, such payments will not be deemed to be damages for "bodily injury" and "property damage" and will not reduce the limits of insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as Supplementary Payments ends when we have used up the applicable limit of insurance in the payment of judgments or settlements or the conditions set forth above, or the terms of the agreement described in Paragraph **f.** above, are no longer met.

SECTION II – WHO IS AN INSURED

1. If you are designated in the Declarations as:

a. An individual, you and your spouse are insureds.

b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to their duties as partners or members of a joint venture.

c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to their duties as members of a limited liability company. Your managers are insureds, but only with respect to their duties as your managers.

d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

2. Each of the following is also an insured:

a. Any person (other than your "employee") or any organization while acting as your real estate manager.

b. Any person or organization having proper temporary custody of your property if you die, but only:

(1) With respect to liability arising out of the maintenance or use of that property; and

(2) Until your legal representative has been appointed.

c. Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Coverage Part.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

SECTION III – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:

a. Insureds;

b. Claims made or "suits" brought; or

c. Persons or organizations making claims or bringing "suits".

2. The Aggregate Limit is the most we will pay for the sum of damages because of all "bodily injury" and "property damage".

3. Subject to Paragraph **2.** above, the Each Occurrence Limit is the most we will pay for the sum of damages because of all "bodily injury" and "property damage" arising out of any one "occurrence".

If you designate more than one project in the Declarations, the Aggregate Limit shall apply separately to each project.

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The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

SECTION IV – CONDITIONS

1. **Bankruptcy**

   Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

2. **Cancellation**

   a. The first Named Insured shown in the Declarations may cancel this policy by mailing or delivering to us advance written notice of cancellation.

   b. We may cancel this policy by mailing or delivering to the first Named Insured and the "contractor" written notice of cancellation at least:

      (1) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

      (2) 30 days before the effective date of cancellation if we cancel for any other reason.

   c. We will mail or deliver our notices to the first Named Insured's and the "contractor's" last mailing address known to us.

   d. Notice of cancellation will state the effective date of cancellation. The policy period will end on that date.

   e. If this policy is cancelled, we will send the "contractor" any premium refund due. If we cancel, the refund will be pro rata. If the first Named Insured cancels, the refund may be less than pro rata. The cancellation will be effective even if we have not made or offered a refund.

   f. If notice is mailed, proof of mailing will be sufficient proof of notice.

3. **Changes**

   This policy contains all the agreements between you, the "contractor" and us concerning the insurance afforded. The first Named Insured shown in the Declarations and the "contractor" are authorized to make changes in the terms of this policy with our consent. This policy's terms can be amended or waived only by endorsement issued by us and made a part of this policy.

4. **Duties In The Event Of Occurrence, Claim Or Suit**

   a. You must see to it that we are notified as soon as practicable of an "occurrence" which may result in a claim. To the extent possible, notice should include:

      (1) How, when and where the "occurrence" took place;

      (2) The names and addresses of any injured persons and witnesses; and

      (3) The nature and location of any injury or damage arising out of the "occurrence".

   b. If a claim is made or "suit" is brought against any insured, you must:

      (1) Immediately record the specifics of the claim or "suit" and the date received; and

      (2) Notify us as soon as practicable.

      You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

   c. You and any other involved insured must:

      (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";

      (2) Authorize us to obtain records and other information;

      (3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and

      (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.

   d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

5. **Examination Of Your Books And Records**

   We may examine and audit your books and records as well as the "contractor's" books and records as they relate to this policy at any time during the policy period and up to three years afterward.

6. **Inspections And Surveys**

   a. We have the right to:

      (1) Make inspections and surveys at any time;

      (2) Give you reports on the conditions we find; and

      (3) Recommend changes.

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b. We are not obligated to make any inspections, surveys, reports or recommendations and any such actions we do undertake relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for the health or safety of workers or the public. And we do not warrant that conditions:

(1) Are safe or healthful; or

(2) Comply with laws, regulations, codes or standards.

c. Paragraphs **a.** and **b.** of this condition apply not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations.

d. Paragraph **b.** of this condition does not apply to any inspections, surveys, reports or recommendations we may make relative to certification, under state or municipal statutes, ordinances or regulations, of boilers, pressure vessels or elevators.

7. Legal Action Against Us

No person or organization has a right under this Coverage Part:

a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or

b. To sue us on this Coverage Part unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this Coverage Part or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

8. Other Insurance

The insurance afforded by this Coverage Part is primary insurance and we will not seek contribution from any other insurance available to you unless the other insurance is provided by a contractor other than the designated "contractor" for the same operation and job location designated in the Declarations. Then we will share with that other insurance by the method described below.

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

9. Premiums

The "contractor":

a. Is responsible for the payment of all premiums; and

b. Will be the payee for any return premiums we pay.

10. Premium Audit

a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.

b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the "contractor". The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the "contractor".

c. The "contractor" must keep records of the information we need for premium computation, and send us copies at such times as we may request.

11. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" is brought.

12. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

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13. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Auto" means:
   a. A land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or
   b. Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

   However, "auto" does not include "mobile equipment".
2. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time.
3. "Contractor" means the contractor designated in the Declarations.
4. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".
5. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, bylaws or any other similar governing document.
6. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.
7. "Impaired property" means tangible property, other than work performed for you, that cannot be used or is less useful because:
   a. It incorporates work performed for you that is known or thought to be defective, deficient, inadequate or dangerous; or
   b. You have failed to fulfill the terms of a contract or agreement;

   if such property can be restored to use by the repair, replacement, adjustment or removal of the work performed for you or your fulfilling the terms of the contract or agreement.
8. "Insured contract" means:
   a. A lease of premises;
   b. A sidetrack agreement;
   c. Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;
   d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality; or
   e. An elevator maintenance agreement.
9. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".
10. "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:
    a. Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;
    b. Vehicles maintained for use solely on or next to premises you own or rent;
    c. Vehicles that travel on crawler treads;
    d. Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:
       (1) Power cranes, shovels, loaders, diggers or drills; or
       (2) Road construction or resurfacing equipment such as graders, scrapers or rollers;
    e. Vehicles not described in Paragraph **a., b., c.** or **d.** above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:
       (1) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or
       (2) Cherry pickers and similar devices used to raise or lower workers;
    f. Vehicles not described in Paragraph **a., b., c.** or **d.** above maintained primarily for purposes other than the transportation of persons or cargo.

       However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":
       (1) Equipment designed primarily for:
          (a) Snow removal;
          (b) Road maintenance, but not construction or resurfacing; or
          (c) Street cleaning;
       (2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and

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(3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.

However, "mobile equipment" does not include land vehicles that are subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged. Land vehicles subject to a compulsory or financial responsibility law or other motor vehicle insurance law are considered "autos".

11. "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.

12. "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

13. "Property damage" means:

a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or

b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.

For the purposes of this insurance, electronic data is not tangible property.

As used in this definition, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from, computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

14. "Suit" means a civil proceeding, brought in the United States of America (including its territories and possessions), Puerto Rico or Canada, in which damages because of "bodily injury" or "property damage" to which this insurance applies are alleged. "Suit" includes:

a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or

b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.

15. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.

16. "Work" includes materials, parts or equipment furnished in connection with the operations.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – ENGINEERS, ARCHITECTS OR SURVEYORS

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART

A. **Section II – Who Is An Insured** is amended to include as an additional insured any architect, engineer or surveyor engaged by you, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

1. In connection with your premises; or
2. In the performance of your ongoing operations.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury" or "property damage" arising out of the rendering of or the failure to render any professional services by or for you, including:

1. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
2. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the rendering of or the failure to render any professional services by or for you.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

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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 the QUARTON LAKE ESTATES PHASE 2 PROJECT – CONTRACT #1-23(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. 1-23(P), Contract Name QUARTON LAKE ESATES PHASE 2 PROJECT; and the undersigned further represent that the subject work has now been accomplished and the said contract has now been completed.

The undersigned hereby warrants and certifies that all of his/her (its) indebtedness arising by reason of the said contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the said contract, have been fully paid or satisfactorily settled. The undersigned further agrees that if any such claim should hereafter arise, he/she (it) shall assume responsibility for the same immediately upon request to do so by the Owner.

The undersigned, for a valuable consideration, the receipt of which is hereby acknowledged, does further hereby waive, release and relinquish any and all claims or right of lien which the undersigned now has or may hereafter acquire upon the subject premises for labor and material used in accomplishing said project owned by the Owner.

This affidavit is freely and voluntarily given with full knowledge of the facts on this ____ day of _____, 20____.

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 _____, 20____.

_____, 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 _____, 20____

_____
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:_____

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
2023 QUARTON LAKE ESTATES PHASE 2 PROJECT
CONTRACT #1-23(P)

Sealed proposals endorsed "QUATON LAKE ESTATES PHASE 2 PROJECT - Contract #1-23(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 Wednesday, January 11, 2023**. 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 installation of new storm sewer, new water main, new capeseal surface, and miscellaneous curb and sidewalk repairs on Oak Street, Raynale Street, and Westwood Drive in the City of Birmingham. Approximate quantities are as follows: 1,762 linear feet of storm sewer; 1,900 linear feet of water main; 7,300 square yards of new capeseal surfacing, 1,705 square feet of sidewalk; plus other work to make a complete project.

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 **Wednesday, December 14, 2022**.

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 Wednesday, January 4, 2023**. Copies of the Sworn Statement form will be sent by facsimile or 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 faxed to (248) 530-1290, and confirmed received by calling (248) 530-1850. Information may also be emailed at the address given on the form.

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.

CHERILYNN MYNSBERGE
CITY CLERK

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Birmingham Eccentric
MITN

SECTION 301
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

1.01 TIME OF COMPLETION

The Contractor shall be allowed to commence the project as soon as all bonds and insurance submittals have been approved, and the pre-construction meeting has been held.

The Contractor shall have the project substantially completed by **Monday, June 12, 2023**, including all restoration lawn restoration. Substantial completion shall be defined as all roadway, sidewalk and driveway pavement being placed and cured, and all greenbelt areas restored to final grade with topsoil and sod. The Contractor shall have all work on the project finally completed by **Friday, June 30, 2023**. Final completion shall be defined as having all punch list work competed, pavement markings and permanent signage installed, satisfactory establishment of lawn 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 time period specified under "Time of Completion" that the work to be performed by the contractor is not completed. Liquidated damages in this amount shall also apply for each day that the project is not substantially complete beyond the date 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

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, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days Notice of Cancellation shall apply to this policy.

B. Proof of Insurance Coverage: The Contractor shall provide the City of Birmingham at the time the contracts are returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below:

1. Two (2) copies of Certificate of Insurance for Workers' Compensation;
2. Two (2) copies of Certificate of Insurance for Commercial General Liability;
3. Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
4. Original policy, or original binder pending issuance of policy, for Owners Contractors Protective Liability Insurance;
5. If so requested, Certified Copies of all policies mentioned above will be furnished.

C. Coverage Expiration: If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least ten (10) days prior to the expiration date.

D. Maintaining Insurance: The CONTRACTOR also agrees to provide all insurance coverage as specified. Upon failure of the CONTRACTOR to obtain or maintain such insurance coverage for the term of the agreement, the City of Birmingham may, at its option, purchase such coverage from

the contract amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.

1.11 EXAMINATION OF SITE

A. It is expected that each bidder will make a personal examination of the entire site of the proposed work, and of its surroundings. It will be assumed that each bidder, before offering his proposal, has obtained firsthand information concerning any probable interference and the available facilities for transporting, handling and storing of construction equipment and materials, and concerning other conditions which may affect his work.

1.12 LEGAL CONDITIONS

A. Bidders are notified that they should acquaint themselves with the various provisions in the laws of the State of Michigan, and in the ordinances and regulations of the City of Birmingham and Oakland County, with respect to the carrying on of public improvements.

1.13 BIDDER'S ABILITY

A. It is the intention of the City to award the contract for this job to a contractor whose construction skill and financial resources are fully equal to the task of prosecuting the work in a satisfactory manner, and of bringing it to completion within the time limit specified. With this end in view, the Form of Proposal calls for at least three (3) references concerning his ability to do this particular class of work, and a reference list of the last five (5) projects, including those not completed or currently being performed. The mere ability to offer bonds will not be taken as sufficient evidence of responsibility on the part of the bidder. If the contract is awarded to a foreign company, a certificate of authority to do business in this state must accompany executed contract.

1.14 PAYMENTS

A. Partial payments will be made monthly to the Contractor during the satisfactory progress of the working accordance with the Payments section of the General Requirements.

1.15 RIGHT TO ACCEPT, REJECT AND TO WAIVE DEFECTS

A. The City reserves the right to accept any proposal, to reject any or all proposals, and to waive any defect or irregularity in any proposal, if it appears advantageous to the City to do so.

B. In particular, any alterations, erasure or interlineation in the Specifications which are made a part, specifically, of these instruments, or of the Form of Proposal, shall render the accompanying proposal irregular and subject to rejection by the City. In case any explanation, additions or alterations are to be offered, they shall be indicated on separate sheets attached to the proposal form and referred to therein.

C. Proposals which are clearly unbalanced, will also be considered as irregular, and will be subject to instant rejection by the City.

END OF SECTION

SECTION 400
GENERAL REQUIREMENTS

1.01 DEFINITION OF TERMS

A. The intent and meaning of words and expressions, or pronouns used in their stead, occurring in these specifications or in other contract documents, shall be interpreted as described under Section 101.03 Definitions of Terms of the Current Standard Specifications for Construction adopted by the Michigan Department of and Transportation, with the following additions or exceptions:

1. City - The corporation of the City of Birmingham, Michigan.
2. Commission - The Commission of the City of Birmingham, Michigan, and any other board, body, official or officials to which or to whom the powers belonging to the said Commission shall, by virtue of any act or acts, hereafter passed or be held to appertain.
3. Engineer - The person holding the position or acting in the capacity of 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 particular duties entrusted to them.
4. Directed, required, permitted, etc. - Whenever in the specifications the words “as directed”, “as required”, “as permitted”, or words of like effect are used, it shall be understood that the direction, requirements or permission of the Engineer is intended; similarly the words “approved”, “acceptable”, “satisfactory”, or words of like import shall mean approved by, or acceptable, or satisfactory to the Engineer.

1.02 INTENT OF THE PLANS, SPECIFICATIONS AND CONTRACT

A. The intent of the plans, specifications and contract is to provide for the completion of the work in substantial compliance with the details as shown thereon, and as described herein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies, and shall perform all operations required to complete the work in accordance with the specifications, and the lines, grades and cross sections provided for on the plans, or by authorization.

1.03 EXTRA WORK

A. No extra work shall be started, or extra material furnished, until such extra work or furnishing of extra material is authorized in writing by the Engineer.

B. The price for such extra work or material must be approved by the Engineer. Said price may be a unit price, a lump sum price, or if the Engineer so elects, the work shall be done on a force account basis, which will be paid for in the following manner:

1. For all labor, teams and foremen in direct charge of the specific work, the Contractor shall receive the actual rate of wage paid for each and every hour that said labor, teams and foremen are actually engaged in such work, plus 20% of the sum thereof.
2. For materials and supplies, the Contractor will receive the actual cost of such materials delivered on the work, including freight charges, as shown by original receipted bills, plus 15% of the sum thereof.
3. For any machinery and equipment owned or rented by the Contractor, which it may be deemed necessary or desirable to use on extra work, the Contractor will be paid at the actual charge-out rate, if reasonable, for his own equipment, or at the actual rental price paid, if reasonable, for rented equipment for each and every hour that such equipment is used on the work, to which sum 15% will be added.

4. Bond premium, workmen's compensation insurance, personal injury public liability and property damage public liability insurance, unemployment compensation, and Federal Social Security will be paid for at actual cost, to which sum 15% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance.

5. The compensation as herein provided shall be accepted by the Contractor as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, and the use of small tools and equipment for which no rental is allowed.

1.04 ALTERATION IN CHARACTER OF WORK

A. Should the Contractor encounter, or the Engineer encounter, during the progress of the work, sub-surface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, the Engineer's attention shall be called immediately to such conditions before they are disturbed. The Engineer shall thereupon investigate the conditions, and if he finds that they materially differ from those shown on the plans and indicated in the specifications, he shall at once make such changes in the plans and/or specifications, as he may find necessary.

1.05 COORDINATION OF SPECIFICATIONS AND PLANS

A. In case of discrepancy, written figures shall govern over numerals, figured dimensions shall govern over scaled dimensions, plans shall govern over standards specifications, supplemental specifications shall govern over standard specifications and plans, and special provisions shall govern over supplemental specifications.

B. The Contractor shall not take advantage of any apparent error or omission in the plans or specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

1.06 AUTHORITY OF ENGINEER

A. The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the satisfactory and acceptable fulfillment of the terms of the contract by the Contractor.

1.07 INSPECTION

A. Inspectors may be appointed and directed to inspect all materials used, and all work done. The inspection may extend to all parts of the work, and to the preparation or manufacture of the materials for use in the work. The Inspectors will not be authorized to revoke, alter, enlarge or relax any of the provisions of these specifications, nor to change the plans in particular. The Inspector on the work will inform the Engineer as to the progress of the work, the manner in which it is being done, and the quality of the materials being used. He will also call to the attention of the Contractor any failure to follow the plans and specifications that he may observe. In case of any dispute arising between the Contractor and the Inspector as to the materials furnished, or the manner of performing the work, the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and be decided by the Engineer. In no instance shall any action or omission on the part of the Inspector relieve the Contractor of the responsibility of completing the work in accordance with the plans and specifications.

B. The Engineer and his duly authorized Inspector, shall at all times have the right to enter the premises upon which the work under this contract is being done, and to inspect said work and to ascertain whether or not the construction is carried out in accordance with the terms of the contract or specifications; and the Contractor shall render all necessary assistance and provide all reasonable facilities and give ample time for such inspection.

1.08 SUPERVISION

A. The Contractor shall give his personal supervision to the faithful prosecution of the work. In case of his absence, he shall have a competent superintendent or foreman on the work site who shall follow, without delay, all instructions of the Engineer or his assistants in the prosecution and completion of the work, and every part thereof in conformity with this contract. He shall also have full authority to supply material and labor immediately.

B. The Contractor's supervisor shall be responsible to act on behalf of the Contractor. This includes being present or available at all times, making decisions on behalf of the Contractor and Subcontractor, scheduling, monitoring work progress on a continued basis, communicating with City representatives, etc. His name shall be submitted prior to the start of work, with all appropriate ways of contacting him. He shall remain the responsible Contractor's representative throughout completion of the project, including any subcontract work associated with this contract. If it is necessary to replace this person, it shall have the approval of the Engineer.

1.09 TIME AND SEQUENCE OF WORK

A. The Contractor shall have control over the sequence of order of execution of the several parts of the work to be done under this contract, and over the methods of accomplishing the required results, except as some particular sequence or method may be distinctly demanded by these specifications and plans, or by the express provisions of the contract.

B. The Engineer may 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 in regard to adjoining work, shall be determined and adjusted by the Engineer.

1.11 CONSTRUCTION STAKES

A. The location, alignment, elevation and grade of the work will be determined by the Engineer, who will set such stakes as are necessary to properly mark these elements. The Contractor shall assume full responsibility for detail dimensions and elevations measured from the lines, grades and elevations so established.

B. The Engineer may require the Contractor, at the Contractor's expense, to provide such masts, scaffolds, batterboards, straightedges, templates or other devices as may be necessary to facilitate laying out, inspecting and constructing the work.

C. The Contractor shall exercise proper care in the preservation of all stakes set for his use, or for the use of the Engineer, and if such stakes are injured, lost or removed by the Contractor's operations, the cost of resetting may be charged to the Contractor. The Department will be responsible for the accuracy of lines, slopes and grades established by the City, except that the Contractor shall not take advantage of any obvious errors or omissions.

1.12 SOIL CONDITIONS

A. The Contractor shall make his own determination of the soil conditions and he shall complete the work in whatever materials, and under whatever conditions he may encounter or create, without extra cost of the City.

1.13 MATERIALS FURNISHED BY THE CITY

A. When specified, the City of Birmingham may furnish materials at no cost to the Contractor. All other materials necessary to complete the project shall be furnished by the Contractor.

B. Materials to be furnished by the City will be at the Department of Public Works Yard at Eton Road and Holland Avenue. The Department of Public Works will require the Contractor to provide a written authorization from the Engineer before releasing any materials. The Contractor shall load and transport all such materials from the Department of Public Works Yard to the construction site, at his own expense.

C. The City may, at its discretion, furnish to the Contractor, any materials, supplies or transportation required for extra work, and the Contractor shall not be entitled to any allowance or percentage on account of materials, supplies or transportation so furnished.

1.14 STORED MATERIAL

A. Materials and equipment distributed, stored or placed upon or near the site of the work shall be at all times so disposed as not to interfere with work being 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 take action. When dry conditions are declared by the Engineer, the Contractor shall have a water truck and calcium chloride on site at all times, to be applied as needed. The Contractor shall be pro-active with respect to applying dust control measures as needed.

1.24 PROTECTION AND RESTORATION OF PROPERTY

A. The Contractor shall restore, at his own expense, any and all public or private property damaged or injured in consequences of any act or omission on his part, or on the part of his employees or agents, to a condition similar and equal to that existing before such damage or injury was done. If the Contractor neglects to repair or make restoration, the Engineer may, after forty-eight (48) hours written notice to the Contractor, proceed to make such repairs or restoration, and will deduct the cost thereof from any monies that are or may become due 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.

1.30 MAINTAINING SERVICE TO DRAIN, WATER MAINS, ETC.

A. The Contractor shall maintain in continuous and effective service all drains, sewers, watercourses and water mains touched during the progress of the work. If it should become necessary to temporarily divert or obstruct the flow of any watercourse or drain, written consent must first be obtained from the Engineer, and then the Contractor shall assume full responsibility for the consequences.

1.31 NOTIFICATION OF UTILITIES

A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavating or disturbances.

B. The rights are reserved to both the City and to the owners of public utilities or franchises to enter upon the work for the purpose of making repairs to their installations and making changes in their installations necessitated by the work.

1.32 SUBLETTING OR ASSIGNING

A. The Contractor shall perform without subletting, at least twenty-five (25) percent of the work provided for in this contract, computed on the basis of cost.

B. The subletting of any portion of the contract work shall be subject to approval by the Engineer, but such approval shall not relieve the Contractor of responsibility for the work of such Subcontractors who likewise shall be bound by all pertinent provisions of these specifications. Before any work is sublet, the Contractor shall satisfy the Engineer that the proposed Subcontractor is suitably equipped and experienced in that kind of work, and that he has proper financial resources to enable him to carry it out.

C. No assignment by the Contractor of any principal construction contract or any part thereof, or of the funds to be received thereunder by the Contractor will be recognized unless such assignment has had the approval of the Engineer, and the Surety has been given due notice of such assignment in writing.

D. No assignment will receive approval unless the instrument of assignment contains a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

1.33 DISCHARGE OF EMPLOYEES

A. The Contractor shall employ only competent, skillful persons to do the work. Whenever the Engineer shall notify the Contractor in writing that, in his opinion, any employee on the work is incompetent, impertinent, disobedient, unfaithful, disorderly or otherwise unsatisfactory, that employee shall be discharged from the work and shall not again be employed on it except with the written consent of the Engineer.

1.34 PROSECUTION OF WORK

A. The Contractor shall begin work in accordance with the detailed progress schedule after execution of the Contract by the City. He shall prosecute the work in the order given in the progress schedule, with force and equipment adequate to complete the major items, portions, or sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the progress schedule, or if it appears at any time that such work is not being prosecuted

in such manner as to insure its completion within the time specified, the Engineer shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to the progress schedule; with or without notice to the Surety, place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plant and equipment as in his judgment is reasonable, and for such time as the plant and equipment are in service.

1.35 EXTENSION OF TIME

A. If the Contractor is obstructed or delayed in the prosecution or completion of the work by reason of the neglect, delay or default of any other Contractor having a contract with the City for adjoining or contiguous work; by reason of any damage that may happen thereto by the unusual action of the elements; by reason of the abandonment of the work by the employees in a general strike; the Contractor shall have no claim of damages for any such cause or delay. He shall, however, be entitled to such extension of the time specified for the completion of the work as the Engineer shall determine to be just and proper, provided however, that such claim for such extension of time is made by the Contractor in writing to the Engineer within one (1) week from the time when any such cause for delay occurs.

1.36 SUNDAY AND HOLIDAY WORK

A. No work shall be done on Sundays, or upon any days celebrated as holidays by the City of Birmingham, except in case of emergency, or to protect work from damage or injury. All Sunday or holiday work must have prior written approval of the Engineer.

1.37 NIGHT WORK

A. No work shall be carried on from 7:00 p.m. to 7:00 a.m., except in case of emergency, or to protect from damage or injury work that has already been done. All night work must have the prior written approval of the Engineer. This provision does not apply to work covered under the provision entitled “shutting off water”.

1.38 MEASUREMENT OF QUANTITIES

A. Quantities of work completed under the contract will be measured by the Engineer according to United States standard measures. When material is measured by weight in tons, the unit shall be the ton of two thousand (2000) pounds.

B. All longitudinal measurements for area of base courses, surface courses and pavements will be made along the actual surface of the roadway. For all transverse measurements for area of base courses, surface courses and pavement, the dimensions used in calculating the pay area shall be the neat dimensions provided in the plans or by authorization.

C. Structures will be measured according to neat lines provided on the plans or by authorization.

D. All materials which are specified for measurement by the cubic yard “Loose Measure” will be measured at the location where used on the project under construction, unless otherwise provided.

1.39 CLEANING UP

A. Upon completion of the actual work of construction, the Contractor shall clean up and leave in a neat condition all the premises which he has occupied during the construction period.

B. Before the time of the final estimate, the Contractor shall remove from the premises, debris, rubbish and all unused materials, together with all tools and equipment, or shall deposit them at such points and in such a manner as the Engineer may require.

C. Before leaving the grounds, the Contractor shall replace and put in good repair all fences, telephone poles and lines, roadways and other property that may have been damaged by him in the progress of the work.

1.40 ENVIRONMENTAL PROTECTION

A. Contractor shall at all times be responsible to insure that no chemicals, pollutants or other harmful or hazardous materials are spilled, discharged or otherwise released into the environment or onto City property, rights-of-way or into the storm or sanitary systems. Should such a release occur, Contractor shall immediately take action to extract the contaminants and prevent further exposure and damage. Contractor shall immediately contact the City and all other required governmental agencies to assess and determine the necessary and appropriate remediation activities. Contractor shall be responsible for all costs and damages stemming from the release including, but not limited to, the cost to remove and dispose of the contaminant, repair/replace/restore the affected areas, and all costs incurred by the City or governmental agency in response.

1.41 UNNOTICED DEFECTS

A. Any defective work or material that may be discovered by the Engineer before the final acceptance of the work, or before final payment has been made, shall be removed and replaced by work and material 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 particular 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. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suite in the Oakland County Circuit Court or the 48th District Court.

1.45 MAINTENANCE AND GUARANTY

A. The Contractor shall guarantee all the work furnished under this Contract against all defects in workmanship and materials, and incidental damage to other property, for a period of one (1) year following the date of the final acceptance of the work by the City. The Performance Bond shall fully cover all guarantees contained in this article.

1.46 CONFLICT OF INTEREST

A. The Contractor shall not directly or indirectly employ or otherwise use a City official of the City of Birmingham in conjunction with this contract. If subsequent to entering into the Contract a City official, a spouse, child or parent shall become directly or indirectly interested in the contract, the City shall have the right to terminate the contract without further liability if the disqualification has not been removed within thirty (30) days after the City has given notification of the disqualifying interest.

1.47 INSPECTOR CREW DAYS

A. It shall be the responsibility of the bidder to extend as a bid item in his proposal, when called for, the number of inspection crew days he requires for the completion of the project, times the unit price for inspection. The basis of computing crew days shall be as follows:

Total Hours Worked	**Crew Days Charged**
When an Inspector reports to the project and the Contractor decides not to work, or does not appear to work, weather permitting.	- One-half (1/2) crew day
Under four (4) hours	- One-half (1/2) crew day
Four (4) hours or more	- One (1) crew day

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 ($600) 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 = $300.00
2. Full Day = $600.00

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 410
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.#

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 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 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, nonrising 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 particular 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 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.

G. Curb stop valves shall be Mueller Model No. H-10300

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. Particular 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 keep on the job at all times all of 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 in order 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 by the use of 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 a distance of 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 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 the 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.

G. All trenches and excavations shall be backfilled as soon as inspection is completed in order to avoid unnecessary risk of damage to the line and also 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:

1.

Existing Surface	Replaced By
a. Gravel (driveways, shoulders, etc)	8" 23A aggregate
b. Bituminous mat	5" full-depth asphalt
c. Asphalt (full-depth or over aggregate)	5" full-depth asphalt
d. Concrete pavement	8" concrete
e. Asphalt surfaced concrete	8" concrete and 2" asphalt surfacing
f. Concrete sidewalk	4" concrete, except 6" at drives
g. Grass surface	3" topsoil plus seed or sod

B. For asphalt surfaces, the top shall be a wearing course mixture at one (1) inch minimum thickness. The balance of the thickness shall be: (a) leveling course mixture when over a concrete base and (b) base course mixture when in a full-depth asphalt.

C. Surfaces not described above, which are damaged for the construction, shall be replaced with the same type and thickness of material removed.

D. All surface restoration shall comply with the City's Standard Details and specifications for the specific type of work being done.

3.23 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 as a result 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 if 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 p.s.i., 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 #		Date YYYY/MM/DD	Time 17:10	Street STREET NAME	
City LOCATION		Further location details CAMERA IS HEADING SOUTH			
Up ID #XXX		Rim to invert	Grade to invert	Rim to grade	Ft
Down ID #XXX		Rim to invert	Grade to invert	Rim to grade	Ft
Use Sanitary/Combined/Storm	Direction Down		Flow control Not Controlled		Media No XXX
Shape Circular	Height 18	Width	ins	Preclean J	Date Cleaned YYYY/MM/DD
Material Vitrified Clay Pipe		Joint length	Total length		Length Surveyed 187.8
Lining		Year laid	Year rehabilitated		Weather Dry
Purpose Capital Improvement Program Assessment		Cat			Pressure
Additional info				Structural O & M Constructional Miscellaneous Hydralic	
Location Light Highway					
Project PROJECT NAME				Work Order	
Northing		Easting		Elevation	
Coordinate System				GPS Accuracy	

Count	Video	CD	Code		Grade	In1	In2	%	Jnt	Fr	To	ImRef	Remarks
0.0			ST	Start of Survey									
0.0			AMH	Manhole									C-039
0.0			MWL	Water Level				0					
20.6			CM	Crack Multiple	3					02	04		
20.6			TB	Tap Break-in		6.000				02			WEST
33.2			TB	Tap Break-in		6.000				02			WEST
87.6		S01	RFJ	Roots Fine Joint	1				J	05	07		
92.6			TF	Tap Factory		6.000				09			EAST
94.3			FC	Fracture Circumferential	2					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 601.02 of the Standard Specifications for Construction and the contract. Concrete Grade P1M 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 P1M. 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 be meet the requirement of MDOT Mixture P1, with 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 excavating; removal of existing sidewalk; granular fill (not more than four (4) inches thick); preparation of the base; forming, furnishing, placing and finishing of concrete; placing of jointing material; curing; 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 762
CAPESEAL SURFACE

PART 1. GENERAL

1.01 SUMMARY

This work shall consist of a double chipseal followed by one application of a type II asphalt slurry applied after second chipseal application. The application of the materials shall comply with the following specifications.

A. BITUMINOUS SURFACE TREATMENT

1. This work consists of two applications of bituminous material applied to the prepared surface and being covered with a course of aggregate. The work shall be done in accordance with this specification or in accordance with applicable drawings to plans of this contract.

B. SLURRY SEAL APPLICATION

1. The work covered by this specification consists of furnishing all labor, equipment, and materials to apply the second course of the capeseal, an emulsified asphalt slurry seal, in complete accordance with the specification.

1.02 REFERENCES

Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 QUALITY ASSURANCE

A. APPLICABLE SPECIFICATIONS

ASTM – American Society for Testing and Materials
ISSA – International Slurry Surfacing Association

1. AGGREGATE AND MINERAL FILLER

a. ASTM D75: Sampling Stone, Slag Gravel, Sand and Stone Block for use as Highways Materials.
b. ASTM C136: Sieve Analysis of Fine or Coarse Aggregate.
c. ASTM C117: Amount of Material Finer than No. 200 Sieve in Aggregate.
d. ASTM D2419: Plastic Fines in Graded Aggregate and Soils by use of the Sand Equivalent Test.
e. ASTM C128: Specific Gravity and Absorption of Fine Aggregate.
f. ASTM C29: Unit Weight of Aggregate.
g. ASTM C131: Abrasion of Coarse Aggregate by use of the Los Angeles Machine.
h. ASTM C183: Sampling Hydraulic Cement
i. ASTM D546: Sieve Analysis of Mineral Filler
j. ASTM D242: Mineral Filler for Bituminous Paving Mixtures

2. EMULSIFIED ASPHALT

a. ASTM D140: Sampling Bituminous Materials.
b. ASTM D244: Testing Emulsified Asphalt.
c. ASTM D977: Specifications for Anionic Emulsified Asphalt.

d. ASTM D2397: Specifications for Cationic Emulsified Asphalt.
e. ASTM D2172: Bitumen Content of Paving Mixture by Centrifuge.
f. ISSA T100: Measurement of Wear of Slurry Seal Mixtures by Wet Tract Abrasion.

1.04 DELIVERY, STORAGE AND HANDLING

A. SLURRY SEAL APPLICATION

1. STOCKPILING OF AGGREGATES. Precautions shall be taken to ensure that stockpiles do not become contaminated with over-sized rock, clay, silt, or excessive amounts of moisture. The stockpile shall be kept in areas that drain readily. Segregation of the aggregate will not be permitted. Owner will provide yard site for stockpiling aggregates and keeping emulsion storage tanks within one mile of the projects, or closer when possible.

2. STORAGE. The contractor shall provide suitable storage facilities for the asphalt emulsion. The container shall be equipped to prevent water from entering the emulsion. Suitable heat shall be provided if necessary to prevent freezing.

1.05 PROJECT/SITE CONDITIONS

A. TRAFFIC CONTROL

1. Suitable methods such as barricades, flag-men, pilot cars, etc., shall be used to protect the uncured slurry surface from all type of traffic. Contractor shall perform all necessary barricading and/or flagging of traffic. Any damage to the uncured slurry will be the responsibility of the Contractor. The Engineer shall give final approval as to the method used. The Contractor shall co-ordinate the scheduling of street to be surfaced with the City Engineering Department.

1.06 PAYMENTS

A. Seal coat will be paid for at the contract price per square yard, (as described above) which price shall be payment in full for furnishing, heating, hauling and applying the bituminous material, furnishing, hauling and placing the cover material, dragging, rolling, replacing disturbed material, maintaining traffic and constructing the surface complete.

PART 2. PRODUCTS

1.01 MATERIALS

A. BITUMINOUS SURFACE TREATMENT

1. BITUMINOUS MATERIAL - Shall be CM-90
   a. MATERIALS - The materials will meet the following requirements as specified. All chip seal multi grade asphalt will conform to the following table:

CHIP SEAL MULTI GRADE ASPHALT

	CM-90	METHOD OF TEST
Viscosity @ 25°C, 1. Sec.-1, P.	2000-20,000	ASTM D-4957
Flash Point, °C	66+	ASTM D-93
Distillate Test		

Volume % of Total Distillate to 360° C		ASTM D-402
To 225° C	0-2	
To 260° C	0-5	
To 316°	15.75	
Residue from Distillate to 360° C % Volume by Difference		
Water %	1.0-	ASTM D-95
Test on Residue from Distillation		
Penetration @ 25° C, 100g, 5 sec, dmm.	100-250	ASTM D-5
Float Test @ 60° C, sec.	1200+	ASTM D-139
Solubility %	99.0+	ASTM D-2042

The successful Contractor will be responsible to provide above material delivered to the project location on a schedule determined by the Contractor. The contractor shall be responsible for proper heating of asphalt, needed storage facilities and for all truck demurrage charges that are incurred.

b. APPLICATION - The Contractor shall apply the multi grade asphalt at a temperature between 260° F and 300° F, followed by a uniform application of coarse aggregate.

c. MULTI GRADE ASPHALT - Application Rates:

CM-90 shall be within the range of 0.26-0.28 gal/syd. The JMF target rate for the asphalt shall be 0.27 gal/syd.

If the target rate of 0.27 gal/syd is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the Contractor shall notify the Project Engineer, immediately. The Contractor shall then document the new JMF rate(s) by stationing.

2. COARSE AGGREGATE - Coarse aggregates for all chip seals will be tested materials or provided by a prequalified aggregate supplier. All aggregate must meet the gradation requirements in the following table:

a. A CS-2 coarse aggregate of limestone, natural, or slag shall be used.

GRADATION FOR CHIP SEAL AGGREGATES
Sieve Analysis (MTM 109), Total Percent Passing (a)

Sieve Size	**CS-2**
3/4"	100
½"	100
3/8"	90-100
No. 4	0-10
N0. 8	0-5
N0. 200 (loss by wash)	2.0 maximum 2.0 maximum

PHYSICAL REQUIREMENTS

TEST	DESCRIPTION	SPECIFICATION
MTM - 102	L.A. Abrasion Resistance	45% Max.
MTM - 117	Percentage of Crushed Particles	95% Min.
*MTM - 110	Deleterious Particles in Aggregate	3.5% max.

*Includes the sum of shale, siltstone, structurally weak and clay-ironstone particles

B. SLURRY SEAL APPLICATION

The slurry seal surface shall consist of a mixture of emulsified asphalt, mineral aggregate, and water, properly proportioned, mixed and spread evenly over the double chipseal surface as specified herein and as directed by the engineer. The cured slurry shall have a homogeneous appearance, fill all cracks, adhere firmly to the surface and have skid resistant texture.

1. ASPHALT EMULSION. The emulsified asphalt shall conform to the requirement of International Slurry Seal Association Specification, for type CSS-1H.

2. AGGREGATE. The mineral aggregate shall consist of natural or manufactured sand, slag, crusher fines, and others, or a combination thereof. Smooth-textured sand of less than 1.25 percent water absorption shall not exceed 50 percent of the total combined aggregate. The aggregate shall be clean and free from vegetable matter and other deleterious substances. When tested by ASTM D2419, the aggregate blend shall have a sand equivalent of not less than 45. When tested according to ASTM C88 the aggregate shall show a loss of not more that 15%. When tested according to ASTM C131 the aggregate shall show a loss of not more that 30%.

Mineral fillers such as Portland cement, limestone dust, fly ash, and others shall be considered as part of the blended aggregate and shall be used if required by the mix design. They shall meet the gradation requirements of ASTM D242.

The combined mineral aggregate shall conform to the following gradation when tested by the previously mentioned test.

TYPE II	
SIEVE SIZE	PERCENT PASSING
3/8	100
No. 4	90-100
No. 8	65-90
No. 16	45-70
No. 30	30-50
No. 50	18-30
No. 100	10-21
No. 200	5-15

Theoretical Asphalt Content

% Dry Aggregate 7.5-13.5

TYPE II. This aggregate blend is used when it is desired to fill surface voids, correct severe surface conditions, and provide sealing and a minimum wearing surface. An application rate of 18 (plus or minus) 2 pounds per square yard based on dry aggregate weight is used when standard aggregates are utilized.

3. WATER
   a. All water used with the slurry mixture shall be potable and free from harmful soluble salts.

1.02 EQUIPMENT

A. BITUMINOUS SURFACE TREATMENT

All equipment used shall be sufficient size and in such mechanical condition as to produce a satisfactory job.

1. PRESSURE DISTRIBUTORS - The pressure distributor shall have a computerized application rate and speed control. This control shall have a radar ground sensing device that controls the application rate regardless of ground speed or spray bar width. The pressure distributor shall be capable of maintaining the asphalt emulsion at the specified temperature. The spray bar nozzles shall produce a uniform fan spray, and the shutoff shall be instantaneous, with no dripping. Each pressure distributor shall be capable of maintaining the specified application rate within ±0.015 gal/syd for each load.

2. AGGREGATE CHIP SPREADER - The aggregate chip spreader shall be self-propelled and have a computerized spread control capable of spreading the cover material uniformly for widths of 1 to 20 feet and have a screen to remove oversized material.

3. COMPACTION EQUIPMENT - Shall be self-propelled, vibratory, rubber tired, three wheel or tandem rollers. Rollers shall weigh not less than 6 ton or more than 9 ton.

4. MISCELLANEOUS EQUIPMENT - Sufficient equipment for hauling of cover material shall be provided to ensure continuance covering of bituminous material, hand tools, thermometers, etc. Chain link fence drag shall be available for use when required by engineer.

B. SLURRY SEAL APPLICATION

All equipment used in the performance of this work shall be maintained in satisfactorily working order at all times.

1. SLURRY MIXING EQUIPMENT. A minimum of two (2) continuous flow slurry machines, minimum capacity of eight (8) tons shall be provided. They shall be capable of delivering accurately a predetermined proportion of aggregate, water and asphalt emulsion to the mixing chamber and to discharge the thoroughly mixed product on a continuous basis. The aggregate shall be pre-wetted immediately prior to mixing with the emulsion. The mixing unit of the mixing chamber shall be capable of thoroughly blending all ingredients together. No violent mixing shall be permitted. The mixing machine shall be equipped with an approved fines feeder that provides an accurate metering device or method to introduce a predetermined proportion of mineral filler into the mixer at the same time and location that the aggregate is fed. The feeder shall be used whenever added mineral filler is a part of the aggregate blend. The mixing

machine shall be equipped with a water pressure system and fog type spray bar adequate for complete fogging the surface preceding spreading equipment with a maximum application of 0.05 gallons per square yard.

2. CALIBRATION- Each material delivery function (a) fines feed, (b) aggregate feed, and (c) emulsion feed, shall be independently operated and monitored with digital counters capable of giving accumulated readings of the material usage on a daily basis.

   All instruments, gauges and meters shall be accurate within +5% of the operating range required. All instruments and controls shall be centrally mounted in a protected console and shall be readily accessible during operation to the Engineer or his designated representative.

   The bidder will submit calibration sheets for each machine to substantiate meter reading and aggregate openings (gal/count, #/count). Daily counter readings will be supplied to the inspector with yardage applied to verify application rates. If readings do not confirm correct application rates, recalibration on site will be required before additional work is applied.

3. SLURRY SPREADING EQUIPMENT. Attached to the mixer machine shall be a mechanical type squeegee box equipped with flexible material in contact with the surface to prevent loss of slurry from the box. It shall be maintained so as to prevent loss of slurry on varying grades and crown by rotating at center of box. There shall be a steering device and a flexible strike-off. The spreader box shall have an adjustable width from 8 to 12 feet. The box shall be kept clean, and build-up of asphalt and aggregate on the box shall not be permitted. The use of burlap drags or other drags shall be approved by the Engineer.

4. CLEANING EQUIPMENT. Power brooms, power blowers, air compressors, water flushing equipment, and hand brooms shall be suitable for cleaning the surface and cracks of the old surfaces.

5. AUXILIARY EQUIPMENT. Hand squeegees, shovels and other equipment shall be provided as necessary to perform work.

PART 3. EXECUTION

1.03 PREPARATION

A. BITUMINOUS SURFACE TREATMENT

1. Work required on existing surface such as base repair, patching, sweeping shall be done by the contractor.

B. SLURRY SEAL APPLICATION

1. Immediately prior to applying the slurry, the surface shall be cleaned of all loose material, silt pots, vegetation, and other objectionable material, which shall be done by owner. Any standard cleaning method used to clean pavements will be acceptable, except water flushing will not be permitted in areas where considerable cracks are present in the pavement surface. The Engineer shall give final approval of the surface.

1.04 CONSTRUCTION

A. BITUMINOUS SURFACE TREATMENT

1. EXISTING SURFACE
   a. The bituminous material shall be applied at the rate specified immediately followed by the self-propelled chipper covering the bituminous material with aggregate. In no instance shall the chipper by more than 400 ft. behind the distributor. The aggregate should be compacted into the bituminous material by a self-propelled roller directly behind the chipper. At no time shall the aggregate cover material be left unrolled for more than 10 minutes.

2. WEATHER LIMITATIONS
   a. No bituminous material shall be applied during rainy weather or when the air temperature in the shade is less than 50 F. and rising except by the approval of the contracting officer

B. SLURRY SEAL APPLICATION

1. GENERAL
   a. The surface shall be fogged with water directly preceding the spreader. The slurry mixture shall be of the desired consistency when deposited on the surface and no additional elements shall be added. Total time of mixing shall not exceed four (4) minutes. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that complete coverage is obtained. No lumping, balling or unmixed aggregate shall be permitted. No segregation of the emulsion and aggregate fines shall be permitted. If the coarse aggregate settles to the bottom of the mix, the slurry will be removed from the pavement. No excessive breaking of the emulsion will be allowed in the spreader box. No streaks such as caused by oversized aggregate will be left in the finished pavement.

2. COMPOSITION AND RATE OF APPLICATION OF THE SLURRY MIX
   a. The amount of asphalt emulsion to be blended with the aggregate shall be that as determined by the laboratory report after final adjustment in the field. A minimum amount of water shall be added as necessary to obtain a fluid and homogeneous mixture. The Engineer shall give final approval to the design and rate of application used.

3. JOINTS
   a. No excessive build-up or unsightly appearance shall be permitted on longitudinal or transverse joints.

4. HAND WORK
   a. Approved squeegees shall be used to spread slurry in accessible areas to the slurry mixer. Care shall be exercised in leaving no unsightly appearance from hand work.

5. CURING
   a. Treated areas will be allowed to cure until such time as the Engineer permits their opening to traffic.

6. INTERSECTION

a. Care should be taken to achieve a clean straight line as directed by the Engineer by use of 15 pound roofing felt or equal. All roofing felt will be removed at completion of work.

7. WEATHER LIMITATION
   a. The slurry seal surface shall not be applied if either the pavement or air temperature of 55 F or below and falling but may be applied with both the air and pavement temperature is 45 F or above and rising. The mixture should not be applied if high relative humidity prolongs the curing beyond a reasonable time.

1.05 FIELD QUALITY CONTROL

A. BITUMINOUS SURFACE TREATMENT

1. INSPECTION
   a. METHOD OF MEASUREMENT: Field measurements of the areas seal coated in square yards shall be determined by the engineer in the presence of the contractor and or with his concurrence.

B. SLURRY SEAL APPLICATION

1. LABORATORY TESTING
   a. Sources of all materials shall be selected prior to the time the materials are required for use in the work. All samples shall be taken according to procedures previously mentioned. All materials shall be pretested in a qualified laboratory as to their suitability for use in slurry. The theoretical asphalt content shall be determined. The laboratory shall also determine if a mineral filler is required, and if so, how much should be used. Test samples shall be made and tested on a Wet Track Abrasion Machine. A complete laboratory analysis and test report accompanied by an un-abraded slurry test sample shall be submitted by the Contractor before the job starts.

2. INSPECTION
   a. The slurry seal surface shall be measured and paid for by the square yards of work completed and accepted as designated by the Engineer.

3. SAMPLING
   a. Samples of materials and of the finished slurry surfaces shall be furnished by the Contractor as directed by the Engineer during progress of the work. Test reports may be requested from the Contractor as additional materials arrive.

1.06 CLEANING

A. Initial sweeping and cleaning will be performed by the contractor.

B. Sweeping During Contract: The contractor will be required to sweep the chipsealed area prior to the slurry application.

C. Contractor shall ensure that all existing utility structure covers shall remain clean and visible following the installation of the capeseal surface on the streets.

SECTION 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 Class IV Reinforced Concrete Pipe (RCP) in the sizes indicated on the plans, unless otherwise shown on the plans.

B. Contractor shall be responsible for installing gas traps, including sumps, in the first structure method for 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. Where existing storm sewers are shown to be removed on the drawings, the sewer removal shall be considered incidental to the cost of new storm sewer installations included in the project, and

will not paid for separately. Removed sewer pipe shall be hauled offsite immediately upon excavation, or deposited in a water tight dumpster, in accordance with Oakland County Health Department and/or MDEQ regulations. Removed sewers may not be stockpiled within the right-of-way awaiting final removal.

E. The removal of existing bituminous road surface within the required utility trenching limits shall be incidental to the cost of the utility installation. Removed bituminous material required for utility installations shall be hauled off-site and shall not be used as on-site backfill or road base material.

F. Utility trenches shall be backfilled with engineered material per plan requirements for each type of utility, to an elevation of 8" below the existing road surface, and then 8" of compacted 21AA crushed concrete to the existing road surface elevation. All bedding, backfill, and compaction, including the 8" crushed concrete road base, shall be incidental to the cost of utility installations.

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 under the SEWER SERVICE CONNECTION pay item. 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, it will be paid for under SEWER SERVICE TAP pay items.

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 incidental to the cost of the service pipe installation.

1.05 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.

C. Where drop connections are required, they shall be constructed in accordance with applicable requirements of the Oakland County Water Resource Commissioner.

1.06 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. Edge drain shall be installed on all inlets and catch basins as shown on plan sheets. A separate pay item has been provided for this work.

B. Adjusting the rim to the proposed elevation noted on the plans is incidental to the installation of a new structure.

1.07 6" PERFORATED PIPE UNDERDRAIN (NO SOCK)

A. The Contractor shall prepare their base bid unit price for this work based on the assumption that edge drain shall be installed on all inlets and catch basins as shown on plan sheets.

B. The unit price for this work shall include all labor, equipment and materials necessary for the complete installation of the underdrain, open-graded angular aggregate backfill and non-geotextile trench wrap as shown in the details on the plans. Connecting the edge drains to the appropriate structures shall be incidental to the unit price for the installation, when the connection is to a new catch basin or inlet. Taps to existing drainage structures shall be paid for separately as outlined below.

C. The removal of existing bituminous road surface within the required utility trenching limits shall be incidental to the cost of the utility installation. Removed bituminous material required for utility installations shall be hauled off-site and shall not be used as on-site backfill or road base material.

D. Utility trenches shall be backfilled with engineered material per plan requirements for each type of utility, to an elevation of 8" below the existing road surface, and then 8" of compacted 21AA crushed concrete to the existing road surface elevation. All bedding, backfill, and compaction, including the 8" crushed concrete road base, shall be incidental to the cost of utility installations.

1.08 SEWER SERVICE TAP, 6"

A. Since most existing combined sewers within the project limits will be either removed or abandoned, it is anticipated at most existing sewer laterals will require a tap to the new combined sewer main. This work shall be paid for as SEWER SERVICE TAP, 6". Sewer service taps to all new reinforced concrete 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.

1.09 SEWER SERVICE CONNECTION, 6"

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.

1.10 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.

B. Note that removal of existing storm sewer, where indicated on the drawings, is denoted as "incidental". This work shall be included in other pay items included on the project and shall not be paid for separately.

1.13 BULKHEAD STRUCTURE, VARIOUS SIZES

A. The pay item BULKHEAD STRUCTURE, VARIOUS SIZES, included in this contract is intended to provide a water-tight repair at existing drainage structures to remain where an existing sewer pipe will be removed from the structure as identified in the plans.

B. Note that removal of existing storm sewer, where indicated on the drawings, is denoted as "incidental". This work shall be included in other pay items included on the project and shall not be paid for separately.

1.14 CCTV SEWER ACCEPTANCE INSPECTION

A. Contractor shall provide a video inspection record of all sewer mains and service leads installed for the project in accordance with the written specification section 605. The vide inspection shall occur after sewer trenches have been backfilled and compacted to final elevation.

1.15 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.

B. The removal of existing bituminous road surface within the required utility trenching limits shall be incidental to the cost of the utility installation. Removed bituminous material required for utility installations shall be hauled off-site and shall not be used as on-site backfill or road base material.

C. Utility trenches shall be backfilled with engineered material per plan requirements for each type of utility, to an elevation of 8" below the existing road surface, and then 8" of compacted 21AA crushed concrete to the existing road surface elevation. All bedding, backfill, and compaction, including the 8" crushed concrete road base, shall be incidental to the cost of utility installations.

1.16 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.

1.17 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 walkable surface in the sidewalk shall be incidental to the cost of the service pipe installation.

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.

1.18 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.

1.19 WATER SERVICE CONNECTION, VARIOUS SIZES

A. This pay item is to connect the water services to the new 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.

1.20 HYDRA-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. In the case of the 8" and 6" Hydra-Stops, 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 include necessary earth excavation and trench backfills.

1.21 SUBGRADE UNDERCUTTING

A. After pulverization of the existing road surface and re-shaping of the resultant base material, the entire surface shall be proof rolled as a part of the preparation for new capeseal surface. 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 5 MPH. Proof rolling is incidental to the other work of this project and shall not be paid for separately.

B. Upon field evaluation of the proof-rolling operations, smaller areas that require undercutting may be undercut and backfilled using compacted 21AA limestone upon direction from the Engineer. In the event that the Contractor uncovers a large section of unsuitable base material that must be removed as directed by the Engineer, wherein the area involves 80 linear feet or more of roadway, being removed at 75% or more of the road width, and extending consistently at 18 inches below the planned bottom of pavement grade, then the Contractor shall supply 1 x 3 crushed concrete material in the area that extends 8" or more below the planned bottom of pavement grade. Substitution of the 1 x 3 material shall be paid for at the same unit rate as the 21AA limestone.

1.22 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.

1.23 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.

1.24 REMOVING PAVEMENT FULL DEPTH (CURB & GUTTER INCLUDED)

A. This pay item shall apply to the full depth removal of the concrete pavement with integral curb located at the easterly repair limits on Oak Street. The pavement shall be sawcut full-depth, and removed to the nearest joint lines.

B. The Contractor is encouraged to use care when considering methods of pavement destruction and removals.

C. 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.

1.25 AGGREGATE BASE, MDOT 21AA LIMESTONE, 8”

A. This pay item shall include all earth excavation and 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.

1.26 CONCRETE PAVEMENT, NONREINFORCED, 8” , INCL. INTEGRAL 6” CURB

A. This work consists of constructing a jointed Portland cement concrete pavement in accordance with Section 602 of the MDOT 2012 Standard Specifications for Construction.

B. This pay item shall include all concrete pavement with integral curb and gutter, measured by the square yard, where designated on the plan. This pay item will apply to the new concrete pavement on Oak Street where specified on the Drawings. 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.

C. 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.

D. 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.

E. 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.

F. All sawcutting and joint sealing, as detailed in Section 710 of these Specifications, shall be incidental to this pay item.

G. 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.

1.27 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. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete approach, and sawcutting the pavement joints per the plans.

1.28 CONCRETE SIDEWALK, 6" (INCLUDES RAMPS)

A. All concrete sidewalks within drive approaches shall be six (6) inches, as well as all sidewalk ramps at intersections. All six (6) inch sidewalks on the project shall be paid for under this pay item.

B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete sidewalk, and sawcutting the sidewalk joints per the plans.

C. Concrete sidewalk construction shall also be inclusive of necessary earth excavation required to construct the sidewalks to the proposed grade elevations indicated on the plans. Locations with proposed sidewalk and sidewalk ramps at intersections will typically be required to be lower than existing sidewalks to meet applicable ADA guidelines that were used in the grading design. Earth excavation work shall include disposal of surplus and/or unsuitable materials, trimming of the earth grade, and compacting the subgrade material to 95% of the maximum dry density at the correct elevation to accommodate the proposed sidewalk base and concrete cross-section.

1.29 CONCRETE SIDEWALK, 4"

A. This pay item is for replacement of sections of sidewalk removed as a part of this project for excavations, at intersections, or removed to install other work on this project.

B. The unit price for sidewalk installation shall include all materials, labor, equipment and other work necessary for grading, grade preparation, six (6) inches sand base, forming, and pouring the concrete sidewalk, and sawcutting the sidewalk joints per the plans.

C. Concrete sidewalk construction shall also be inclusive of necessary earth excavation required to construct the sidewalks to the proposed grade elevations indicated on the plans. Locations with proposed sidewalk and sidewalk ramps at intersections will typically be required to be lower than existing sidewalks to meet applicable ADA guidelines that were used in the grading design. Earth

excavation work shall include disposal of surplus and/or unsuitable materials, trimming of the earth grade, and compacting the subgrade material to 95% of the maximum dry density at the correct elevation to accommodate the proposed sidewalk base and concrete cross-section.

1.30 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.

1.31 REMOVE & REPLACE CURB & GUTTER

A. This work is to be used where there are deteriorated curbs that need replacement. The extent of the curb replacements will be marked in the field by the Engineer.

B. The price for the removal of the existing curb and gutter shall be included in the unit price for this work item. Any sawcutting necessary for the removals shall be incidental to this work item.

1.32 PULVERIZE AND RESHAPE EXISTING BITUMINOUS PAVEMENT

A. Existing bituminous road surface materials existing in variable thicknesses on Oak Street, Raynale Street, and Westwood Drive. The existing bituminous material shall be shall be pulverized full-depth using methods outlined in Section 305 of the MDOT 2020 Standard Specifications for Construction. The areas to be pulverized will include the utility trenches that will be finished to the top of pavement with 8” 21AA aggregate after utility installations are completed as part of the utility pay items.

B. Once the existing pavements are pulverized, the Contractor shall reshape and compact the pulverized material in preparation for a replacement capeseal surface. The Contractor shall create a crown on the road with cross slopes between 2% and 4% with the pulverized material.

C. The graded and compacted road base shall be proof-rolled to determine if any additional undercutting is required.

D. The unit price for this work includes all costs necessary for the pulverizing, grading, and compaction across the entire road sections between curbs. The unit price also includes for the Contractor to remove and legally dispose of any excess material generated from the pulverization process that cannot be used to create the required road crowned cross-section.

E. The new capeseal surface shall be applied over the final approved road base as a separate pay item.

1.33 CAPESEAL SURFACE

A. This work consists of the installation of a capeseal over a compacted, shaped, and approved road base in accordance with the Section 762 Specification. The capeseal application includes a double-layer chip-seal, followed by one application of a type II asphalt slurry.

1.34 ADJUST STRUCTURE COVER

A. All manhole covers that are within the work area that need adjustment, but do not need any repairs below the top six (6) inches beneath the casting shall be paid for under this pay item. If additional work is required below the top six (6) inches beneath the casting, then all of the work, including the adjustment, shall be paid for under the "RECONSTRUCT MANHOLE (IF & WHERE NEEDED)". The repair shall be measured vertically from the top of the existing cover to the ending point of the repair. Adjustment of all new structures shall be included in the price of the new structure, and shall not be paid for under this pay item.

1.35 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.

1.36 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.

1.37 PAVEMENT MARKINGS

A. All pavement markings must be provided to the size and color as noted, and using the material noted (sprayable thermoplastic or waterbourne). All materials shall comply with MDOT standard specifications. Waterbourne applications shall include two coats.

1.38 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.

1.39 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.

1.40 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.

1.41 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.

1.42 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.

1.43 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.

1.44 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.

1.45 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.

1.46 INLET SEDIMENT PIT

A. Installation of this item shall follow the standard details prepared by the Oakland County Water Resources Commissioner.

B. This item will only be used should weather cause significant delay after the curbs have been installed and the subbase is awaiting the first course of bituminous pavement. Note that this pay item shall be installed, at the direction of the City, if there is significant delay in the project at this point, regardless of the cause. The work will not be paid for if it is evident that the delay is the responsibility of the Contractor, his Subcontractors or suppliers.

1.47 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.

1.48 TRAFFIC MAINTENANCE AND CONTROL

A. The Contract Proposal indicates that this pay item shall 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 maintain the appropriate number of Type III barricades and an R11-4 (ROAD CLOSED TO THROUGH TRAFFIC) at all times. Appropriate advance warning at entrances to the job site shall be defined as maintaining a Type III barricade and W20-3 (ROAD CLOSED AHEAD) at the next end of the affected block. For example, advanced warning signage for this project shall be placed at the Westwood/Redding, Raynale/Lyonhurst, Oak/Chesterfield, Westwood/Pine intersections, and at the Birmingham City limits located on Oak Stret and Raynale Street. 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.

C. The Contractor shall provide all materials, labor and equipment necessary to install, maintain and remove traffic control devices and to maintain access to driveways (including temporary gravel or cold patch.

D. The Contractor shall be responsible for maintaining traffic control that allows 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. 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.

F. 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.

G. Allowable trucking routes are indicated on the drawing cover sheet. Routes identified are intended to consolidate truck traffic to collector streets, and avoid residential, unimproved streets which can be easily damaged by heavy truck loads. Trucking routes for the project much be within City of Birmingham limits.

1.49 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.

1.50 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

SOIL BORING AND PAVEMENT CORE INFORMATION

CONSULTING GROUP

Report on Geotechnical Investigation

Quarton Lake Estates
Phase II
Water and Sewer Improvements
Birmingham, Michigan

Latitude 42.557293˚ N
Longitude 83.236493˚ W

Prepared for:

Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

G2 Project No. 200943
February 17, 2021

g2consultinggroup.com

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CONSULTING GROUP

February 17, 2021

Mr. Brett J. Buchholz, P.E.
Principal
Nowak & Fraus Engineers, Inc.
47777 Woodward Avenue
Pontiac, Michigan 48342

Re: Report on Geotechnical Investigation
Quarton Lake Estates Phase II - Water and Sewer Improvements
Birmingham, Michigan
G2 Project Number 200943

Dear Mr. Buchholz:

We have completed the geotechnical investigation for the proposed water main, sewer, and paving improvement project within the Quarton Lake Estates subdivision within the City of Birmingham, Oakland County, Michigan. This report presents the results of our observations and analyses and our recommendations for pavement section design, underground utility replacement, and construction as they relate to the geotechnical conditions on site.

We appreciate the opportunity to be of service to the Nowak & Fraus Engineers, Inc., 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 Engineer

Noel J. Hargrave-Thomas, P.E.
Principal

James Berry, P.E.
Project Manager

JMH/NJHT/JLB/ljv

Enclosures

EXECUTIVE SUMMARY

The project consists of underground and paving improvements within the Quarton Lake Estates subdivision located in the City of Birmingham, Michigan. Underground improvements include local sewer reconstruction, new water main construction, and service lead reconstruction. New sewer and structure depths are estimated at 10 feet below existing pavement grade. The new water main is assumed to be constructed with a minimum of 6 feet of cover. It is our understanding the new water main will be constructed using horizonal directional drilling (HDD) methods and limited conventional open cut for connections and sewer construction. Current plans call for cape seal surface treatments over most of the routes within the project area; however, the pavements along Raynale Street and Oak Street will be reconstructed using either a Portland cement concrete pavement section or a bituminous concrete section.

The existing pavements appear to consist of bituminous concrete in some areas, cape seal surface treatment in some areas, and a combination of bituminous concrete and cape seal treatment in the remaining areas. Areas of cape seal treatment are nominally 1 inch thick, bituminous concrete pavements are nominally 4 inches to 6 inches thick, and combined sections are nominally 3 inches to 4 inches thick. A base of granular material was noted at all of the boring locations. The aggregate bases consist of crushed bituminous concrete sandy gravel with trace silt and measures 3-1/2 to 10-1/4 inches in thickness.

Loose clayey sand fill with trace organic matter, is present below the pavement section within boring B-10 and extends to an approximate depth of 3 feet. Native granular soils, generally consisting of loose to compact silty sand, clayey sand, sandy silt, silt, and gravelly sand, underlies the clayey sand fill within boring B-10 and pavement section within borings B-01 through B-03, and B-05 through B-09 and extends to the explored depth of 15 feet within borings B-05, B-07 through B-10 and depths ranging from 3 to 12 feet below existing grades within the remaining aforementioned borings. However, very loose silty sand is present within boring B-08 between 3 and 8-1/2 feet. Very stiff to hard silty clay and clayey silt are present between the pavement section of soil borings B-04 and B-11 extending to depths of 13 and 12 feet, respectively. During drilling operations, groundwater was encountered at depths ranging 3 to 11 feet within borings B-01, B-04 through B-11. Upon completion of drilling operations, groundwater was measured at depths ranging from 8-1/2 feet to 13 feet within borings B-01, B-04, B-06, B-07, and B-11. No significant groundwater seepage was observed within borings B-02 and B-03 during or upon completion of drilling operations.

Given the existing groundwater conditions and utility invert depths, it will be necessary to temporarily lower the groundwater table prior to open cut excavation in order to construct the water main under dry conditions. We recommend temporary groundwater control consist of pumping from properly constructed sumps where the groundwater level may need to be lowered only 1 to 2 feet and a well point dewatering system where the groundwater will need to be lowered more than 2 feet.

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 2H:1V (horizontal: vertical) within the existing very loose to loose granular soils, 1-1/2H:1V within the medium compact to compact granular soils and medium to stiff cohesive soils and at a minimum of 1H:1V within the very stiff to hard cohesive soils.

Based on the results of our analyses, we recommend a minimum bituminous concrete pavement section for the pavement reconstruction consisting of 2 inches of MDOT 5E1 bituminous concrete wearing course supported by 2 inches of MDOT 4E1 bituminous concrete leveling course supported by 8 inches of MDOT 21AA dense graded material aggregate base. We recommend the proposed Portland cement concrete pavement section consist of 7 inches of non-reinforced MDOT P1M concrete atop 8 inches of MDOT 21AA dense graded aggregate base course.

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 underground and paving improvements within the Quarton Lake Estates subdivision located in the City of Birmingham, Michigan. It is understood that the project limits include the following roadways:

Westwood Drive: Oak Street to Redding Road
N. Glenhurst Drive: Raynale Street to Redding Road
Lyonhurst Street: Raynale Street to Redding Road
Brookwood Street: Raynale Street to Redding Road
Oak Street: N. Glenhurst Drive to City Limits
Raynale Street: N. Glenhurst Drive to City Limits

Underground improvements include local sewer reconstruction, new water main construction, and service lead reconstruction. New sewer and structure depths are estimated at 10 feet below existing pavement grade. The new water main is assumed to be constructed with a minimum of 6 feet of cover. It is our understanding the new water main will be constructed using horizonal directional drilling (HDD) methods and limited conventional open cut for connections and sewer construction.

Current plans call for cape seal surface treatments over most of the routes within the project area; however, the pavements along Raynale Street and Oak Street will be reconstructed using either a Portland cement concrete pavement section or bituminous concrete pavement section.

SCOPE OF SERVICES

The field operations, laboratory testing, and engineering report preparation were performed under direction and supervision of a licensed professional engineer. Our services were performed according to generally accepted standards and procedures in the practice of geotechnical engineering in this area. Our scope of services for this project is as follows:

1. We performed a total of eleven (11) pavement core/soil borings within the proposed project extending to a depth of 15 feet each. Pavement core/soil borings B-01 and B-02 were performed along Brookwood Street. Pavement core/soil boring B-03 was drilled through the pavements of Lyonhurst Street. Pavement core/soil borings B-04 and B-05 were performed along N. Glenhurst Drive. Pavement core/soil borings B-06, B-08, and B-09 were drilled through the pavements of Westwood Drive. Pavement core/soil boring B-07 was performed along Raynale Street. Pavement core/soil borings B-10 and B-11 were drilled through the pavements of Oak Street. We measured the existing pavement section materials (bituminous concrete and aggregate base) and identified the type and condition of subgrade soils.

2. We performed laboratory testing on samples obtained from the soil borings. Laboratory testing included visual engineering classification, grain size distribution, moisture content, organic matter content (loss-on-ignition), dry density, and unconfined compressive strength determinations.

3. We prepared this engineering report. Our report includes recommendations for pavement rehabilitation/reconstruction, and underground utility replacement construction.

FIELD OPERATIONS

G2 Consulting Group, LLC, selected the number, depth, and location of the soil borings. The soil borings were located in the field by a G2 representative by measuring from existing site features and landmarks using conventional taping methods. The approximate soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available at the time of the field investigation.

We used a gas powered core rig equipped with a 6-inch diameter diamond-tipped core barrel to core the pavement locations. Pavement cores were drilled through the full depth of the existing pavement structure to obtain an accurate determination of the pavement thickness.

The soil borings were drilled using a truck-mounted rotary drilling rig. Continuous flight, 2-1/4-inch inside diameter, hollow-stem augers were used to advance the boreholes. The soil samples were obtained at intervals of 2-1/2 feet within the upper 10 feet and at 15 feet by the Standard Penetration Test (SPT) method ASTM D1586, which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N). The blow counts for each 6-inch increment and the resulting N-value are presented on the soil boring logs.

The soil samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. During the drilling operations, the drilling crew maintained logs of the encountered subsurface conditions, including changes in stratigraphy and observed groundwater levels of the soil borings to be used in conjunction with our analyses of the subsurface conditions. The final boring logs are based on the field logs and laboratory soil classification and testing. After completion of the drilling operations, the boreholes were backfilled with excavated soil and capped with cold patch.

LABORATORY TESTING

Representative soil samples were subjected to laboratory testing to determine soil parameters pertinent to pavement design and underground utility construction. An experienced geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System.

Laboratory testing included natural grain size distribution, moisture content, dry density, organic matter content (loss-on-ignition), and unconfined compressive strength determinations. Grain size distribution was determined in general conformance with ASTM C 136 method of testing. 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. 12 within the Appendix. The grain size analyses are presented in the Appendix as Grain Size Distribution, Figure Nos. 13 and 14. 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.

EXISTING PAVEMENT CONDITIONS

The existing pavements over the project area are generally in fair condition. Surface distress consists of random cracking, crack spalling, localized areas of fatigue cracking, and areas of patched pavement. The pavements are crowned, allowing surface runoff water to drain along concrete curbs present along the pavement edge. Surface runoff water is further sloped to drain into catch basins built into the curb line. Some sections of the existing curbs appear to have cracked or settled. Due to the cover of the existing catch basins, G2 was not able to visibly observe the existing condition of catch basins.

The existing pavements appear to consist of bituminous concrete in some areas, cape seal surface treatment in some areas, and a combination of bituminous concrete and cape seal treatment in the remaining areas. Areas of cape seal treatment are nominally 1 inch thick, bituminous concrete pavements are nominally 4 inches to 6 inches thick, and combined sections are nominally 3 inches to 4 inches thick. A base of granular material was noted at all of the boring locations. The aggregate bases consist of crushed bituminous concrete sandy gravel with trace silt and measures 3-1/2 to 10-1/4 inches in thickness. A grain size analysis was performed on a sample of the aggregate base obtained from boring B-05. Test results indicate the base is generally well graded but does not meet the gradation requirements of MDOT 22A dense graded aggregate base due to an insufficient amount of material finer than the No. 4 sieve (sand).

EXISTING SUBSURFACE CONDITIONS

Clayey sand fill with trace organic matter, is present below the pavement section within boring B-10 and extends to an approximate depth of 3 feet. Native granular soils, consisting of silty sand, clayey sand, sandy silt, silt, and gravelly sand, underlies the clayey sand fill within boring B-10 and pavement section within borings B-01 through B-03, B-05 through B-09 and extends to the explored depth of 15 feet within borings B-05, B-07 through B-10 and depths ranging from 3 to 12 feet below existing grades within the remaining aforementioned borings. Native cohesive soils, consisting of silty clay and clayey silt, are present below pavement section and/or native granular soils within borings B-01 through B-04, B-06, B-11 and generally extend to the explored depth of 15 feet. However, native granular soils underlie the native cohesive soils within boring B-04 and B-11 at depths of 13 and 12 feet, respectively, and extend to the explored depth of 15 feet. In addition, a stratum of native silty clay is present within the native granular soils between 3 and 6 feet within boring B-07.

The clayey sand fill within boring B-10 is loose in compactness with a Standard Penetration Test (SPT) N-value of 6 blows per foot (bpf) and an organic matter content of 2.3 percent. The native granular soils are generally loose to compact with SPT N-values ranging from 5 to 37 bpf. However, the native silty sand within boring B-08 between 3 and 8-1/2 feet is very loose in compactness with a SPT N-value of 4 bpf. The native cohesive soils are generally stiff to hard in consistency with natural moisture contents ranging from 9 to 20 percent, a dry density of 114 pounds per cubic foot (pcf), and unconfined compressive strengths ranging from 3,680 to 9,000 pounds per square foot (psf). However, the native silty clay within boring B-01 below an approximate depth of 5 feet is medium to stiff in consistency with natural moisture contents ranging from 17 to 18 percent, a dry density of 114 pcf, and unconfined compressive strengths ranging from 1,310 to 3,000 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 11, Unconfined Compressive Strength Test, Figure No. 12, Grain Size Distribution, Figure Nos. 13 and 14, and Photographic Documentation, Figure Nos. 15 through 26, are presented in the Appendix. The soil profiles described above are generalized descriptions of the conditions encountered at the boring location. General Notes Terminology defining the nomenclature used on the soil boring logs and elsewhere in this report are presented on Figure No. 27.

GROUNDWATER CONDITIONS

Groundwater observations were performed during and upon completion of drilling operations. During drilling operations, groundwater was encountered at depths ranging 3 to 11 feet within borings B-01, B-04 through B-11. Upon completion of drilling operations, groundwater was measured at depths ranging from 8-1/2 feet to 13 feet within borings B-01, B-04, B-06, B-07, and B-11. A wet cave of the borehole was observed upon completion of drilling operations within borings B-05 and B-08 through B-10 at depths ranging from 8-1/2 to 12 feet. No significant groundwater seepage was observed within borings B-02 and B-03 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.

WATER MAIN AND SEWER CONSTRUCTION RECOMMENDATIONS

General

It is our understanding the project includes local sewer improvements, new water main construction, and storm lead reconstruction. New sewer and structure depths are estimated at 10 feet below existing pavement grade. The new water main is assumed to be constructed with a minimum of 6 feet of cover. It is our understanding the new underground utilities will be constructed using horizonal directional drilling (HDD) and open cut installation methods. Once the proposed pipeline profile becomes available and the pipeline installation methods for each segment of the pipeline alignment have been established, G2 should be notified so that we can review our recommendations presented herein.

Groundwater Control

Groundwater was encountered during drilling operations within borings B-01 and B-04 through B-11 at depths ranging from 3 to 11 feet. The proposed underground utility inverts ranging from 6 to 10 feet below existing grades. Therefore, it will be necessary to temporarily lower the groundwater table prior to open cut excavation in order to construct the water main and sewer under dry conditions. Due to the proposed depth of excavation, we recommend temporary groundwater control consist of pumping from properly constructed sumps where the groundwater level may need to be lowered only 1 to 2 feet. We anticipate most of the utility installation could be dewatered this way. However, depending on sewer depths, dewatering with well points may be required, especially with soil borings B-05, B-07, and B-09.

We recommend that well points be installed to lower the groundwater level prior to beginning excavation operations where necessary. The groundwater level should be lowered to at least two (2) feet below the expected depth of excavation. The well points should be installed by a qualified dewatering contractor. The quantity of the wells will depend on the depth of the wells, the size of the pump that will be used, and the effective hydraulic conductivity of the soils being dewatered. The dewatering contractor should perform his own pump tests to determine the actual hydraulic conductivity of the soil.

Horizontal Directional Drilled (HDD) Installation

We understand horizontal directional drilling (HDD) methods will be used for most of the installation of the new water main within the existing subdivision. We anticipate the soil conditions at the water main invert elevation will consist of very loose to medium compact granular soils and stiff to hard cohesive soils. Groundwater was observed within most of the borings at depths ranging from 3 to 11 feet during drilling operations. These soils are suitable for horizontal directional drilling pipe installation methods. An experienced contractor with the resources to provide appropriate designs for the directional drilling and recovery pits, as well as provide the proper equipment to penetrate the anticipated soils, maintain alignment, and control groundwater conditions, should perform the directional drilling.

Excavations

Temporary unsurcharged trench excavations for the proposed open-cut water main installation operations must be sloped back at a minimum of 2H:1V (horizontal: vertical) within the existing very loose to loose granular soils, 1-1/2H:1V within the medium compact to compact granular soils and medium to stiff cohesive soils and at a minimum of 1H:1V within the very stiff to hard cohesive soils. Where seepage from excavation cuts is observed, the slopes must be flattened sufficiently to achieve stability, but in no case left steeper that 3H:1V at and below the seepage level. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the embankments to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in slope faces should be inspected by qualified personnel so modifications of the slopes can be made if variations in the soil or water conditions occur. If sufficient space for open cut consideration is not available trench box shoring may be used.

Trench box shoring may be used provided some lateral deflection of adjacent soils can be tolerated. If a trench box is used, excavations should be performed from within the trench box, such that no unsupported vertical cut is allowed to exist. A trench box is not recommended where adjacent utilities, roadways, or structures are located less than a lateral distance delineated by a plane extending upward from the bottom edges of the excavation at a 1H:1V slope.

All excavations should be safely sheeted, shored, sloped, or brace in accordance with MI-OSHA requirements. If material is stored or equipment is operated near the excavation, stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should always be exercised when excavating near existing buildings, roadways, or utilities to avoid undermining. In no case should excavations extend below the level of adjacent structures or utilities unless underpinning is planned.

Pipeline Support

Based on the observed subsurface conditions and the anticipated invert elevations, we expect the proposed utility will generally be supported on very loose to compact granular soils and medium to hard cohesive soils. In general, these soils are adequate for support of the utilities; however, where very loose to 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 on stabilization crushed aggregate. 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 utility pipe and the remainder of the utility trench. The engineered fill or bedding 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. Therefore, the existing granular fill soils with trace organic matter and native sandy clay should not be reused as engineered fill. However, the native sandy gravel and sand fill can be reused as engineered fill.

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 Michigan Department of Transportation "Density Testing and Inspection Manual" dated April 8, 2010. Granular engineered fill material should be placed and compacted at moisture contents within 2 percent above or below the optimum moisture content.

PAVEMENT RECOMMENDATIONS

General

It is our understanding the City wishes to reconstruct the existing pavements along Raynale Street and Oak Street with a new rigid (jointed plain concrete pavement) or flexible (bituminous concrete over aggregate base) pavement section. The remaining routes will be paved with a cape seal surface treatment. For the areas to be reconstructed, we recommend completely removing the existing pavement and granular base materials, fine grading the exposed subgrade, evaluating the exposed subgrade for stability, performing any necessary undercuts, then constructing the new pavement section.

Pavement Subgrade Preparation

The existing pavements and curbs should be removed along the roadway alignments. We anticipate subgrade cuts will be necessary to accommodate the addition of the recommended dense graded aggregate base materials.

The exposed subgrade should be graded to promote effective drainage and then compacted. Once a rough grade has been achieved, the exposed subgrade should be evaluated for stability. We recommend subgrade soils be proof rolled using a fully loaded tri-axle dump truck. We recommend granular subgrade soils be proof compacted with a large smooth drum roller. We recommend the vibratory setting on the smooth drum roller be turned off when within 25 feet of the existing building. We recommend the smooth drum roller make a minimum of 10 passes across the granular subgrade. Any unstable or unsuitable areas noted should be improved by additional compaction or removed and replaced with engineered fill.

Subgrade undercuts, if required, should be evaluated by a qualified engineering technician to determine if subgrade stabilization is necessary. We recommend that undercut excavations, where required, be backfilled with MDOT 21AA placed in an engineered manner. A drain tile should be placed at the deepest portion of catch undercut and connected to the closest catch basin to prevent trapped water from collecting in the granular cut soils. Lift thicknesses should not exceed 9 inches. All engineered fill should be compacted to a density of at least 95 percent of the maximum density determined by the Modified Proctor (ASTM D 1557) method of testing. 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". Based on existing subgrade soils, we have provided design pavement sections based on an effective modulus of subgrade reaction, k, of 50 pounds per cubic inch (pci) and an effective subgrade resilient modulus of 6,000 pounds per square inch (psi).

No information regarding the type or amount of traffic along the existing roadways were available upon completion of this report. In addition, the City of Birmingham does not have a minimum design

pavement section for local side streets. However, we assume traffic along the roadways is primarily cars with the occasional garbage and delivery truck. For evaluation purposes, we have designed the pavement section on an estimated of 100,000 18-kip equivalent single-axle loads (ESALs) over a 20-year design life. If any actual traffic volume information becomes available, G2 Consulting Group should be notified so we can reevaluate our recommendations.

For the proposed new pavement section, we estimated a serviceability loss of 2.0, a standard deviation of 0.49 for flexible pavements and 0.39 for rigid pavements, a reliability factor of 0.95. load transfer coefficient of 3.2, a drainage coefficient of 1.0, a Portland cement concrete modulus of rupture of 670 psi, and an elastic modulus of the Portland cement concrete slab of 4,200,000 psi.

Based on the results of our analyses, we recommend a minimum bituminous concrete pavement section for the pavement reconstruction consisting of 2 inches of MDOT 5E1 bituminous concrete wearing course supported by 2 inches of MDOT 4E1 bituminous concrete leveling course supported by 8 inches of MDOT 21AA dense graded material aggregate base. We recommend the proposed Portland cement concrete pavement section consist of 7 inches of non-reinforced MDOT P1M concrete atop 8 inches of MDOT 21AA dense graded aggregate base course.

All pavement materials are specified within the 2012 Standard Specifications for Construction from the Michigan Department of Transportation. The concrete pavement materials are described in Section 601. The aggregate materials for the subbase and concrete are described in Section 902. The bituminous pavement materials are described in Section 501 and can be assigned a structural coefficient number of 0.42. Any imported MDOT 21AA material can be assigned a structural coefficient number of 0.14.

Pavement Drainage

The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding. We also recommend pavement subbase materials consist of non-frost-susceptible aggregates where possible.

Proper pavement drainage is essential given the shallow cohesive soil conditions. We recommend edge drains be provided continuously along curbs/gutter line since they can become a source of water infiltration into the pavement subgrade. Such drains should extend to minimum depths of 4 inches below the bottom of the proposed aggregate base course or granular fill placed within undercut areas. These drains could be connected to nearby catch basins.

Pavement Maintenance

The new cape seal (chip seal followed by slurry seal) application may be applied directly over the existing pavements provided that the pavement surface is properly cleaned of any loose materials or oils, areas of poor base or subgrade are identified and treated, and any significant cracks are cleaned and filled. Areas requiring subgrade treatment can be best identified by fatigue cracked pavement. This condition develops when the pavement section is too thin, vehicle loads are too heavy, or the base and subgrade provide inadequate support. It is recommended that these areas be identified prior to cape seal construction for treatment ahead of the paving operation. The existing pavement and base materials should be removed to a depth of at least 12 inches and replaced with compacted MDOT 21AA aggregate base course. Areas of obviously weak or wet subgrade may require additional removal and replacement. This may be determined at the time of construction based upon observation and proof roll testing.

We recommend that the joints within newly constructed pavements be sealed with hot rubber to prevent moisture intrusion into the subgrade soils below, as well as prevent spalling of the joint due to material entering the joint.

Regular timely maintenance should be performed on the pavement to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils. In addition, regular joint maintenance should be performed.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to underground utility construction, site preparation, and pavement rehabilitation/reconstruction on the basis of data provided to us relating to the general location for the proposed pavement improvements. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions.

The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the new underground utilities, pavements, and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

We have based the analyses and recommendations submitted in this report upon the data from soil borings performed at the approximate locations shown on the Soil Boring Location Plan, Plate No. 1. This report does not reflect variations that may occur between the actual boring locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

Soil conditions at the site could vary from those generalized on the basis of soil borings made at specific locations. It is, therefore, recommended that G2 Consulting Group, LLC be retained to provide soil engineering services during the site preparation and pavement construction phases of the proposed project. This is to observe compliance with the design concepts, specifications, and recommendations. Also, this allows design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction.

APPENDIX

Soil Boring Location Plan	Plate No. 1
Soil Boring Logs	Figure Nos. 1 through 11
Unconfined Compressive Strength Test	Figure No. 12
Grain Size Distribution	Figure Nos. 13 and 14
Photographic Documentation	Figure No. 15 through 26
General Notes Terminology	Figure No. 27

Legend

Pavement Core/Soil Borings performed by Strata Drilling on December 8 and 11, 2020

Soil Boring Location Plan		
Quarton Lake Estates Phase II Water and Sewer Improvements Birmingham, Michigan		
2G CONSULTING GROUP	Project No. 200943	
	Drawn by: JMH	
	Date: 1/19/21	Plate No. 1
	Scale: NTS	

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-01**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Bituminous Concrete (4-1/2 inches) 0.4	
		Crushed Bituminous Concrete 0.8	
		Aggregate Base: Dark Brown Sandy Gravel with trace silt (5-1/2 inches)	
		Medium Compact Brown Silty Sand with trace clay and gravel 3.5	
5		Hard Gray Silty Clay with trace sand and gravel 5.0	5
10		Medium to Stiff Gray Silty Clay with trace sand and gravel, occasional sand seams 15.0	10
15			15
20		End of Boring @ 15 ft	20

SOIL SAMPLE DATA

SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
AS-1					
S-1	5 6 7	13			
S-2	6 6 7	13	12.8		9000*
S-3	6 7 8	15	17.7		3000*
S-4	7 7 9	16	17.9	114	1310
S-5	6 7 7	14	17.2		3000*

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
9 feet during drilling operations; 8-1/2 feet upon completion

Notes:
Brookwood Street
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 1

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-02**

CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Bituminous Concrete (6 inches) 0.5	
		Crushed Bituminous Concrete 0.9	
		Aggregate Base: Dark Brown Sandy Gravel with trace silt (5 inches)	
		Loose Brown Silty Sand with trace clay and gravel 4.0	
5		Very Stiff Mottled Brown Silty Clay with trace sand and gravel 6.0	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)
AS-1					
S-1	3 4 4	8			
S-2	3 4 6	10	18.1		6000*
S-3	3 6 6	12	19.2		8000*
S-4	5 5 6	11	16.8	114	3680
S-5	6 6 7	13	16.3		5000*

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
Brookwood Street
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 2

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-03**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PROFILE	
		Bituminous Concrete (2-1/4 inches) 0.2
		Crushed Bituminous Concrete Aggregate Base: 0.8
		Dark Brown Sandy Gravel with trace silt (7-3/4 inches)
		Medium Compact Brown Silty Sand with trace clay and gravel 3.0
5		Very Stiff to Hard Gray Silty Clay with trace sand and gravel
10		10.0
15		Hard Gray Clayey Silt with trace sand and gravel 15.0
20		End of Boring @ 15 ft

SOIL SAMPLE DATA

DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
	AS-1					
	S-1	3 5 6	11			
5	S-2	5 6 6	12	15.5		9000*
	S-3	7 7 8	15	16.9		7000*
10	S-4	5 6 7	13	19.9		5000*
15	S-5	4 6 7	13	16.0		8000*
20						

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
Dry during and upon completion of drilling operations

Notes:
Lyonhurst Street
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 3

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-04**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE	
		Bituminous Concrete (3-3/4 inches) 0.3
		Crushed Bituminous Concrete 0.8
		Aggregate Base: Dark Brown Sandy Gravel with trace silt (5-1/4 inches)
		Very Stiff to Hard Brown and Gray Silty Clay with trace sand and gravel, occasional silt seams (roots in S-1) (S-1 Organic Matter Content = 1.9%)
5		
		7.5
		Hard Gray Silty Clay with trace sand and gravel
10		
		13.0
		Medium Compact Gray Gravelly Sand with trace silt and clay
15		15.0
		End of Boring @ 15 ft
20		

SOIL SAMPLE DATA

DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
	AS-1					
	S-1	4 3 4	7	14.0		4000*
5	S-2	6 8 9	17	18.7		9000*
	S-3	7 9 9	18	12.0		9000*
10	S-4	5 9 11	20	16.2		9000*
15	S-5	6 7 8	15			

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
6 feet during drilling operations; 13 feet upon completion

Notes:
N. Glenhurst Drive
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 4

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-05**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Bituminous Concrete (3-1/4 inches) 0.3	
		Crushed Bituminous Concrete Aggregate Base: 0.9	
		Dark Brown Sandy Gravel with trace silt (7-3/4 inches)	
		Loose Brown Silty Sand with trace clay and gravel 2.5	
5		Loose Brown Clayey Sand with trace silt and gravel	5
		6.0	
		Loose Brown Silty Sand with trace gravel	
		8.5	
10			10
		Medium Compact Gray Sandy Silt with trace clay and gravel	
		13.0	
15		Medium Compact Gray Gravelly Sand with trace silt 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)
AS-1					
S-1	4 4 3	7			
S-2	4 3 3	6			
S-3	2 2 3	5			
S-4	6 12 15	27			
S-5	8 8 10	18			

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
6 feet during drilling operations; wet cave measured at 12 feet upon removal of augers

Notes:
N. Glenhurst Drive
Borehole collapsed at 12 ft after auger removal

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 5

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. B-06

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE	Description	Elevation
		Bituminous Concrete (1-1/2 inches)	0.1
		Crushed Bituminous Concrete Aggregate Base: Dark Brown Sandy Gravel with trace silt (4 inches)	0.5
		Loose Brown Clayey Sand with trace silt and gravel	2.5
5		Loose Brown Silty Sand with trace gravel	6.0
		Medium Compact Brown Silt with trace sand and gravel	8.0
10		Compact Brown Gravelly Sand with trace silt	12.0
15		Hard Gray Silty Clay with trace sand and gravel	15.0
20		End of Boring @ 15 ft	

SOIL SAMPLE DATA

DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
	S-1	3 3 3	6			
5	S-2	3 3 4	7			
	S-3	3 8 8	16			
10	S-4	7 15 19	34			
15	S-5	5 6 6	12	16.4		9000*
20						

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
11 feet during and upon completion of drilling operations

Notes:
Westwood Drive
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

5J

Figure No. 6

SOIL / PAVEMENT BORING 200943.GPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-07**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PROFILE		DEPTH (ft)
		Bituminous Concrete (1 inch) — 0.1	
		Crushed Bituminous Concrete Aggregate Base: — 0.9	
		Dark Brown Sandy Gravel with trace silt (10 inches)	
		Loose Brown Silt with trace clay and sand — 3.0	
5		Hard Brown Silty Clay with trace sand and gravel, occasional sand seams — 6.0	5
10		Loose to Medium Compact Brown Sandy Silt with trace clay, and gravel — 11.0	10
15		Medium Compact Gray Silt with trace clay, sand, and gravel — 15.0	15
20		End of Boring @ 15 ft	20

SOIL SAMPLE DATA

SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
AS-1					
S-1	3 4 4	8			
S-2	4 5 5	10	12.0		9000*
S-3	5 7 8	15			
S-4	1 5 5	10			
S-5	5 6 6	12			

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
6 feet during drilling operations; 11 feet upon completion

Notes:
Raynale Street
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 7

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-08**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE	
		Bituminous Concrete (1 inch) 0.1
		Crushed Bituminous Concrete 0.5
		Aggregate Base: Dark Brown Sandy Gravel with trace silt (5 inches)
5		Loose to Medium Compact Brown Silty Sand with trace gravel
		8.5
10		
		Loose to Medium Compact Gray Sandy Silt, occasional sand seams
15		15.0
		End of Boring @ 15 ft
20		

SOIL SAMPLE DATA

DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
	S-1	4 5 6	11			
5	S-2	2 2 2	4			
	S-3	1 2 2	4			
10	S-4	5 5 5	10			
15	S-5	4 8 10	18			
20						

Total Depth: 15 ft
Drilling Date: December 11, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
8-1/2 feet during drilling operations; wet cave measured at 12 feet upon removal of augers

Notes:
Westwood Drive
Borehole collapsed at 12 ft after auger removal

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 8

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-09**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Bituminous Concrete (3/4 inches) 0.1	
		Crushed Bituminous Concrete Aggregate Base: 0.9	
		Dark Brown Sandy Gravel with trace silt (10-1/4 inches)	
		Loose Brown Silty Sand with trace clay and gravel 2.5	
5		Medium Compact Brown Sandy Silt with trace gravel	5
		6.0	
		Loose Brown Silty Sand with trace gravel	
		8.0	
10			10
		Loose to Medium Compact Gray Silty Sand with trace gravel	
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)
AS-1					
S-1	5 5 4	9			
S-2	7 7 7	14			
S-3	3 4 5	9			
S-4	4 5 5	10			
S-5	4 5 7	12			

Total Depth: 15 ft
Drilling Date: December 8, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
3 feet during drilling operations; wet cave measured at 10 feet upon removal of augers

Notes:
Westwood Drive
Borehole collapsed at 10 ft after auger removal

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 9

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-10**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

DEPTH (ft)	PRO-FILE		DEPTH (ft)
		Bituminous Concrete (4-1/2 inches) 0.4	
		Crushed Bituminous Concrete 0.8	
		Aggregate Base: Dark Brown Sandy Gravel with trace silt (5-1/2 inches)	
		Fill: Loose Dark Brown Clayey Sand with trace silt, gravel, and organic matter (Organic Matter Content = 2.3%) 3.0	
5			5
10		Medium Compact Brown Silty Sand with trace gravel	10
15		15.0	15
20		End of Boring @ 15 ft	20

SOIL SAMPLE DATA

SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
AS-1					
S-1	2 3 3	6			
S-2	4 8 11	19			
S-3	4 5 6	11			
S-4	4 6 7	13			
S-5	4 7 7	14			

Total Depth: 15 ft
Drilling Date: December 8, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

Water Level Observation:
6-1/2 feet during drilling operations; wet cave measured at 8-1/2 feet upon removal of augers

Notes:
Oak Street
Borehole collapsed at 8-1/2 ft after auger removal

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 10

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No. 200943

Latitude: N/A Longitude: N/A

Soil Boring No. **B-11**

G2 CONSULTING GROUP

SUBSURFACE PROFILE

GROUND SURFACE ELEVATION: N/A

Description	Depth (ft)
Bituminous Concrete (6-1/2 inches)	0.5
Crushed Bituminous Concrete Aggregate Base: Dark Brown Sandy Gravel with trace silt (3-1/2 inches)	0.8
Very Stiff Mottled Brown and Gray Silty Clay with trace sand and gravel	2.5
Hard Mottled Brown and Gray Clayey Silt with trace sand and gravel	6.5
Very Stiff to Hard Gray Clayey Silt with trace sand and gravel	12.0
Compact Gray Silty Sand with trace gravel	15.0
End of Boring @ 15 ft	

SOIL SAMPLE DATA

SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
AS-1					
S-1	5 5 5	10	11.7		7000*
S-2	7 7 7	14	10.7		8000*
S-3	5 7 8	15	10.6		5000*
S-4	6 6 9	15	9.1		9000*
S-5	11 17 20	37			

Total Depth: 15 ft
Drilling Date: December 8, 2020
Inspector:
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Drilling Method:
2-1/4 inch inside diameter hollow stem auger

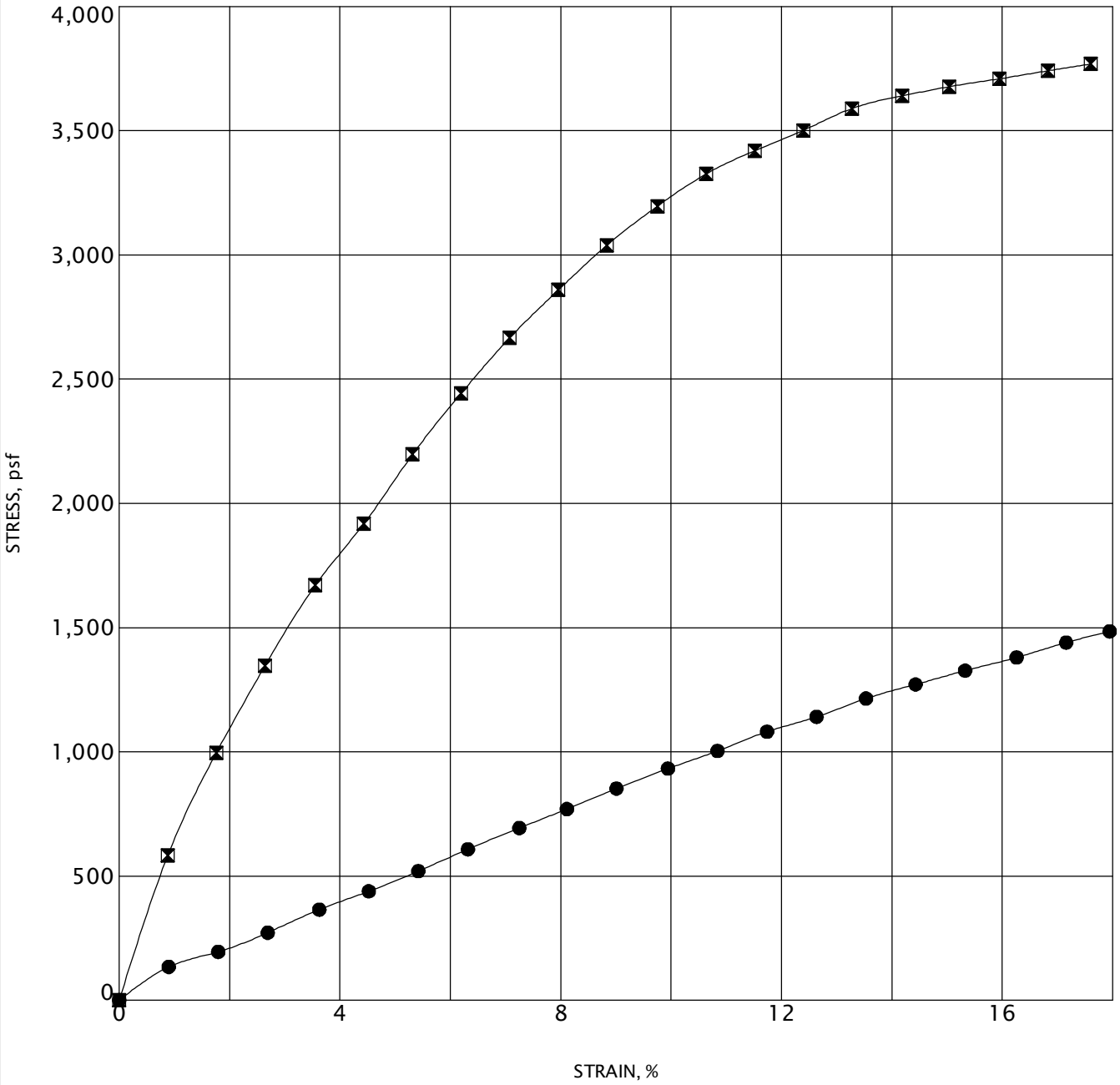
Water Level Observation:
6-1/2 feet during drilling operations; 13 feet upon completion

Notes:
Oak Street
* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Auger cuttings and capped with cold patch

Figure No. 11

SOIL / PAVEMENT BORING 200943.GPJ 20150116.G2 CONSULTING DATA TEMPLATE.GDT 2/17/21



	Specimen		Classification	MC%	γ_d	UC
●	B-01	S-4	Gray Silty Clay	18	114	1310
⊠	B-02	S-4	Gray Silty Clay	17	114	3680

G2 CONSULTING GROUP

UNCONFINED COMPRESSIVE STRENGTH TEST

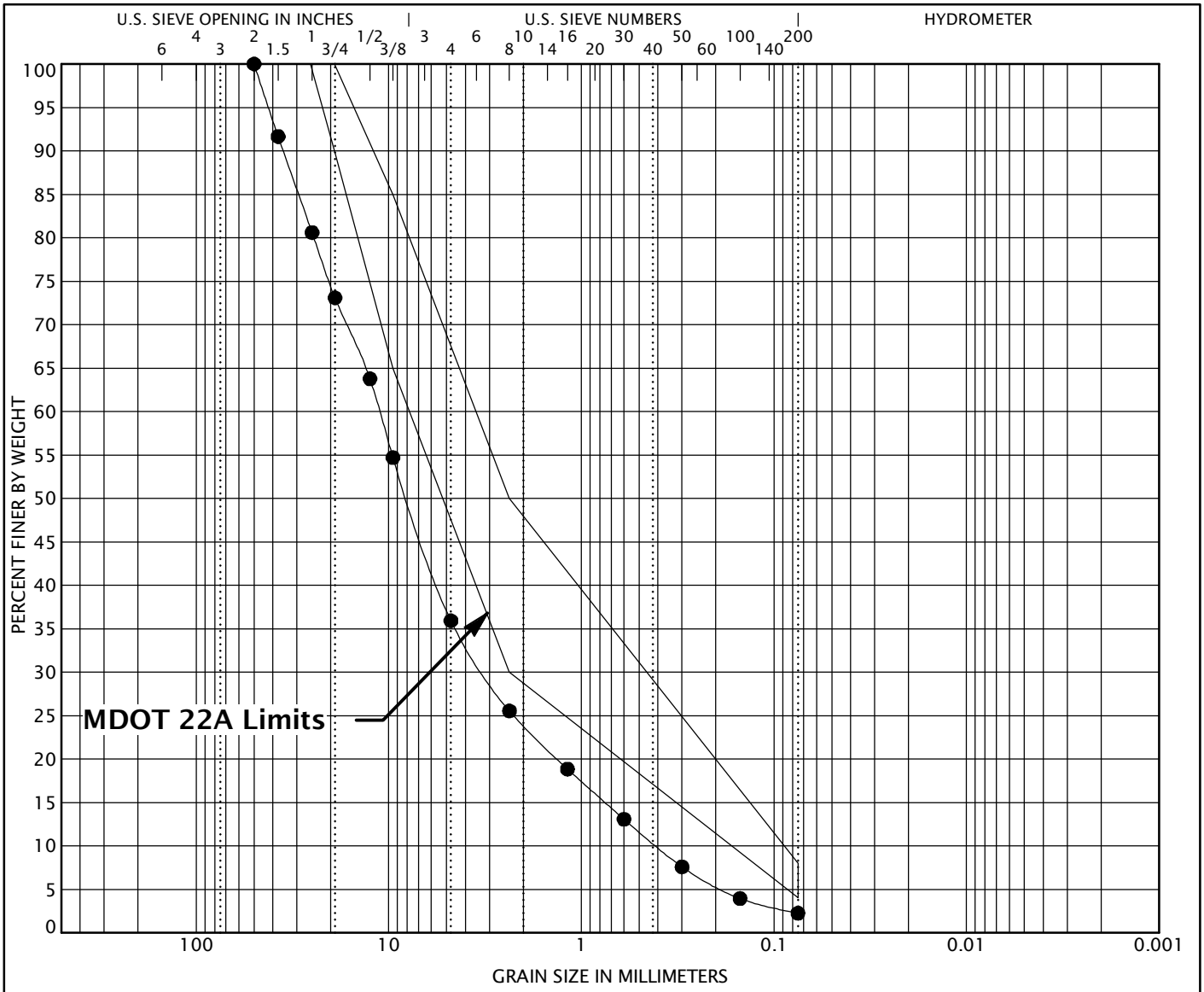
Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No.: 200943

Figure No. 12

US_UNCONFINED 200943.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 2/17/21



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen ID	Description	LL	PL	PI	Cc	Cu
●	B-05 AS-1	Dark Brown Sandy Gravel with trace silt				2.24	27.36

	Specimen ID	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-05 AS-1	50	11.157	3.19	0.408	64.1	33.7	2.2	

G2 CONSULTING GROUP

GRAIN SIZE DISTRIBUTION

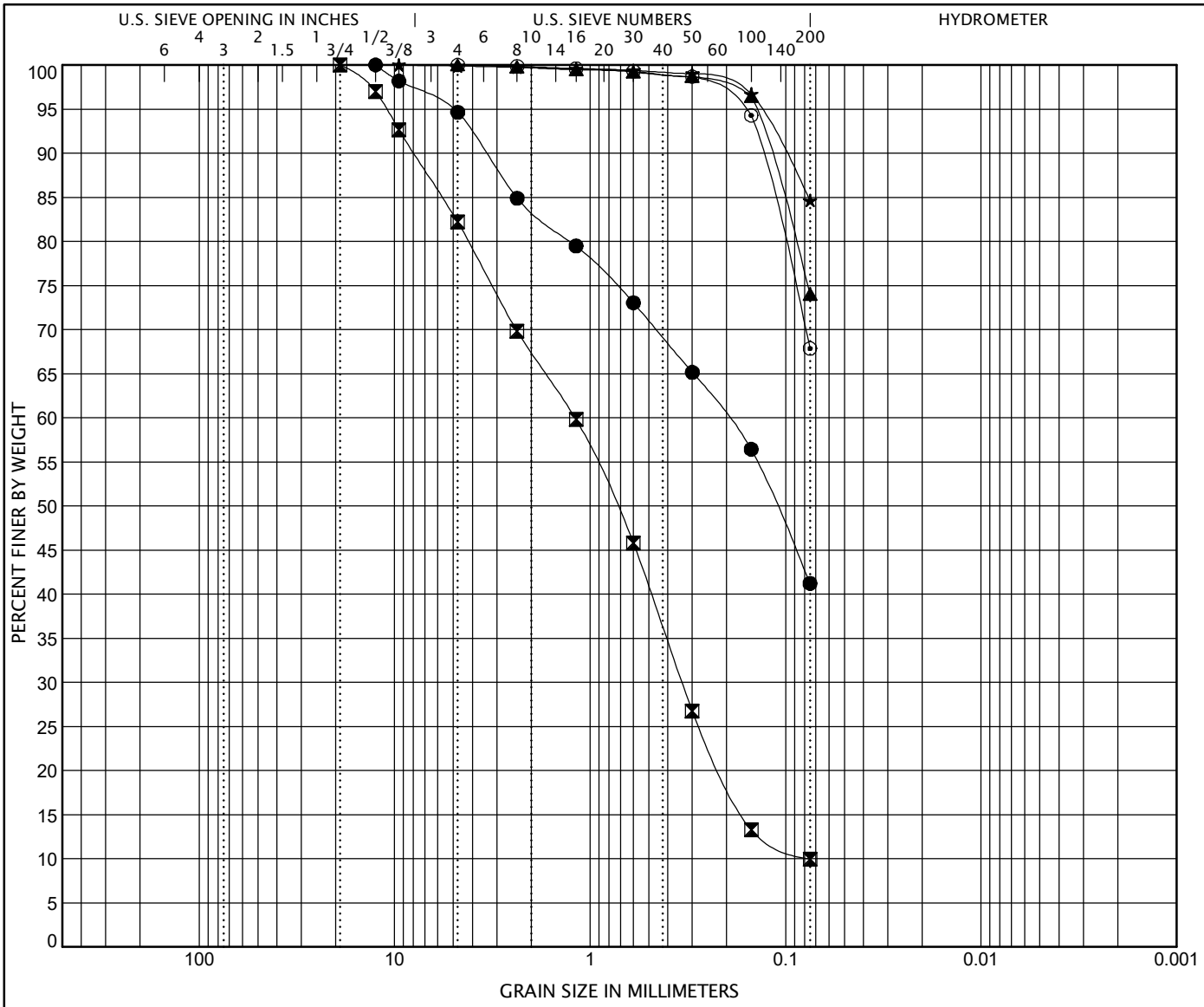
Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No.: 200943

Figure No. 13

US_GRAIN_SIZE_MDOT_22A 200943.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 2/17/21



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen ID		Description	LL	PL	PI	Cc	Cu
●	B-05	S-3	Brown Silty Sand with trace gravel					
⊠	B-06	S-4	Brown Gravelly Sand with trace silt				1.3	15.8
▲	B-07	S-3	Brown Sandy Silt					
★	B-08	S-4	Gray Sandy Silt					
⊙	B-09	S-2	Brown Sandy Silt					

	Specimen ID		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-05	S-3	12.5	0.199			5.4	53.4	41.2	
⊠	B-06	S-4	19	1.195	0.338	0.076	17.8	72.2	10.0	
▲	B-07	S-3	4.75				0.0	26.0	74.0	
★	B-08	S-4	9.5				0.1	15.3	84.6	
⊙	B-09	S-2	4.75				0.0	32.2	67.8	

G2 CONSULTING GROUP

GRAIN SIZE DISTRIBUTION

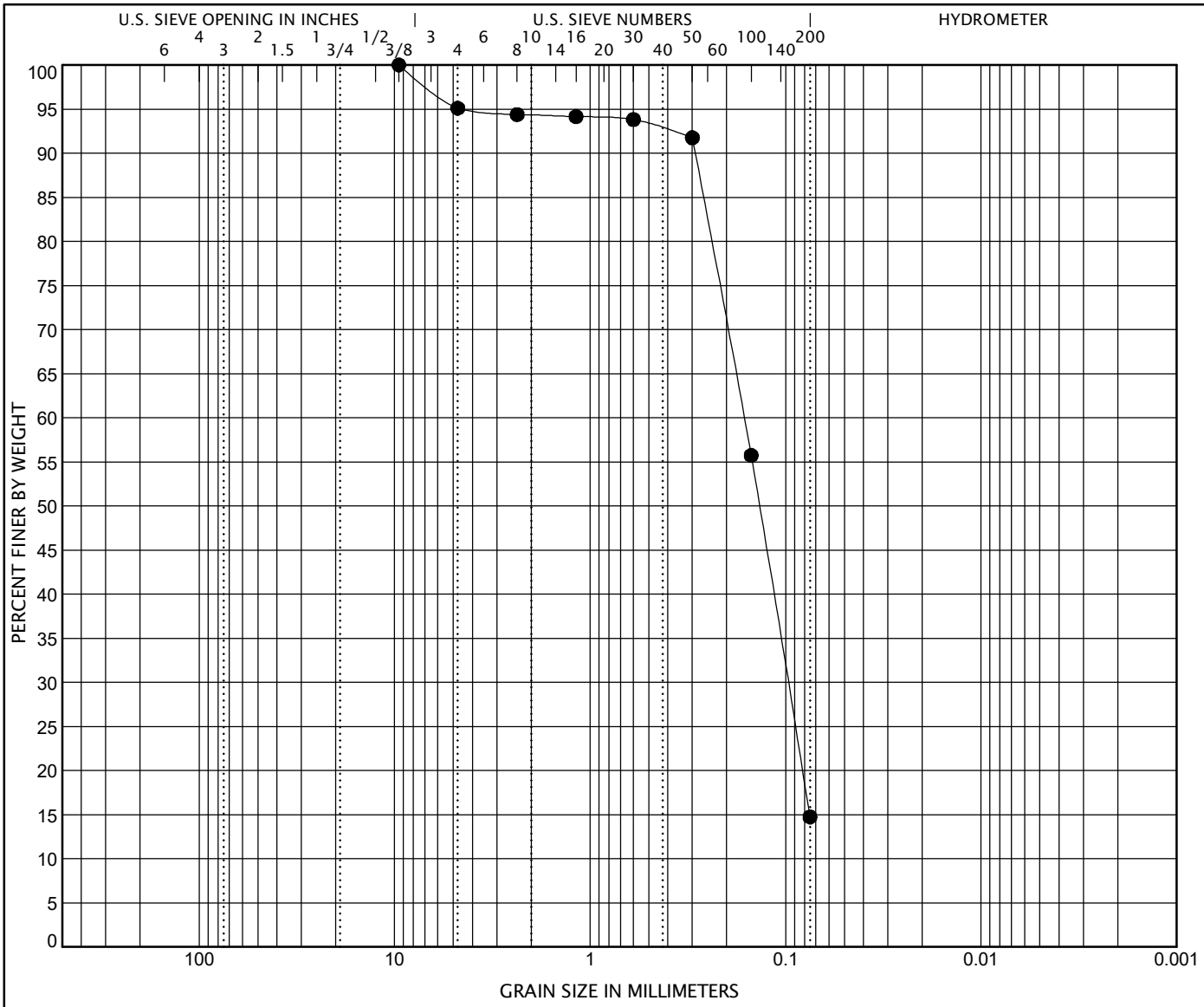
Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No.: 200943

Figure No. 14

US_GRAIN_SIZE 200943.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 2/17/21



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen ID	Description	LL	PL	PI	Cc	Cu
●	B-10 S-3	Brown Silty Sand with trace gravel					

	Specimen ID	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-10 S-3	9.5	0.163	0.097		4.9	80.4	14.7	

CONSULTING GROUP

GRAIN SIZE DISTRIBUTION

Project Name: Quarton Lake Estates Phase II - Water and Sewer Improvements

Project Location: Birmingham, Michigan

G2 Project No.: 200943

Figure No. 15

US_GRAIN_SIZE 200943.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 2/17/21

Core Photograph of B-01: Bituminous Concrete = 4-1/2 inches

Figure No. 16

Core Photograph of B-02: Bituminous Concrete = 6 inches

Figure No. 17

Photographic Documentation
Quarton Lake Estates Phase II Water and Sewer Improvements
Birmingham, Michigan
G2 Project No. 200943

Core Photograph of B-03: Bituminous Concrete = 2-1/4 inches

Figure No. 18

Core Photograph of B-04: Bituminous Concrete = 3-3/4 inches

Figure No. 19

Core Photograph of B-05: Bituminous Concrete = 3-1/4 inches

Figure No. 20

Core Photograph of B-06: Bituminous Concrete = 1-1/2 inches

Figure No. 21

Core Photograph of B-07: Bituminous Concrete = 1 inch

Figure No. 22

Photographic Documentation
Quarton Lake Estates Phase II Water and Sewer Improvements
Birmingham, Michigan
G2 Project No. 200943

Core Photograph of B-08: Bituminous Concrete = 1 inch

Figure No. 23

Photographic Documentation
Quarton Lake Estates Phase II Water and Sewer Improvements
Birmingham, Michigan
G2 Project No. 200943

Core Photograph of B-09: Bituminous Concrete = 3/4 inches

Figure No. 24

Photographic Documentation
Quarton Lake Estates Phase II Water and Sewer Improvements
Birmingham, Michigan
G2 Project No. 200943

Core Photograph of B-10: Bituminous Concrete = 4-1/4 inches

Figure No. 25

Photographic Documentation
Quarton Lake Estates Phase II Water and Sewer Improvements
Birmingham, Michigan
G2 Project No. 200943

Core Photograph of B-11: Bituminous Concrete = 6-1/2 inches

Figure No. 26

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. 27

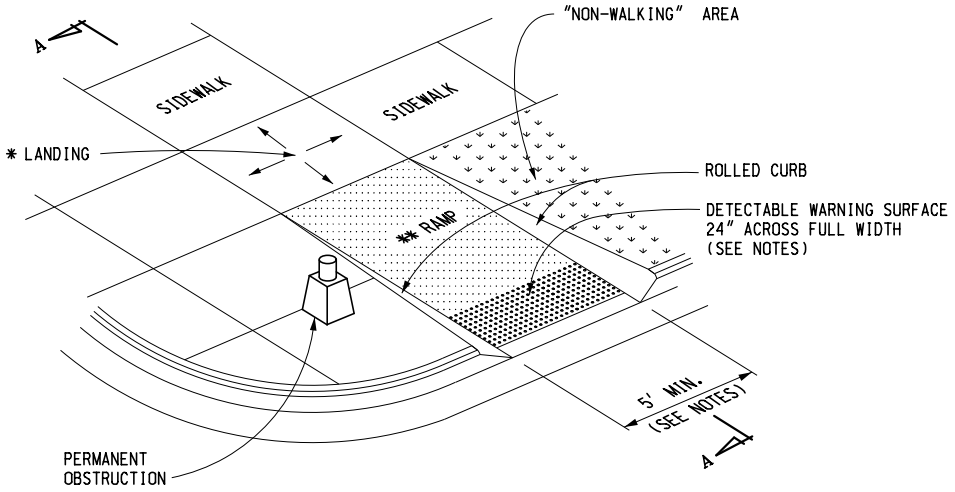
APPENDIX – B

MDOT SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

R-28-J

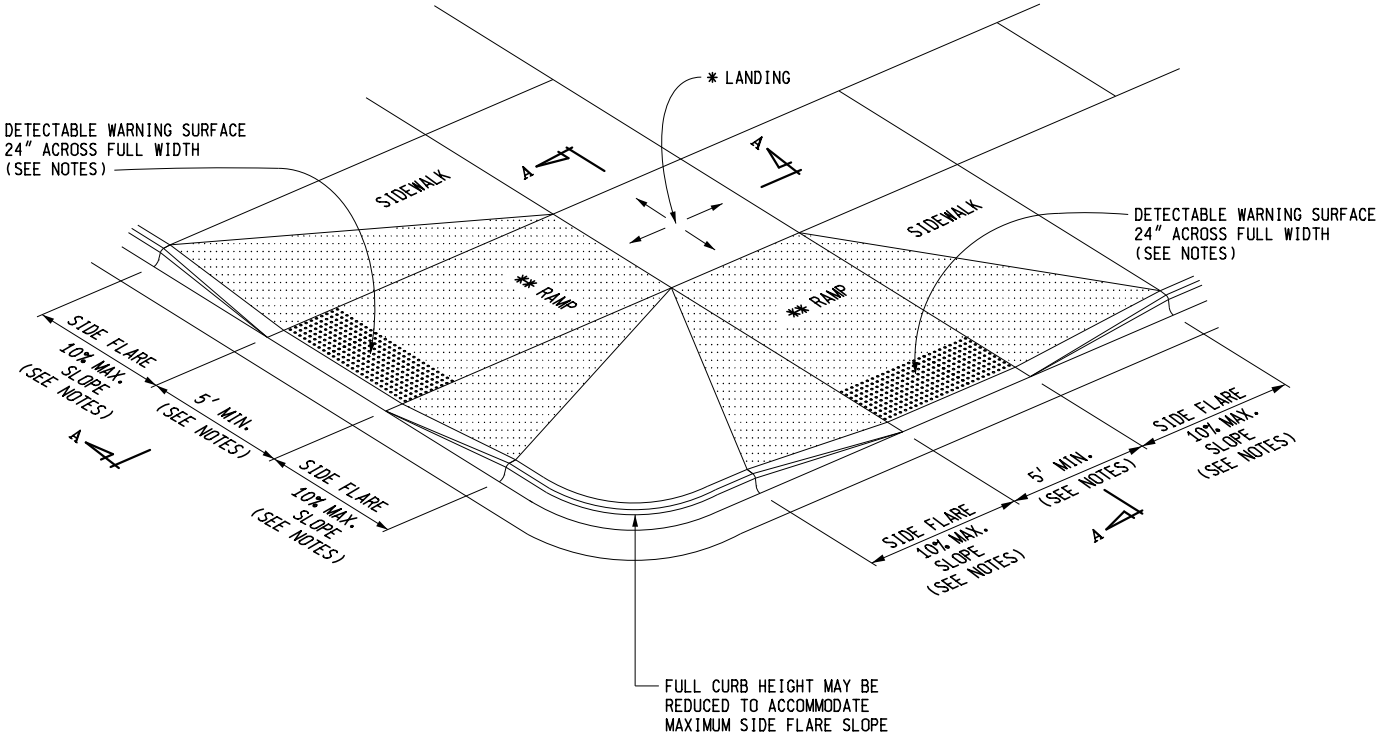
* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5′ x 5′. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% – 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE R

(ROLLED SIDES)



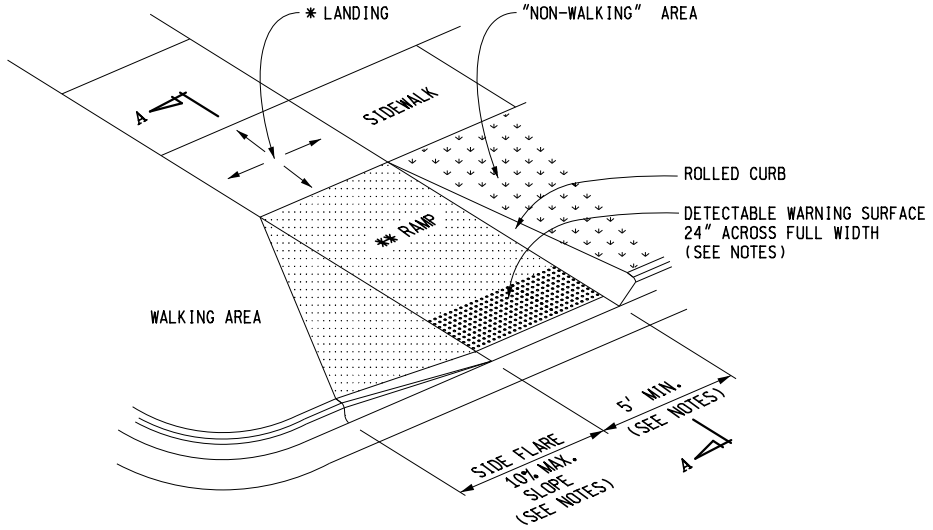
SIDEWALK RAMP TYPE F

(FLARED SIDES, TWO RAMPS SHOWN)

MDOT Michigan Department of Transportation PREPARED BY DESIGN DIVISION DRAWN BY: B.L.T. CHECKED BY: W.K.P.	DEPARTMENT DIRECTOR Paul C. Ajegba APPROVED BY: _____ DIRECTOR, BUREAU OF FIELD SERVICES APPROVED BY: _____ DIRECTOR, BUREAU OF DEVELOPMENT	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS			
		F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 1 OF 7

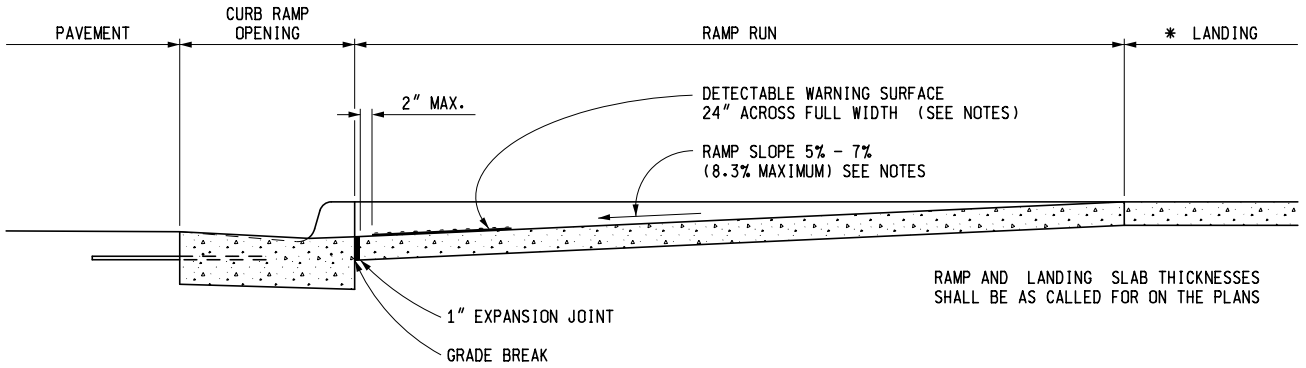
* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5′ x 5′. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% – 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE RF

(ROLLED / FLARED SIDES)

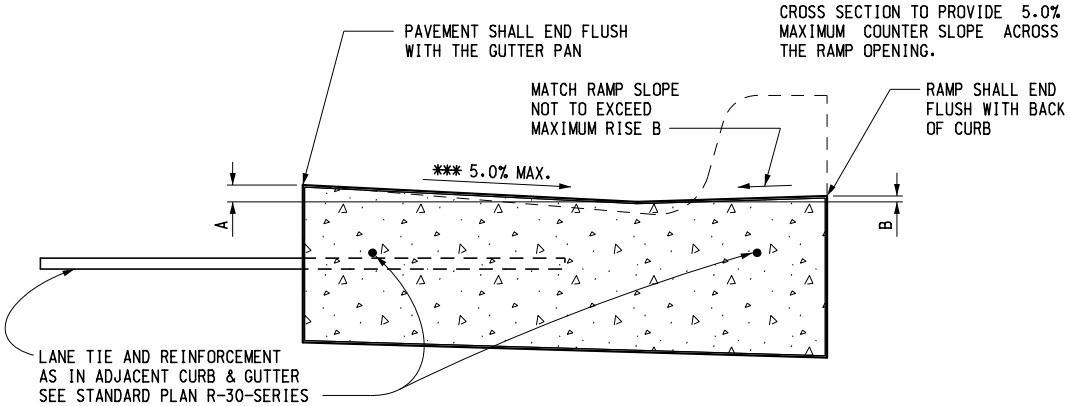


SECTION A-A

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

*** TRANSITION ADJACENT GUTTER PAN CROSS SECTION TO PROVIDE 5.0% MAXIMUM COUNTER SLOPE ACROSS THE RAMP OPENING.



SECTION THROUGH CURB RAMP OPENING

(TYPICAL ALL RAMP TYPES)

MICHIGAN DEPARTMENT OF TRANSPORTATION

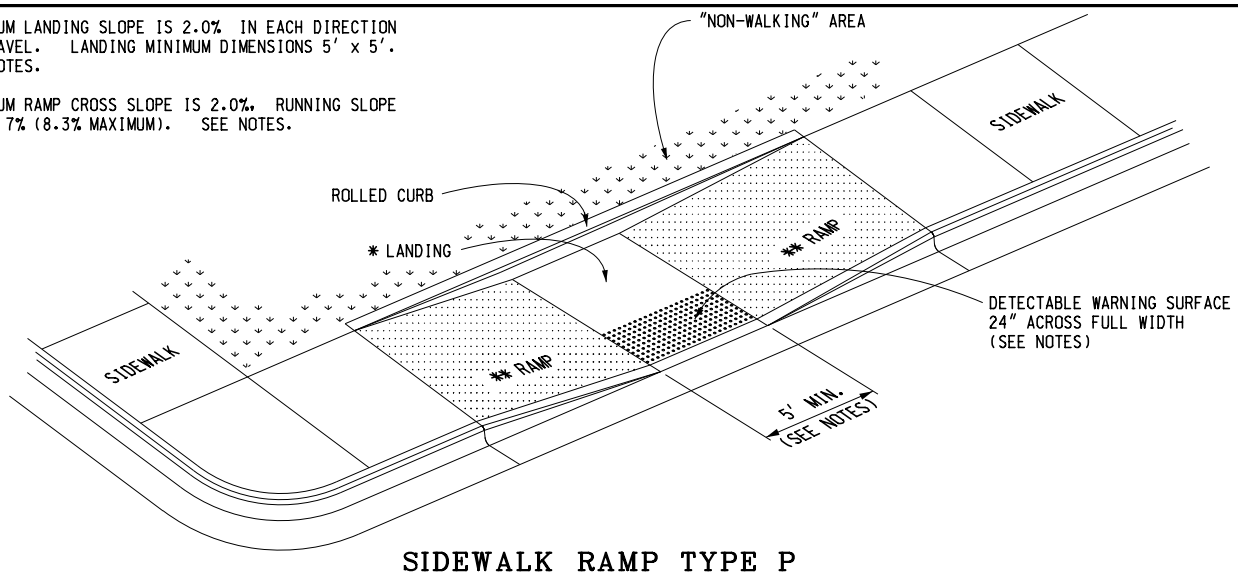
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 2 OF 7

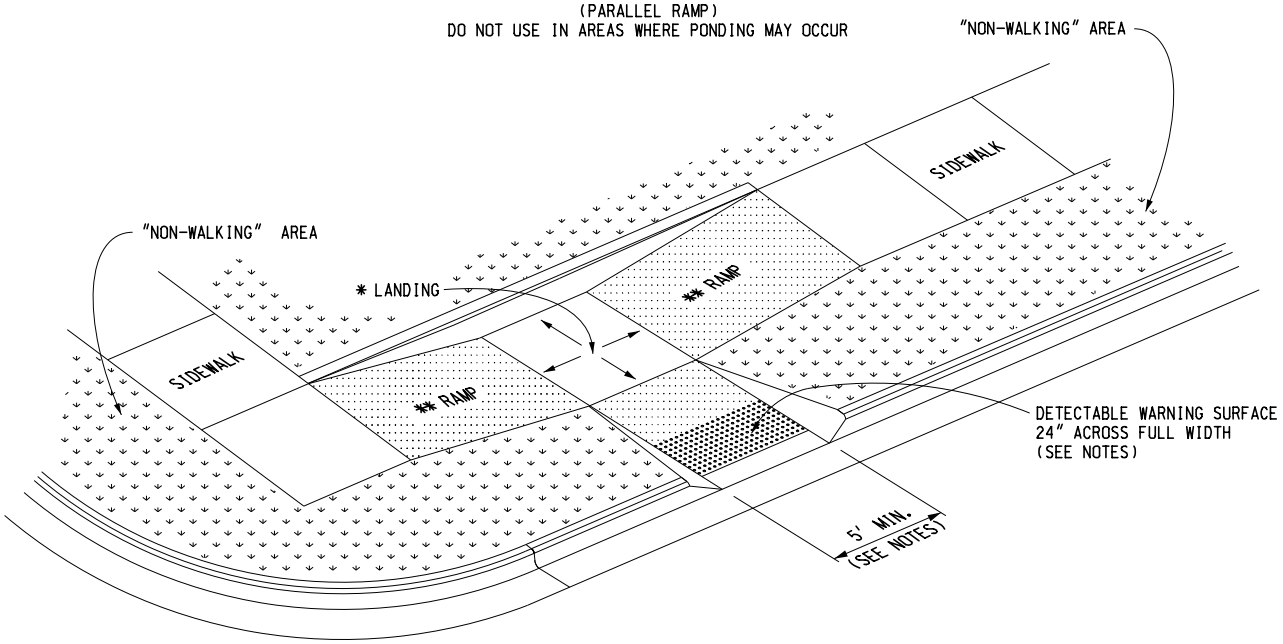
* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5′ x 5′. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% – 7% (8.3% MAXIMUM). SEE NOTES.



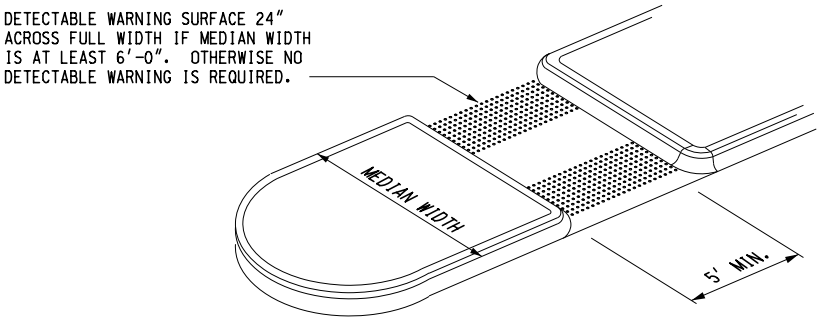
SIDEWALK RAMP TYPE P

(PARALLEL RAMP)
DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



SIDEWALK RAMP TYPE C

(COMBINATION RAMP)



SIDEWALK RAMP TYPE M

(MEDIAN ISLAND)

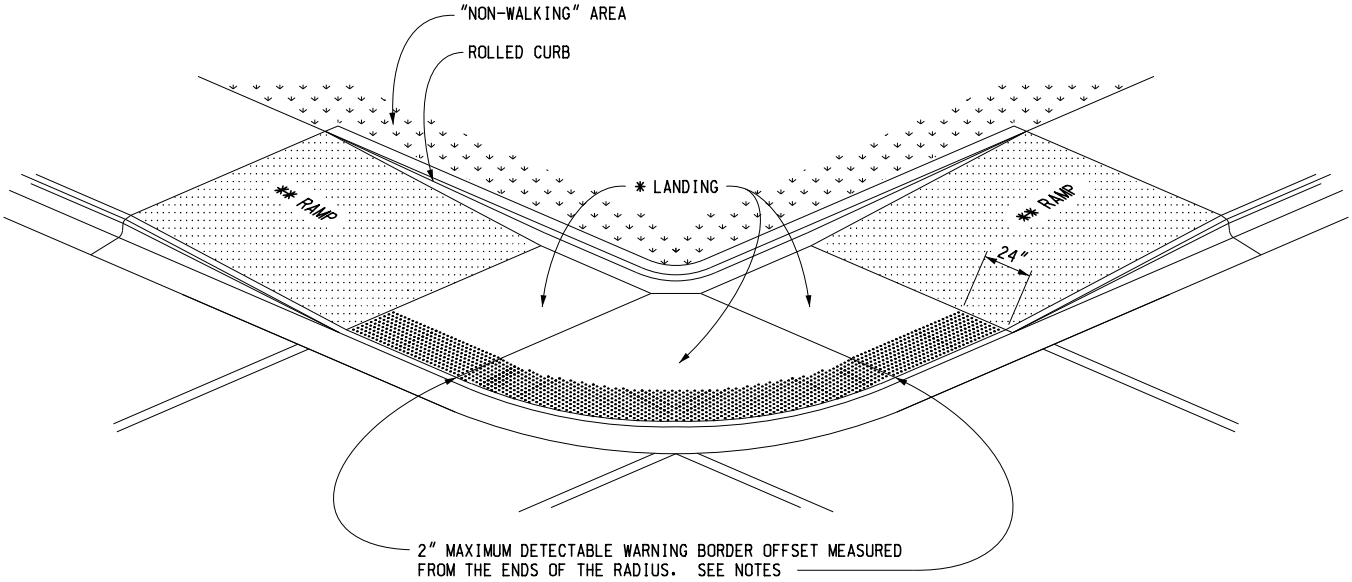
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

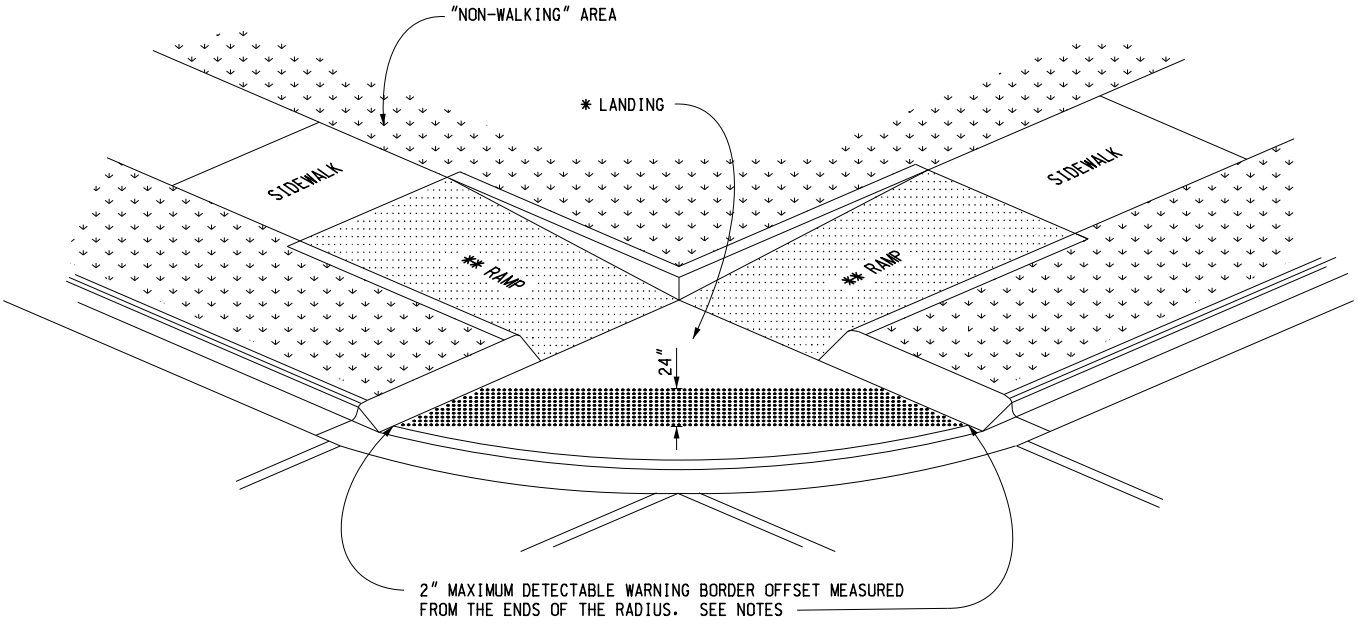
F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 3 OF 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5′ x 5′. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% – 7% (8.3% MAXIMUM). SEE NOTES.



(RADIAL DETECTABLE WARNING SHOWN)



(TANGENT DETECTABLE WARNING SHOWN)

SIDEWALK RAMP TYPE D

(DEPRESSED CORNER)

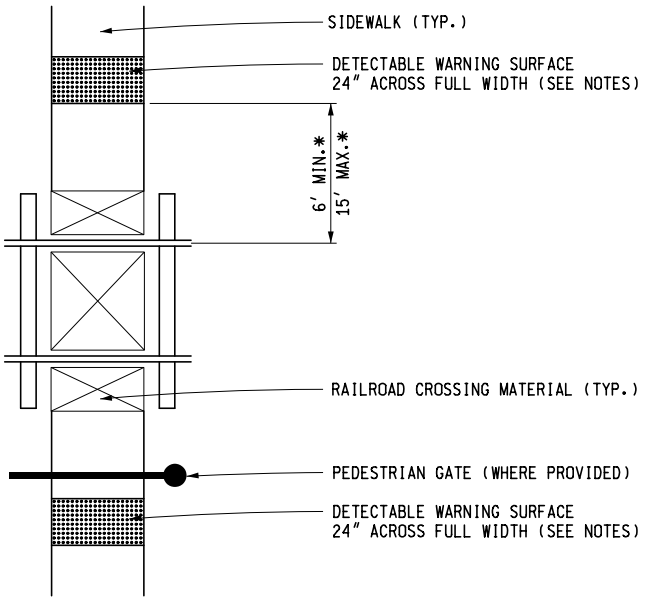
USE ONLY WHEN INDEPENDENT DIRECTIONAL RAMPS CAN NOT BE CONSTRUCTED FOR EACH CROSSING DIRECTION

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

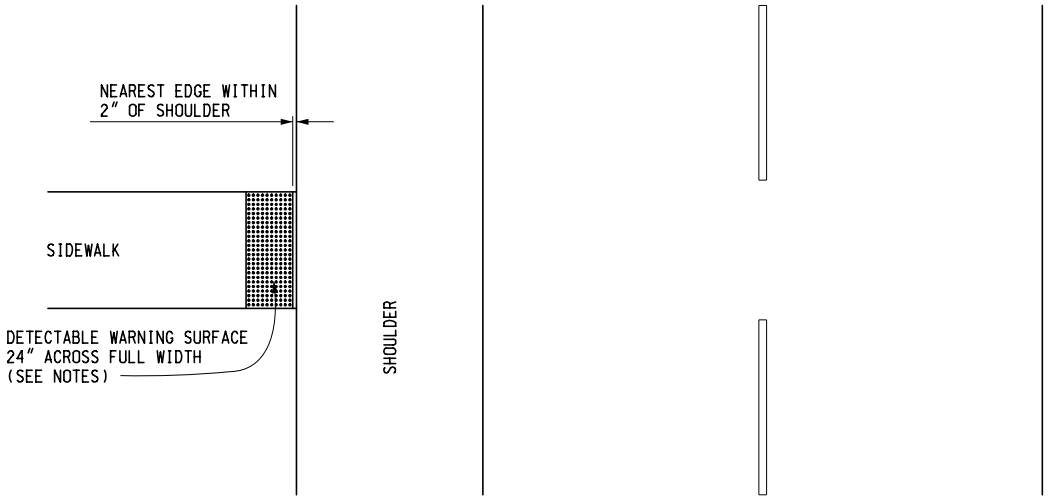
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 4 OF 7

* THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE RAIL CROSSING IS 6′ MINIMUM AND 15′ MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. DO NOT PLACE DETECTABLE WARNING ON RAILROAD CROSSING MATERIAL.



DETECTABLE WARNING AT RAILROAD CROSSING

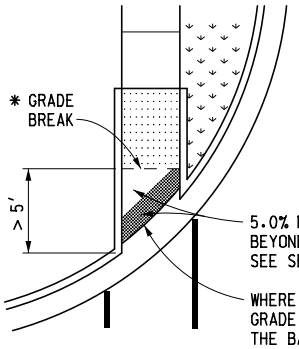


DETECTABLE WARNING AT FLUSH SHOULDER OR ROADWAY

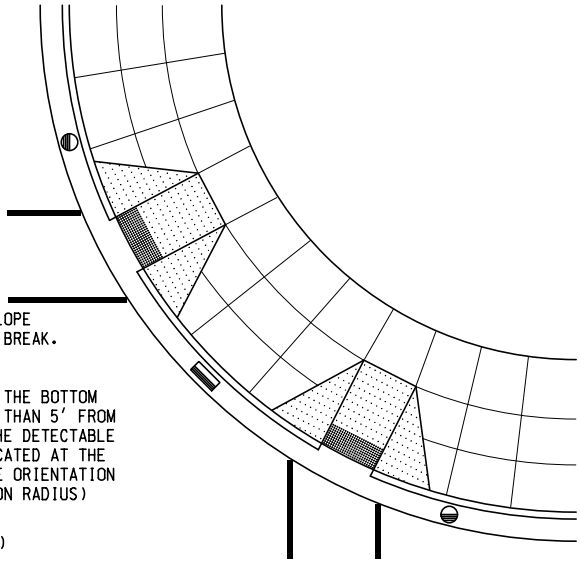
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 5 OF 7



SIDEWALK RAMP LOCATED IN RADIUS (TYPE R SHOWN)
(GRADE BREAK OFFSET GREATER THAN 5')

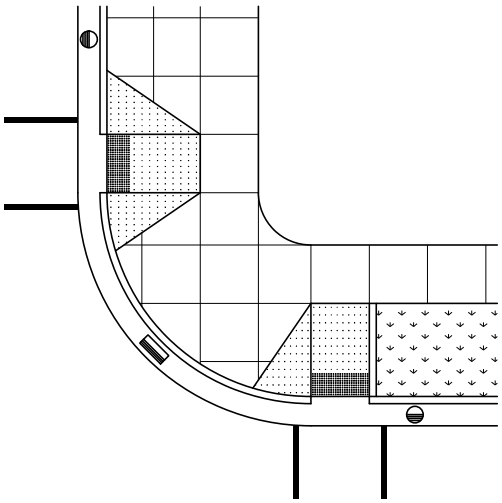


SIDEWALK RAMP PERPENDICULAR TO RADIAL CURB (TYPE F SHOWN)

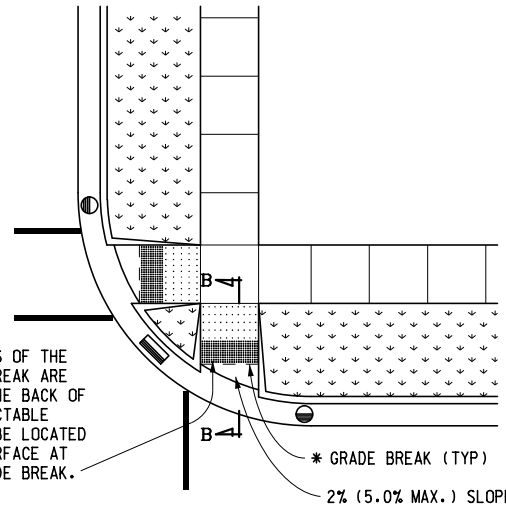
(USE WITH RADIAL CURB WHEN THE CROSSWALK AND SIDEWALK RAMP ARE NOT ALIGNED)

LEGEND

- SLOPED SURFACE
- DETECTABLE WARNING
- "NON-WALKING" AREA
- CROSSWALK MARKING
- PREFERRED LOCATION OF DRAINAGE INLET (TYP.)
- ALTERNATE LOCATION OF DRAINAGE INLET (TYP.)



SIDEWALK RAMP PERPENDICULAR TO TANGENT CURB
(TYPE F AND TYPE RF SHOWN)

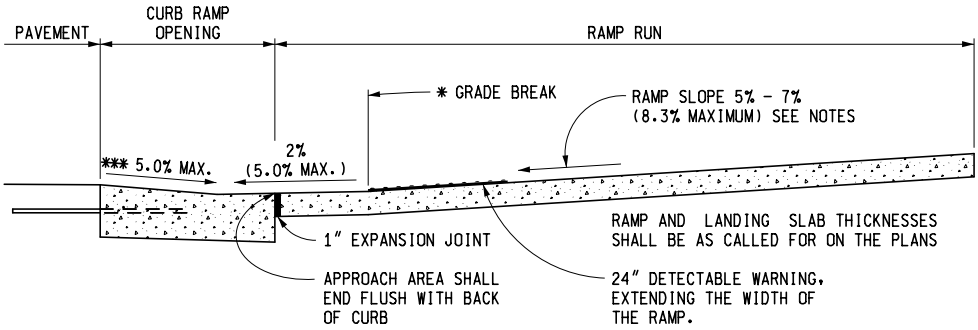


SIDEWALK RAMP LOCATED IN RADIUS (TYPE R SHOWN)
(GRADE BREAK OFFSET LESS THAN 5')

* 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.



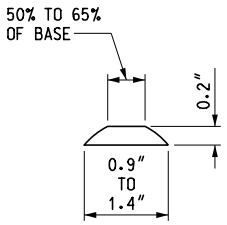
SECTION B-B

SIDEWALK RAMP ORIENTATION

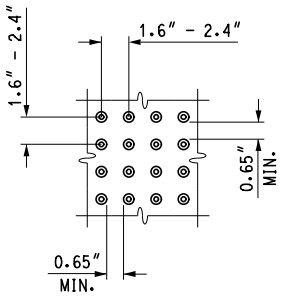
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

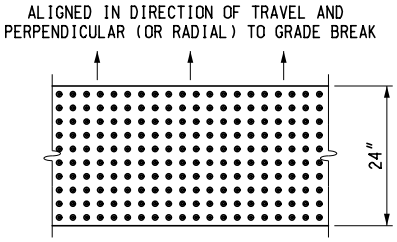
F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 6 OF 7



DOME SECTION



DOME SPACING



DOME ALIGNMENT

DETECTABLE WARNING DETAILS

NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

SIDEWALK 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 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. 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/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 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 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 SIDEWALK RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, UNPAVED 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

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

F.H.W.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 7 OF 7

BIRMINGHAM

A WALKABLE CITY

ENGINEERING DEPARTMENT

QUARTON LAKE ESTATES PHASE 2

CONTRACT# 1-23(P)

SHEET INDEX

COVER SHEET
C1 PAVING AND UTILITY PLAN - OAK STREET P.O.B. TO 4+00
C2 PAVING AND UTILITY PLAN - OAK STREET 4+00 TO P.O.E.
C3 PAVING AND UTILITY PLAN - RAYNALE STREET P.O.B. TO 3+00
C4 PAVING AND UTILITY PLAN - RAYNALE STREET 3+00 TO P.O.E.
C5 PAVING AND UTILITY PLAN - WESTWOOD DRIVE P.O.B. TO 4+00
C6 PAVING AND UTILITY PLAN - WESTWOOD DRIVE 4+00 TO 8+00
C7 PAVING AND UTILITY PLAN - WESTWOOD DRIVE 8+00 TO 11+00
C8 PAVING AND UTILITY PLAN - WESTWOOD DRIVE 11+00 TO P.O.E.
C9 STORM SEWER PROFILES
C10 GRADING PLAN - OAK STREET P.O.B. TO P.O.E.
C11 GRADING PLAN - RAYNALE STREET P.O.B. TO P.O.E.
C12 GRADING PLAN - WESTWOOD DRIVE P.O.B. TO 8+00
C13 GRADING PLAN - WESTWOOD DRIVE 8+00 TO P.O.E.
C14 INTERSECTION GRADING PLAN - WESTWOOD DRIVE
C15 EXISTING AND PROPOSED ROAD CROSS-SECTIONS
C16 NOTES AND DETAILS (1 OF 2)
C17 NOTES AND DETAILS (2 OF 2)

Q1 QUANTITIES

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

WATER / SEWER SERVICE NOTE

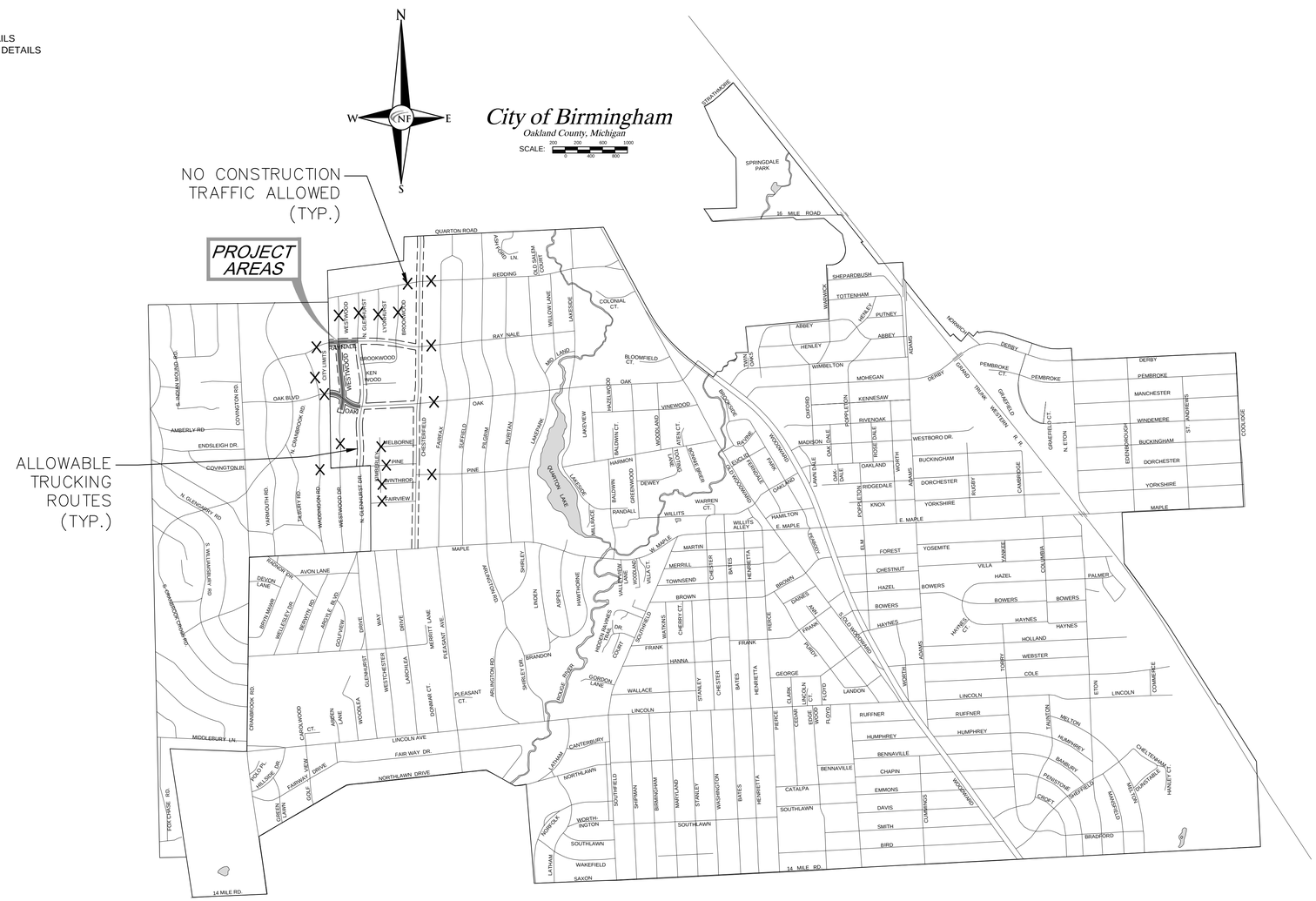
ALL WATER AND SEWER SERVICE LATERAL INFORMATION IS SHOWN PER RECORD, WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL COORDINATE WITH CITY FOR ALL PRIVATE-SIDE WATER AND SEWER LATERAL INFORMATION, AS REQUIRED, TO CONSTRUCT THE PROJECT (INC.).

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.

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.



QUARTON LAKE ESTATES PHASE 2
CONTRACT # 1-23(P)

REQUIRED PERMITS

- MICHIGAN E.G.L.E. PART 399 WATER MAIN

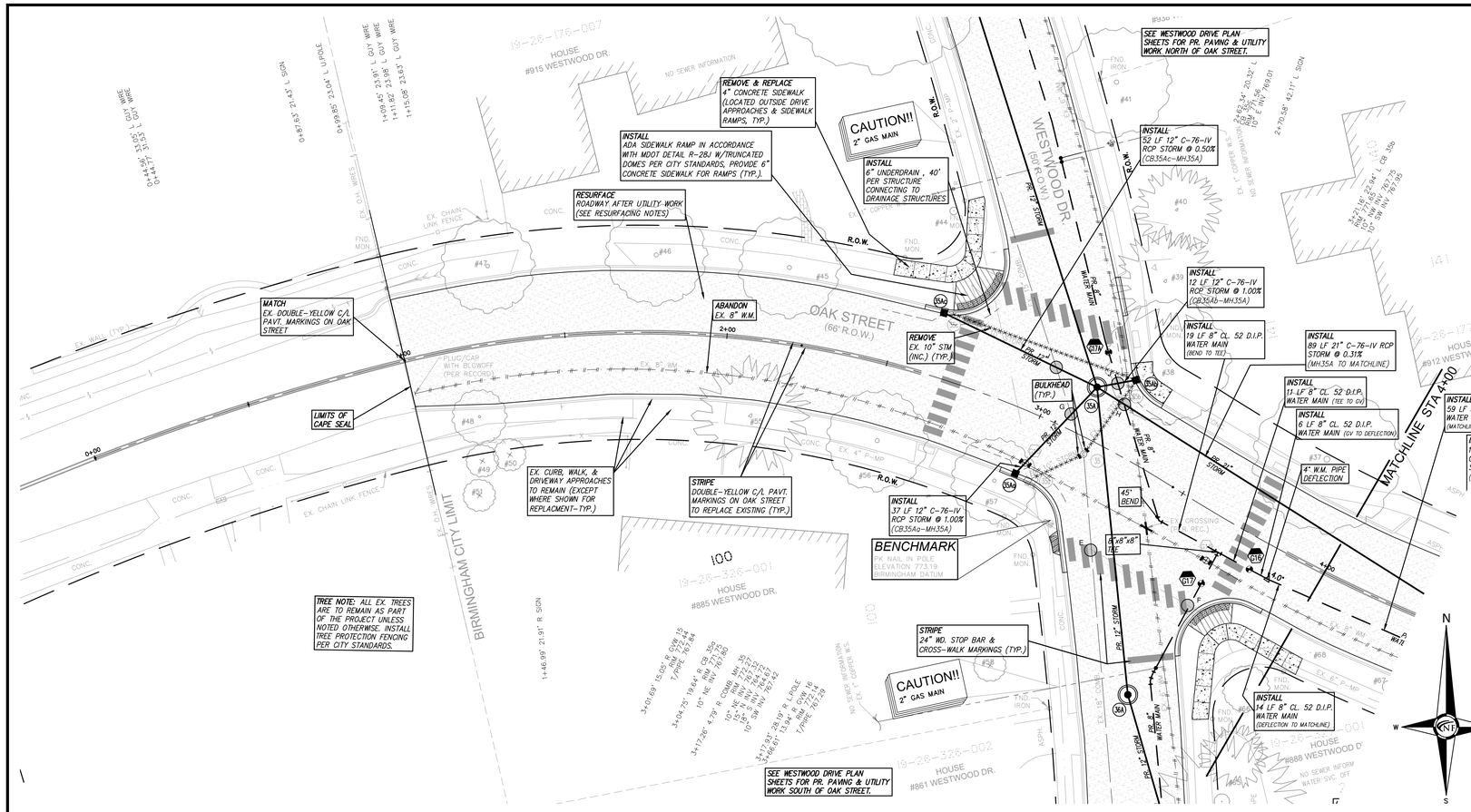
Know what's below
Call before you dig.

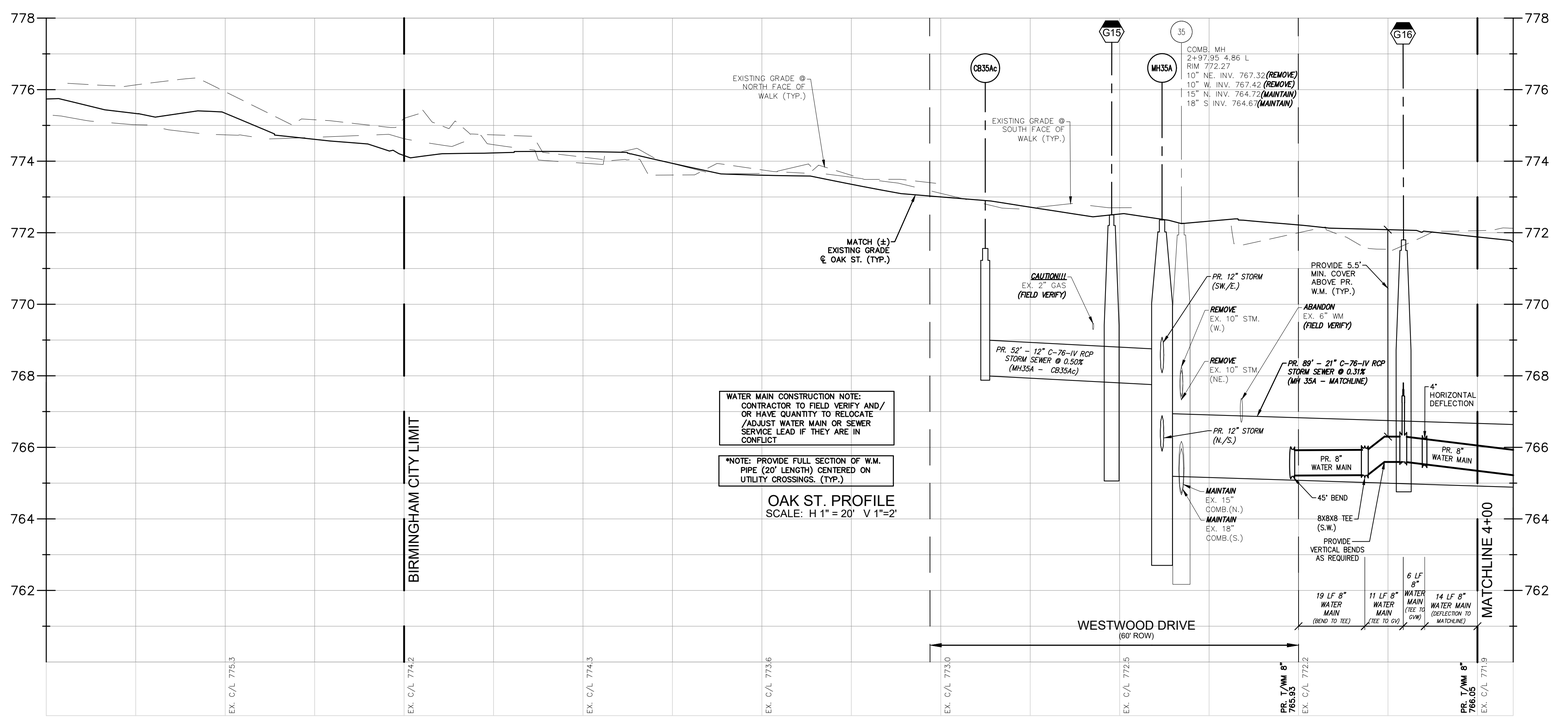
BENCHMARK NOTE

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

APPROVED DATE

JANUARY 03, 2023 REVISED PER EGLE REVIEW





Ex. Tree Information

Tree #	Botanical Name	Common Name	Dia.	Type	Other Dia.	Condition	Comments
38	Fraxinus pennsylvanica	Green Ash	32			Fair	Numerous Prunings, Canopy Die-Back, Competing Lands
39	Picea abies	Norway Spruce	16			Good	
40	Picea abies	Norway Spruce	23			Good	
41	Acer saccharinum	Silver Maple	24			Fair	Minor Lean, Competition, Canopy Die-Back
42	Acer saccharinum	Silver Maple	19			Good	
43	Acer saccharinum	Silver Maple	46			Fair	Removed Leads, Pruning, Rotting Bark, Canopy Die-Back, Decay At Base, Damage To Root Flare
44	Malus sp.	Crabapple	2			Poor	Nearly Dead, Extreme Canopy Die-Back, Extensive Rot At Base
45	Liquidambar styraciflua	American Sweetgum	18			Fair	Bent Lead
46	Liquidambar styraciflua	American Sweetgum	20			Fair	Winding Lead, Canopy Die-Back, Rotting Prune
47	Liquidambar styraciflua	American Sweetgum	20			Good	
48	Liquidambar styraciflua	American Sweetgum	12			Fair	Competition, Canopy Die-Back, Minor Lean
49	Picea abies	Norway Spruce	20			Fair	Competition, In ROW, Canopy Die-Back
50	Picea abies	Norway Spruce	19			Fair	Competition, Canopy Die-Back
51	Picea abies	Norway Spruce	26			Fair	Competition, In ROW, Canopy Die-Back
52	Picea abies	Norway Spruce	18			Fair	Competition, Canopy Die-Back
53	Picea abies	Norway Spruce	26			Fair	Competition, Canopy Die-Back
54	Picea abies	Norway Spruce	19			Fair	Competition, Canopy Die-Back
55	Liquidambar styraciflua	American Sweetgum	18			Good	
56	Liquidambar styraciflua	American Sweetgum	18			Fair	Canopy Die-Back, Bent Lead
57	Liquidambar styraciflua	American Sweetgum	21			Good	
58	Quercus alba	White Oak	40			Good	
59	Acer rubrum	Red Maple	24			Fair	Rotting Bark
60	Fagus grandifolia	American Beech	28			Poor	Moderate Lean, Hollowed Out Trunk/Rotting Cavity, Competition, Inoculation With Hickory
61	Carya Ovata	Shagbark Hickory	14			Fair	Inoculation With Beech, Competition, Canopy Die-Back
62	Abies concolor	White Fir	24			Fair	Minor Lean, Competition
63	Syringa sp.	Lilac	4	Multiple Stemmed	4, 4, 3, 3, 3	Fair	Self-Inoculation, Pruning, Minor Cankers
64	Syringa sp.	Lilac	5	Multiple Stemmed	4, 3, 3, 3, 2	Fair	Self-Inoculation, Pruning, Minor Cankers
65	Picea pungens	Colorado Blue Spruce	13			Poor	Dead Lead, Major Canopy Die-Back, Competition
66	Malus sp.	Crabapple	6	Multiple Stemmed	6, 5, 5, 3	Fair	Canopy Die-Back, Competing Lands, Competition,
67	Pyrus calleryana	Callery Pear	4			Fair	Surfacing Roots Damaged By Mowing Major Canopy Die-Back, Competing Lands
68	Pyrus calleryana	Callery Pear	2			Poor	Self-Inoculation, Pruning, Minor Cankers
69	Malus sp.	Crabapple	6	Multiple Stemmed	5, 5, 5, 5	Fair	Competing Lands, Minor Lean, Canopy Die-Back,
70	Liquidambar styraciflua	American Sweetgum	18			Fair	Pruning, In ROW
71	Quercus alba	White Oak	8			Fair	
72	Acer rubrum	Red Maple	5			Good	
73	Gleditsia triacanthos	Thornless Honey-Locust	10			Fair	Competing Leads, Minor Lean
74	Pyrus calleryana	Callery Pear	7			Good	
75	Amelanchier sp.	Serviceberry	4			Fair	Competing Leads, Pruning

WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED

ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	NEW CURB BOX?
861 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
885 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
888 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
912 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
915 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5

SEWER SERVICE SCHEDULE – LENGTH OF 6" PVC PIPE NEEDED

ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	TAP/CONNECTION @ MAIN
861 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
885 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
888 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
912 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
915 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5

UTILITY CROSSING SCHEDULE

NOTES:
- *ALL CROSSINGS SHALL BE FIELD VERIFIED.*
- *ALL ELEVATIONS ARE ±*
- *RWSP = REVIEW WITH SERVICE PROVIDER*
- *MIN 18" VERTICAL CLEARANCE OF CROSSINGS*

E REFER SHEET C5

F REFER SHEET C5

G REFER SHEET C5

H REFER SHEET C5

I REFER SHEET C5

J REFER SHEET C5

EX. SEWER STRUCTURE SCHEDULE

35 *BULKHEAD STORM LEADS*
3+17.26' 4.79' R
COMB MH 35
RIM 772.27
10" NE INV 767.32 *(REMOVE & B.H.)*
15" N INV 764.72 *(MAINTAIN)*
18" S INV 764.67 *(MAINTAIN)*
10" SW INV 767.42 *(REMOVE & B.H.)*

35a *REMOVE*
3+04.75' 19.64' R
CB 35a
RIM 771.75
10" NE INV 767.80 *(REMOVE)*

35b *REMOVE*
3+21.16' 22.94' L
CB 35b
RIM 771.65
10" NW INV 767.75 *(REMOVE)*
10" SW INV 767.95 *(REMOVE)*

35c *REMOVE*
2+62.34' 20.32' L
CB 35c
RIM 771.56
10" SE INV 769.01 *(REMOVE)*

PR. STORM STRUCTURE SCHEDULE

35A *INSTALL*
PR. STA. 3+11.85' 15.52' L
PR. 5' DIA. STORM M.H.
W/ 2' SUMP
PR. RIM 772.36
PR. 12" S. INV. 765.89
PR. 12" SW. INV. 768.08
PR. 12" E. INV. 768.08
PR. 12" NW. INV. 767.74
PR. 12" N. INV. 765.89
PR. 21" SE. INV. 765.20

35Aa *INSTALL*
PR. STA. 3+00.10' 19.22' R
PR. 2' DIA. STORM INLET
PR. RIM 771.95
PR. 12" NE. INV 768.45

35Ab *INSTALL*
PR. STA. 3+20.89 22.82' L
PR. 2' DIA. STORM INLET
PR. RIM 771.70
PR. 12" W. INV. 768.20

35Ac *INSTALL*
PR. STA. 2+62.44' 19.65' L
PR. 2' DIA. STORM INLET
PR. RIM 771.56
PR. 12" SE. INV. 768.00

36A *REFER TO SHEET C5*

WATER MAIN SCHEDULE

G15 *REMOVE EX. WELL & ABANDON VALVE*
03+01.68' 15.05' R
GVW 15
RIM 772.44

G16 *REMOVE EX. WELL & ABANDON VALVE*
3+66.60' 13.951' R
GVW 16
RIM 772.14
INSTALL 8" GATE VALVE IN BOX
PR. STA. 3+79.26' 9.77' R
PR. RIM. 771.80
PR. T/PIPE 766.30

G17 *REFER TO SHEET C5*

G17N *REFER TO SHEET C5*

EXISTING CURB & GUTTER / LATERAL INSTALLATION NOTE:

EXISTING CURB AND GUTTER SHALL REMAIN UNLESS OTHERWISE INDICATED OR AS DETERMINED BY THE CITY. ALL SEWER AND WATER SERVICE LATERAL REPLACEMENTS MUST BE BORED BENEATH EXISTING CURB AND GUTTER TO REMAIN. THE COST OF BORING UNDER THE CURB SHALL BE INCIDENTAL TO THE COST OF THE WATER AND SEWER LATERALS. ALSO, THE CITY SHALL DETERMINE THE MINIMUM AMOUNT OF CURB AND GUTTER REPLACEMENT NEEDED FOR CURB-LINE DRAINAGE STRUCTURE REPAIRS, REPLACEMENTS, ETC.

RESURFACING NOTES

- REMOVE SUFFICIENT AMOUNT OF EX. CHIP SEAL/BITUMINOUS SURFACE OVER TRENCH TO PERFORM UTILITY MAINS AND SERVICE INSTALLATION WORK
- PERFORM TEMPORARY TRENCH REPAIR OF WATER AND SEWER MAINS AND SERVICE LEADS AT SURFACE WITH MIN. 8" THICK 21AA CRUSHED CONCRETE AS INCIDENTAL TO UTILITY INSTALLATION WORK (TYP)
- AFTER COMPLETION OF UTILITY WORK, PULVERIZE REMAINING EXISTING CHIP SEAL/BITUMOUS PAVEMENT, TRENCH REPAIR AGGREGATE AND GRANULAR BASE, IN PLACE. RESHAPE, REGRADE AND COMPACT TO ACHIEVE 2% CROSS-SLOPE (UP TO 4% MAX) AS NEW BASE COURSE. REMOVE & DISPOSE OF EXCESS PULVERIZED MATERIAL.
- INSTALL CAPE SEAL (APPROX 1/2" THICK) ON COMPACTED NEW BASE COURSE.

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

- CLEAN-OUT
- MANHOLE COMB SAN — EXISTING SAN/COMB SEWER
- GVB GVW HYDRANT — EXISTING WATER MAIN
- RYCB MANHOLE CB END SECTION — EXISTING STORM SEWER
- ELEC. METER ELECTRIC MARKER TELEPHONE MARKER — EXISTING BURIED CABLES
- GAS METER GAS MARKER GAS VALVE — EXISTING GAS MAIN
- UTILITY POLE LIGHT POLE STRAIN POLE GUY WIRE — OVERHEAD LINES
- (RECORD) CURB STOP LOCATION (APPROX.)
- 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. 8" CONC. PAVT. W/ INT. CURB
- PR. 4" CONC. SIDEWALK
- PR. PULVERIZE AND CAPE SEAL
- PR. 6" CONC. PAVT.

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

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

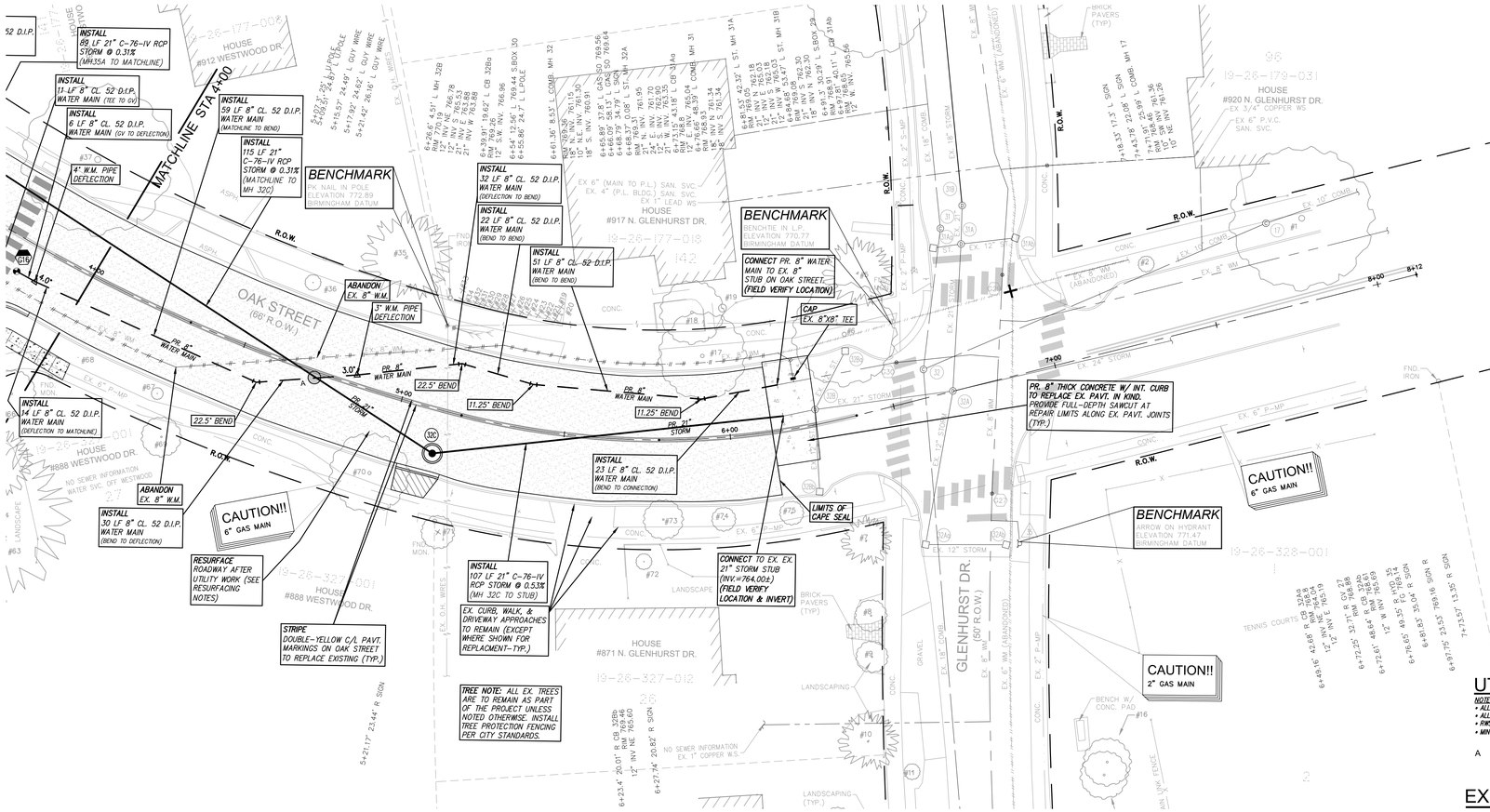
SHEET
Paving & Utility Plan
Oak Street
P.O.B. to Sta. 4+00

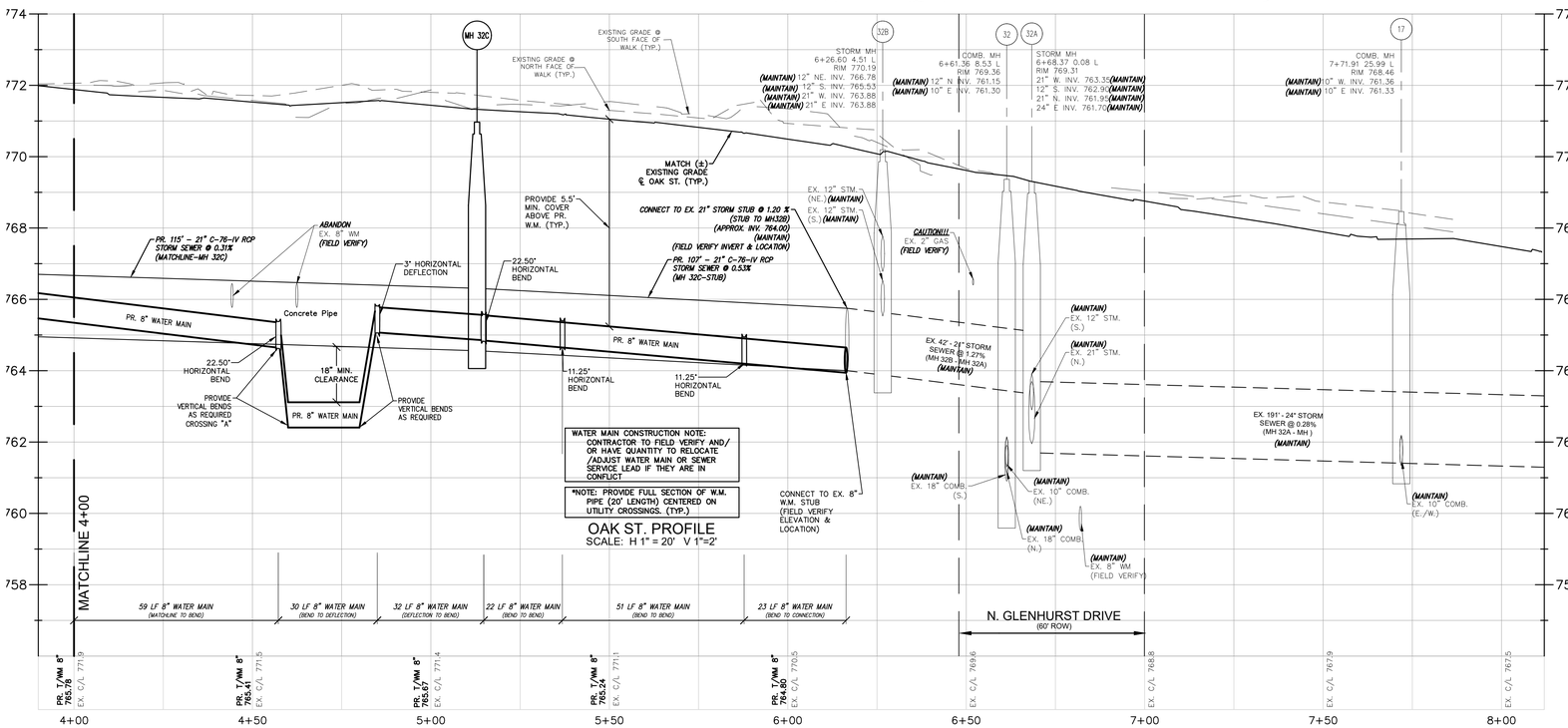
811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C1





WATER MAIN CONSTRUCTION NOTE:
CONTRACTOR TO FIELD VERIFY AND/OR HAVE QUANTITY TO RELOCATE /ADJUST WATER MAIN OR SEWER SERVICE LEAD IF THEY ARE IN CONFLICT

*NOTE: PROVIDE FULL SECTION OF W.M. PIPE (20' LENGTH) CENTERED ON UTILITY CROSSINGS. (TYP.)

OAK ST. PROFILE
SCALE: H 1" = 20' V 1"=2'

Ex. Tree Information

Tree #	Botanical Name	Common Name	Dia.	Type	Other Dia.	Condition	Comments
1	Ulmus americana	American Elm	31			Fair	Canopy Die-Back, Broken Branches Due To Passing Cars,
2	Amelanchier sp.	Serviceberry	3			Fair	Canopy Die-Back, Competition
3	Acer saccharinum	Silver Maple	31			Fair	Canopy Die-Back, Minor Pruning Major Canopy Die-Back, Dead And Dying Leads
4	Acer saccharinum	Silver Maple	26			Poor	
5	Picea pungens	Colorado Blue Spruce	13			Good	
6	Liquidambar styraciflua	American Sweetgum	20			Fair	In ROW, Minor Pruning
7	Picea abies	Norway Spruce	8			Good	
8	Pyrus calleryana	Callery Pear	4	Multiple Stemmed	4, 4, 3, 1	Fair	Competing Leads, Poor Scaming
9	Pyrus calleryana	Callery Pear	7	Twin	4	Fair	Competing Leads
10	Picea abies	Norway Spruce	8			Good	
11	Pyrus calleryana	Callery Pear	3			Fair	Competing Leads, Canopy Die-Back
12	Malus sp.	Crabapple	6	Multiple Stemmed	6, 3	Good	
13	Pyrus calleryana	Callery Pear	3			Fair	Competing Leads, Canopy Die-Back
14	Ginkgo biloba	Ginkgo	4			Good	
15	Ostrya virginiana	American Hophornbeam	11			Fair	Minor Leaf Loss, Canopy Die-Back, Damage To Trunk, Competition
16	Ostrya virginiana	American Hophornbeam	12			Fair	Competition, Crotorfed Crown
17	Liquidambar styraciflua	American Sweetgum	18			Fair	Bent Lead, Competition Competing Leads, Poor Scaming, In ROW
18	Acer rubrum	Red Maple	15			Fair	
19	Acer palmatum	Japanese Maple	2			Fair	Winding Lead, Minor Canker
20	Thuja occidentalis	White Cedar	3	Multiple Stemmed	3, 2, 2	Fair	Competition
21	Thuja occidentalis	White Cedar	3	Multiple Stemmed	2, 1	Fair	Competition
22	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 2	Fair	Competition
23	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 1	Fair	Competition
24	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 1	Fair	Competition
25	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 1, 1	Fair	Competition
26	Thuja occidentalis	White Cedar	2	Multiple Stemmed	1, 1	Fair	Competition
27	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 1	Fair	Competition
28	Thuja occidentalis	White Cedar	3	Multiple Stemmed	2, 1	Fair	Competition
29	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 2, 1	Fair	Competition
30	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 2	Fair	Competition
31	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 2	Fair	Competition
32	Thuja occidentalis	White Cedar	2	Multiple Stemmed	2, 1	Fair	Competition
33	Thuja occidentalis	White Cedar	3	Multiple Stemmed	2, 2	Fair	Competition
34	Thuja occidentalis	White Cedar	3	Multiple Stemmed	3, 2, 1	Fair	Competition
35	Pinus Strobus	Eastern White Pine	13			Good	In ROW
36	Liquidambar styraciflua	American Sweetgum	4			Good	In ROW
37	Populus deltoides	Eastern Cottonwood	44	Twin	25	Good	

WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED

ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	NEW CURB BOX?
871 N. GLENHURST DR.	OFF GLENHURST	OFF GLENHURST	OFF GLENHURST
917 N. GLENHURST DR.	OFF GLENHURST	OFF GLENHURST	OFF GLENHURST
920 N. GLENHURST DR.	OFF GLENHURST	OFF GLENHURST	OFF GLENHURST
888 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
912 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5

SEWER SERVICE SCHEDULE – LENGTH OF 6" PVC PIPE NEEDED

ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	TAP/CONNECTION @ MAIN
871 N. GLENHURST DR.	OFF GLENHURST	OFF GLENHURST	OFF GLENHURST
917 N. GLENHURST DR.	OFF GLENHURST	OFF GLENHURST	OFF GLENHURST
920 N. GLENHURST DR.	OFF GLENHURST	OFF GLENHURST	OFF GLENHURST
888 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
912 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5

UTILITY CROSSING SCHEDULE

NOTES:
- *ALL CROSSINGS SHALL BE FIELD VERIFIED.*
- *ALL ELEVATIONS ARE ±*
- *RWSP = REVIEW WITH SERVICE PROVIDER*
- *MIN 18" VERTICAL CLEARANCE OF CROSSINGS*

A *PR. 21" STORM B/PIPE 764.62*
PR. 8" WATER MAIN T/PIPE 763.12
CLEARANCE: 1.50'
STA. 4+73.64 1.73 R

EX SEWER STRUCTURE SCHEDULE

(31) *MAINTAIN*
6+76.66' 48.39' L
COMB. MH. 31
RIM 768.93
18" N INV 761.34 *(MAINTAIN)*
18" S INV 761.34 *(MAINTAIN)*

(31Ac) *MAINTAIN*
6+73.15' 43.18' L
CB 31Ac
RIM 768.80
12" E INV 765.04 *(MAINTAIN)*

(32) *MAINTAIN*
6+61.36' 8.53' L
COMB. MH 32
RIM 769.36
18" N INV 761.15 *(MAINTAIN)*
10" NE INV 761.30 *(MAINTAIN)*
18" S INV 760.91 *(MAINTAIN)*

(32Ag) *MAINTAIN*
6+49.16' 42.68' L
CB 32Ag
RIM 768.80
12" NE INV 764.04 *(MAINTAIN)*

(32B) *MAINTAIN*
6+26.6' 4.51' L
MH 32B
RIM 770.19
12" NE INV 766.78 *(MAINTAIN)*
12" S INV 765.53 *(MAINTAIN)*
21" E INV 763.88 *(MAINTAIN)*
21" W INV 763.88 *(MAINTAIN)*

(32Bb) *MAINTAIN*
6+23.4' 20.01' R
COMB CB 32Bb
RIM 769.46
12" NE INV 765.60 *(MAINTAIN)*

(31A) *MAINTAIN*
6+81.53' 42.32' L
STORM. MH. 31A
RIM 769.05
21" N INV 762.18 *(MAINTAIN)*
12" E INV 765.03 *(MAINTAIN)*
21" S INV 762.18 *(MAINTAIN)*
12" W INV 765.03 *(MAINTAIN)*

(31Ab) *MAINTAIN*
6+97.81' 40.11' L
CB. 31Ab
RIM 768.65
12" W INV 765.56 *(MAINTAIN)*

(32A) *MAINTAIN*
6+68.37' 0.08' L
STORM MH 32A
RIM 761.95
21" N INV 761.95 *(MAINTAIN)*
24" E INV 761.70 *(MAINTAIN)*
12" S INV 762.90 *(MAINTAIN)*
21" W INV 763.35 *(MAINTAIN)*

(32Ab) *MAINTAIN*
6+72.61' 48.64' R
CB 32Ab
RIM 768.61
12" W INV 765.69 *(MAINTAIN)*

(32Ba) *MAINTAIN*
6+39.91' 19.62' L
COMB CB 32Ba
RIM 766.96
12" SW INV 766.96 *(MAINTAIN)*

(17) *MAINTAIN*
7+71.91' 25.99' L
COMB. MH. 17
RIM 768.46
10" NE INV 761.26 *(MAINTAIN)*
10" SW INV 761.36 *(MAINTAIN)*

PR. STORM STRUCTURE SCHEDULE

(32C) *INSTALL*
PR. STA. 5+12.98' 15.28' R
PR. 4' DIA. STORM MANHOLE
PR. RIM 770.92
PR. 21" NW. INV. 764.56
PR. 21" E. INV. 764.56

WATER MAIN SCHEDULE

(29) *MAINTAIN*
6+91.3' 30.29' L
SB 29
RIM 768.91

(35) *MAINTAIN*
6+76.65' 49.35' R
HYD 35
FG 769.15

(30) *MAINTAIN*
6+54' 12.56' L
SB 30
RIM 769.44

(27) *MAINTAIN*
6+72.25' 32.71' R
SB 27
RIM 768.88

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RESURFACING NOTES

- REMOVE SUFFICIENT AMOUNT OF EX. CHIP SEAL/BITUMINOUS SURFACE OVER TRENCH TO PERFORM UTILITY MAINS AND SERVICE INSTALLATION WORK
- PERFORM TEMPORARY TRENCH REPAIR OF WATER AND SEWER MAINS AND SERVICE LEADS AT SURFACE WITH MIN. 8" THICK 21AA CRUSHED CONCRETE AS INCIDENTAL TO UTILITY INSTALLATION WORK (TYP)
- AFTER COMPLETION OF UTILITY WORK, PULVERIZE REMAINING EXISTING CHIP SEAL/BITUMOUS PAVEMENT, TRENCH REPAIR AGGREGATE AND GRANULAR BASE, IN PLACE. RESHAPE, REGRADE AND COMPACT TO ACHIEVE 2% CROSS-SLOPE (UP TO 4% MAX) AS NEW BASE COURSE. REMOVE & DISPOSE OF EXCESS PULVERIZED MATERIAL.
- INSTALL CAPE SEAL (APPROX 1/2" THICK) ON COMPACTED NEW BASE COURSE.

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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. 8" CONC. PAVT. W/ INT. CURB
- PR. 4" CONC. SIDEWALK
- PR. PULVERIZE AND CAPE SEAL
- PR. 6" CONC. PAVT.

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SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Paving & Utility Plan
Oak Street
Sta. 4+00 to P.O.E.

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
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11-03-22	CITY REVIEW
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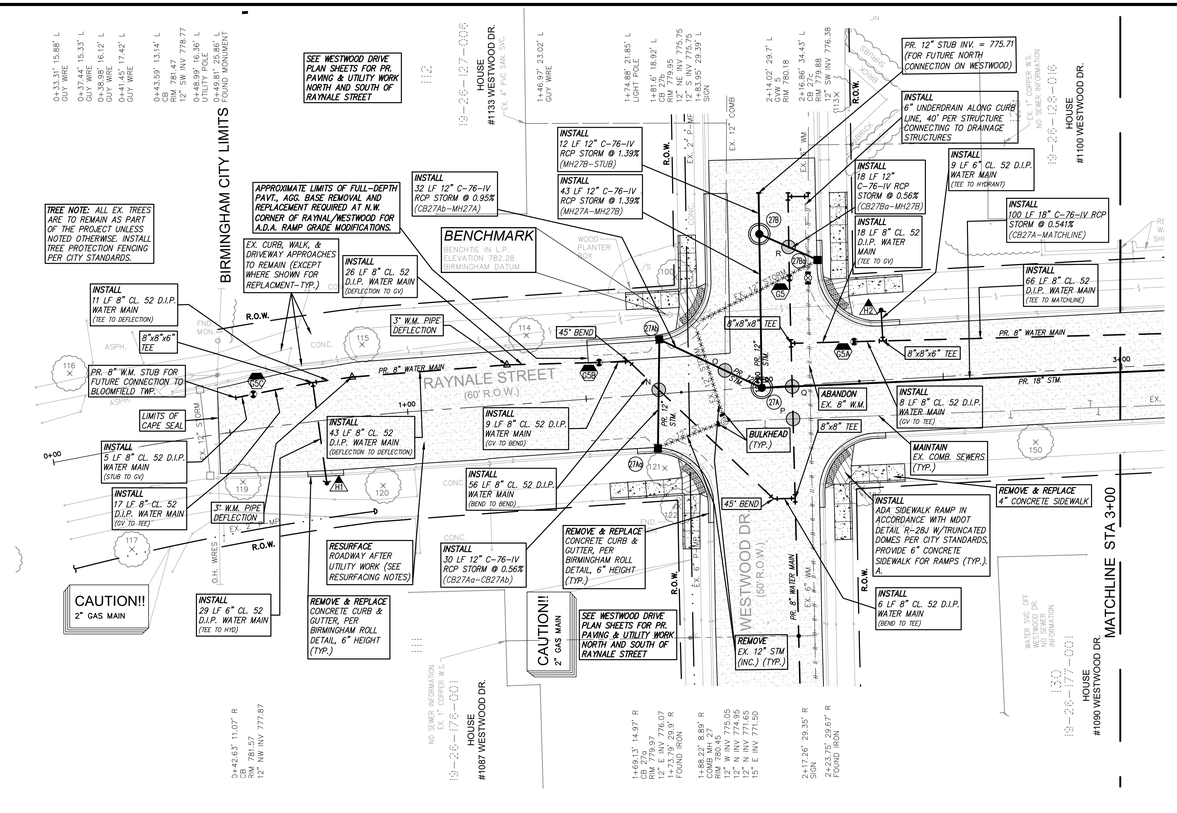
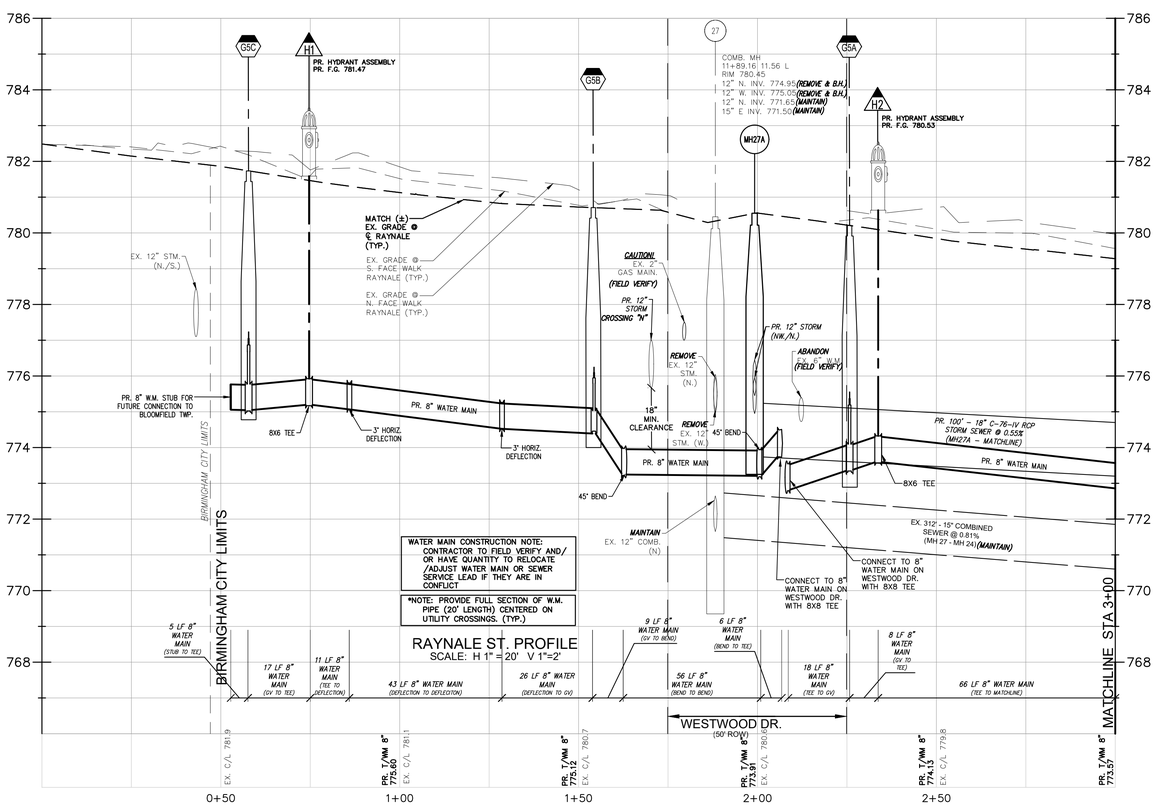
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C2





UTILITY CROSSING SCHEDULE

NOTES:
- *ALL CROSSINGS SHALL BE FIELD VERIFIED.*
- *ALL ELEVATIONS ARE ±*
- *RWCP = REVIEW WITH SERVICE PROVIDER*
- *MIN 18" VERTICAL CLEARANCE OF CROSSINGS*

N *PR. 12" STORM B/ PIPE 775.56*
PR. 12" COMBINED T/PIPE 773.02
CLEARANCE: 2.54'
STA. 1+70.41' 1.76' L

O *SEE SHEET C8*

P *SEE SHEET C8*

Q *SEE SHEET C8*

R *SEE SHEET C8*

EX. SEWER STRUCTURE SCHEDULE

27 *BULKHEAD STORM LEADS*
11+89.16' 11.56' L
COMB MH 27
RIM 780.45
12" W INV 775.05 *(REMOVE & B.H.)*
12" N INV 774.95 *(REMOVE & B.H.)*
12" N INV 771.65 *(MAINTAIN)*
15" E INV 771.50 *(MAINTAIN)*

27b *REMOVE*
12+16.63' 19.46' L
CB 27b
RIM 779.95
12" NE INV 775.75 *(REMOVE)*
12" S INV 775.75 *(REMOVE)*

27a *REMOVE*
11+82.19' 29.25' L
CB 27a
RIM 779.97
12" E INV 779.07 *(REMOVE)*

27c *REMOVE*
12+33.75' 15.00' L
CB 27c
RIM 779.88
12" SW INV 776.38 *(REMOVE)*

PR. STORM STRUCTURE SCHEDULE

27Aa *INSTALL*
PR. STA. 1+99.19' 0.18' R
PR. 4' DIA. STORM M.H.
PR. RIM 780.52
PR. 12" NW. INV. 775.55
PR. 12" N. INV. 774.95
PR. 18" E. INV. 773.75

27Ab *INSTALL*
PR. STA. 1+71.61' 15.19' L
PR. 4' DIA. STORM C.B. W/ 2' SUMP
PR. RIM 779.75
PR. 12" S. INV. 775.75
PR. 12" SE. INV. 775.75

27Ag *INSTALL*
PR. STA. 1+69.01' 15.18' R
PR. 2' DIA. STORM INLET
PR. RIM 779.92
PR. 12" N. INV. 775.92

27B *INSTALL*
PR. STA. 1+99.19' 0.18' R
PR. 4' DIA. STORM M.H. W/ 2' SUMP
PR. RIM 780.52
PR. 12" N. INV. 775.55
PR. 12" S. INV. 775.55
PR. 12" S.E. INV. 776.30

27Ba *INSTALL*
PR. STA. 2+17.04' 34.54' L
PR. 2' DIA. STORM INLET
PR. RIM 779.90
PR. 12" NW. INV. 776.40

WATER MAIN SCHEDULE

65 *SEE SHEET C8*

25A *INSTALL*
PR. 8" GATE VALVE IN BOX
PR. STA 2+25.75, 11.09 L
PR. RIM. 780.02
PR. T/ PIPE 774.45

25B *INSTALL*
PR. 8" GATE VALVE IN BOX
PR. STA 1+54.38, 10.00 L
PR. RIM. 780.70
PR. T/ PIPE 775.03

25C *INSTALL*
PR. 8" GATE VALVE IN BOX
PR. STA 0+57.86, 9.67 L
PR. RIM. 781.81
PR. T/ PIPE 776.23

H1 *INSTALL*
STA 0+75.25' 17.59 R
HYDRANT & ASSEMBLY
PR. FG 781.45

H2 *INSTALL*
STA 2+33.75' 19.45 L
HYDRANT & ASSEMBLY
PR. FG 780.53

WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED			
ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT1)	NEW CURB BOX?
1087 WESTWOOD DR.	SEE SHEET C8	SEE SHEET C8	SEE SHEET C8
1090 WESTWOOD DR.	SEE SHEET C8	SEE SHEET C8	SEE SHEET C8
1100 WESTWOOD DR.	SEE SHEET C8	SEE SHEET C8	SEE SHEET C8
1133 WESTWOOD DR.	SEE SHEET C8	SEE SHEET C8	SEE SHEET C8

COMBINED SEWER SERVICE SCHEDULE- EX. MH27 to EX.MH24C- STA. 0+00 TO 3+00)								
STATION	ADDRESS/DESCRIPTION	EX. SEWER MAIN	SVC. Direction	SVC. DIA.	SVC. MATERIAL	SVC. STATUS	ACTION REQUIRED	LENGTH PVC REQ.(FT)
Unknown	1087 Westwood Dr.	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8
Unknown	1133 Westwood Dr.	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8
1+99.52	Unknown	15" Comb	South	6"(Observed)	Unknown	Active	NA	NA
2+68.29	Unknown	15" Comb	South	6"(Observed)	Unknown	Active	NA	NA
2+90.72	Unknown	15" Comb	North	6"(Observed)	Unknown	Active	NA	NA
Unknown	1090 Westwood Dr.	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8
Unknown	1100 Westwood Dr.	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8	See Sheet C8
2+92.83	Unknown	15" Comb	South	6"(Observed)	Unknown	Active	NA	NA

Ex. Tree Information

Tag	Scientific Name	Common Name	Diameter Breast Height (DBH) Trunk 1	Trunk 2	Condition (1)
100	Acer saccharum	Sugar maple	30.5		Fair
114	Acer rubrum	Red maple	9.8		Fair
115	Acer saccharum	Sugar maple	24.4		Fair
116	Acer saccharum	Sugar maple	41.6		Fair
117	Malus pumila	Apple	10.7		Fair
118	Picea pungens	Blue spruce	19.8		Fair
119	Acer saccharum	Sugar maple	31.4		Fair
120	Acer saccharum	Sugar maple	24.3		Fair
121	Acer saccharum	Sugar maple	16.9		Fair
122	Acer rubrum	Red maple	30.9		Fair
139	Acer rubrum	Red maple	34.5		Fair
150	Acer saccharum	Sugar maple	28.3		Fair

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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. 8" CONC. PAVT. W/ INT. CURB
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PR. PULVERIZE AND CAPE SEAL
PR. 6" CONC. PAVT.

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SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼ of Section 26
Town 2 North, Range 10 East
City of Birmingham, Oakland County, Michigan

SHEET
Paving & Utility Plan
Raynale Street
P.O.B to Sta. 3+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
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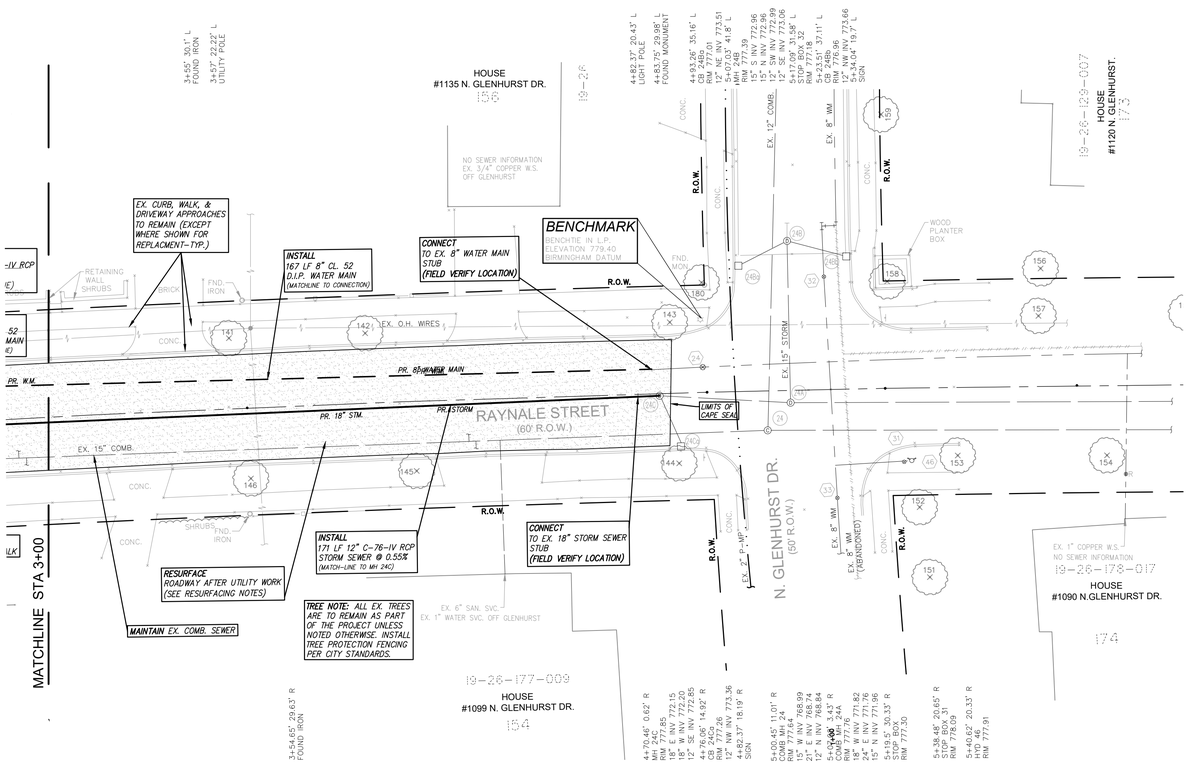
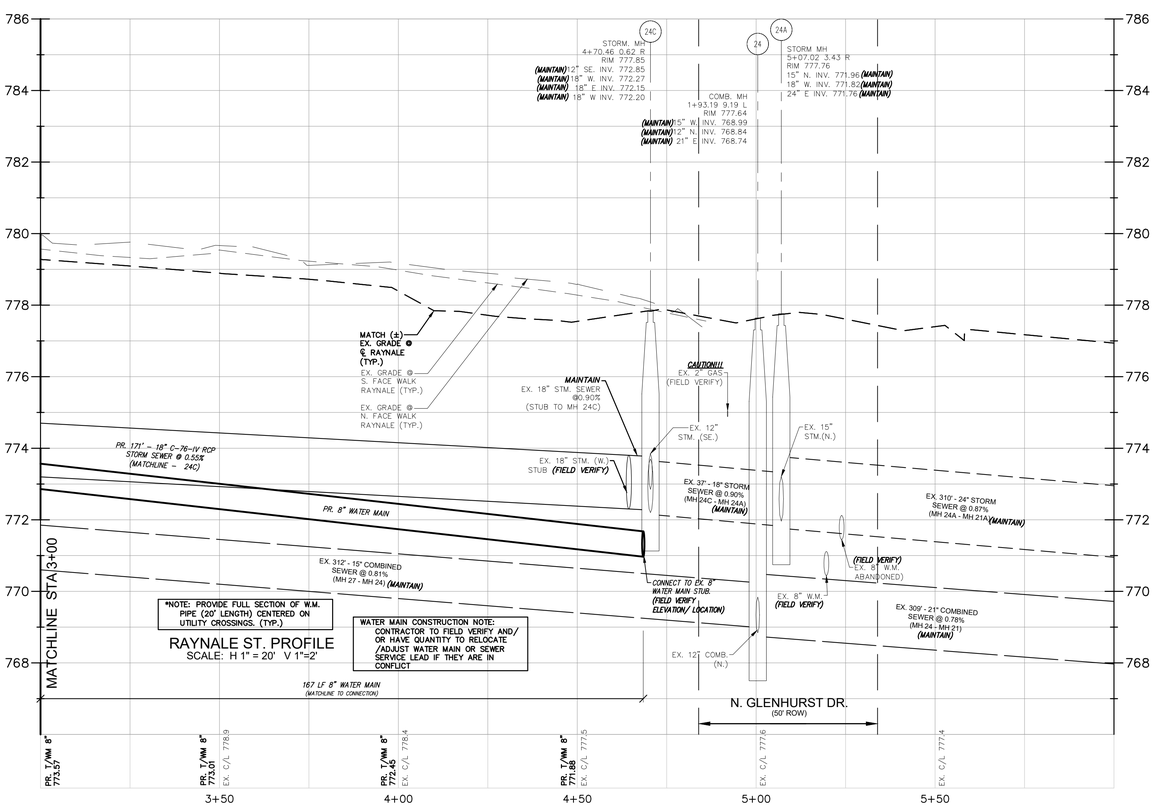
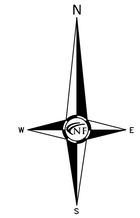
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C3







WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED			
ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	NEW CURB BOX?
1090 N. GLENHURST DR.	1" COPPER	0'	No.
1099 N. GLENHURST DR.	1" COPPER (OFF GLENHURST)	0'	No.
1120 N. GLENHURST DR.	1" COPPER (OFF GLENHURST)	0'	No.
1135 N. GLENHURST DR.	3/4"COPPER (OFF GLENHURST)	0'	No.

COMBINED SEWER SERVICE SCHEDULE- EX. MH27 to EX.MH24C- STA 3+00 TO 6+00)								
STATION	ADDRESS/DESCRIPTION	EX. SEWER MAIN	SVC. Direction	SVC. DIA.	SVC. MATERIAL	SVC. STATUS	ACTION REQUIRED	LENGTH PVC REQ.(FT)
4+16.81	Unknown	15" Comb	North	6"(Observed)	Unknown	Active	NA	NA
4+18.72	Unknown	15" Comb	South	6"(Observed)	Unknown	Active	NA	NA
4+25.47	1099 N. Glenhurst Dr.	15" Comb	South	6"	Unknown	Active	NA	NA
Unknown	1090 N. Glenhurst Dr.	Unknown	Unknown	Unknown	Unknown	Unknown	NA	NA
Unknown	1120 N. Glenhurst Dr.	Unknown	Unknown	Unknown	Unknown	Unknown	NA	NA
Unknown	1135 N. Glenhurst Dr.	Unknown	Unknown	Unknown	Unknown	Unknown	NA	NA

Ex. Tree Information

			Diameter Breast Height (DBH)		
Tag	Scientific Name	Common Name	Trunk 1	Trunk 2	Condition (1)
141	Acer saccharum	Sugar maple	22.2		Fair
142	Acer rubrum	Red maple	4.8		Fair
143	Acer saccharum	Sugar maple	25.1		Fair
144	Acer saccharum	Sugar maple	21.6		Fair
145	Acer rubrum	Red maple	12.8		Fair
146	Acer saccharum	Sugar maple	31.9		Fair
151	Acer rubrum	Red maple	5.8		Fair
152	Malus sylvestris	Crab apple	2.1		Fair
153	Acer saccharum	Sugar maple	24.4		Fair
154	Acer saccharum	Sugar maple	26.1		Fair
156	Picea pungens	Blue spruce	18.2		Fair
157	Acer plantanoides	Norway maple	16.4		Fair
158	Acer saccharinum	Silver maple	37.8		Fair
180	Acer saccharinum	Silver maple	33.4		Fair

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EX. SEWER STRUCTURE SCHEDULE

(24) *MAINTAIN*
5+00.45' 11.01' R
COMB MH 24
RIM 777.64
15" W INV 768.99
21" E INV 768.74
12" N INV 768.84

(24A) *MAINTAIN*
5+07.02' 3.43' R
COMB MH 24A
RIM 777.76
18" W INV 771.82
24" E INV 771.76
15" N INV 771.96

(24B) *MAINTAIN*
5+07.03' 41.8' L
MH 24B
RIM 777.39
15" S INV 772.96
15" N INV 772.96
12" SW INV 772.99
12" SE INV 773.06

(24Ba) *MAINTAIN*
4+93.26' 35.16' L
CB 24Ba
RIM 777.01
12" NE INV 773.51

(24Bb) *MAINTAIN*
5+23.51' 37.11' L
CB 24Bb
RIM 776.96
12" NW INV 773.66

(24C) *MAINTAIN*
4+70.46' 0.62' R
MH 24C
RIM 777.85
18" E INV 772.15
18" W INV 772.20
12" SE INV 772.85

(24Ca) *MAINTAIN*
4+76.06' 14.92' R
CB 24Ca
RIM 777.26
12" NW INV 773.36

WATER MAIN SCHEDULE

(31) *MAINTAIN*
5+38.48' 20.65' R
STOP BOX 31
RIM 778.09

(32) *MAINTAIN*
5+17.09' 31.58' L
STOP BOX 32
RIM 777.18

(46) *MAINTAIN*
5+40.62' 20.33' R
HYD 46
RIM 777.91

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
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12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY:
G. Viju

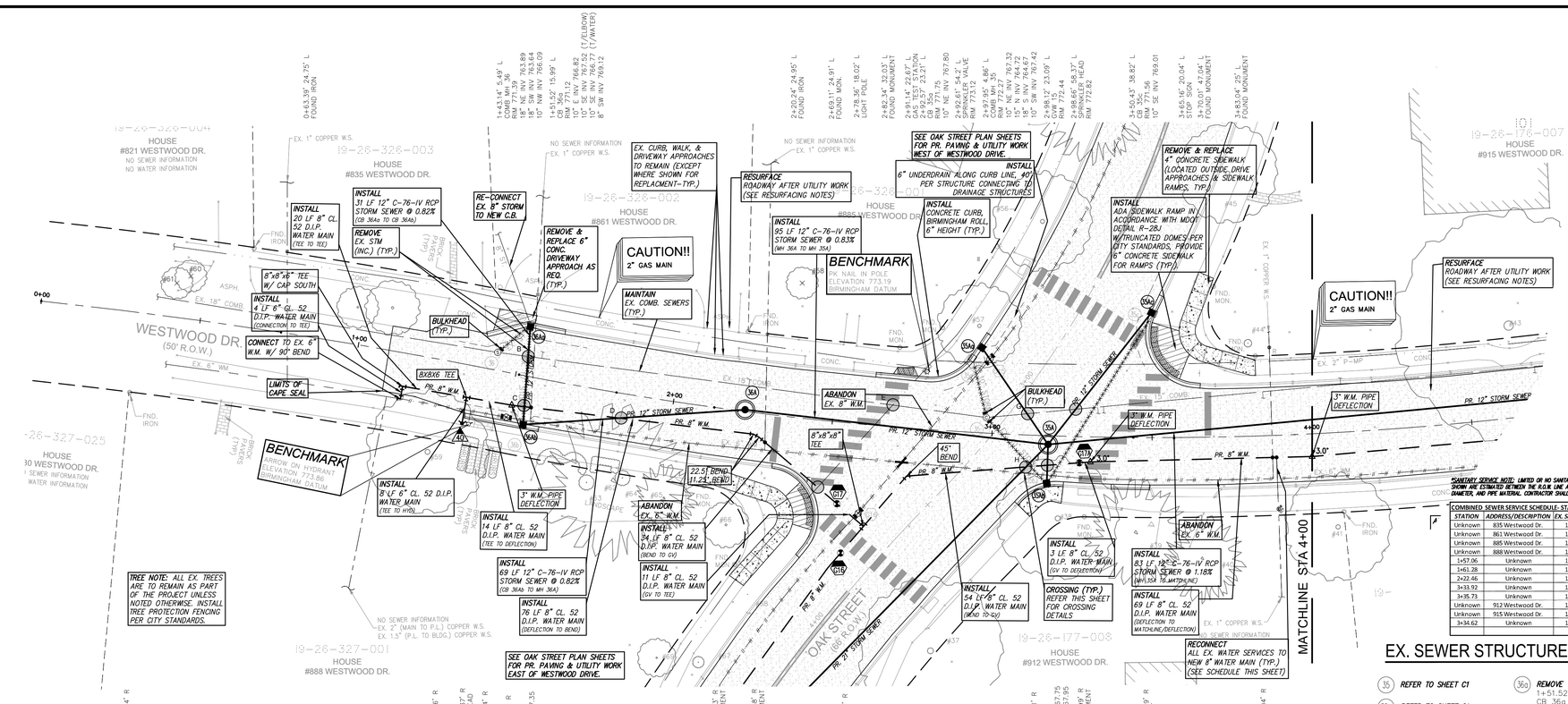
DESIGNED BY:
P. Tulikangas

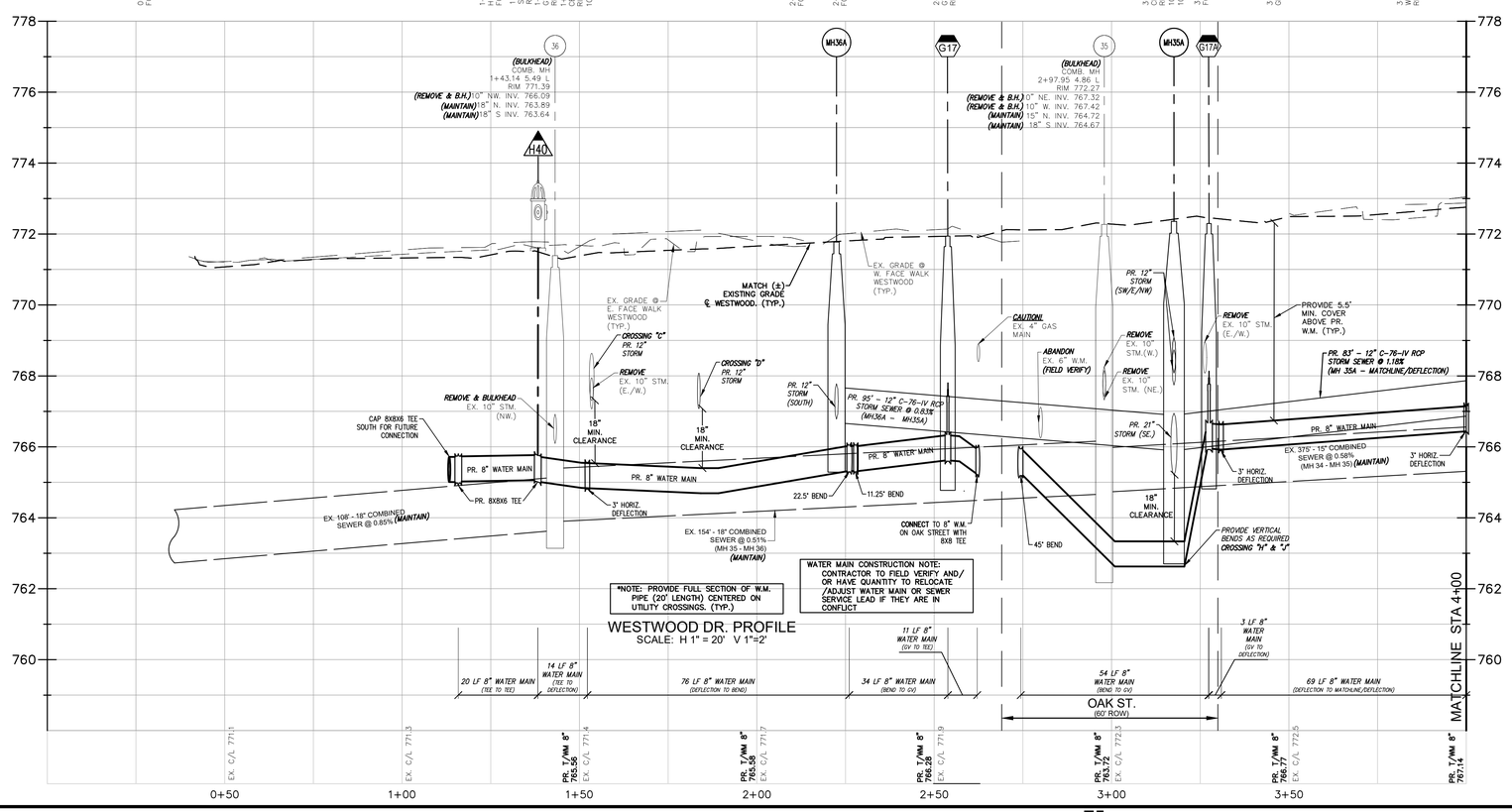
APPROVED BY:
B. Buchholz

DATE:
November 03, 2022

SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. L733
SHEET NO. C4





Ex. Tree Information

Tag	Scientific Name	Common Name	Diameter Breast Height (DBH) Trunk 1	Trunk 2	Condition (1)
37	Populus deltoides	Eastern Cottonwood	44		Good
38	Fraxinus pennsylvanica	Green Ash	32		Fair
39	Picea abies	Norway Spruce	16		Good
40	Picea abies	Norway Spruce	23		Good
44	Malus sp.	Crabapple	2		Poor
45	Liquidambar styraciflua	American Sweetgum	18		Fair
55	Liquidambar styraciflua	American Sweetgum	18		Good
56	Liquidambar styraciflua	American Sweetgum	18		Fair
57	Liquidambar styraciflua	American Sweetgum	21		Good
58	Quercus alba	White Oak	40		Good
59	Acer rubrum	Red Maple	24		Fair
60	Fagus grandifolia	American Beech	28		Poor
61	Carya Ovata	Shagbark Hickory	14		Fair
62	Abies concolor	White Fir	24		Fair
63	Syringa sp.	Lilac	4		Fair
64	Syringa sp.	Lilac	5		Fair
65	Picea pungens	Colorado Blue Spruce	13		Poor
66	Malus sp.	Crabapple	6		Fair

WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED

ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	NEW CURB BOX?
835 WESTWOOD DR.	1.0" COPPER	0'	N
861 WESTWOOD DR.	1.0" COPPER	0'	N
885 WESTWOOD DR.	1.0" COPPER	0'	N
888 WESTWOOD DR.	2.0" MAIN TO PL/ 1" PL TO BLDG.	OUTSIDE PROJECT	N
912 WESTWOOD DR.	1" COPPER	7' (1")	N
915 WESTWOOD DR.	1" COPPER	0'	N

*SANITARY SERVICE NOTE: LIMITED OR NO SANITARY SERVICE INFORMATION IS AVAILABLE FROM CITY 'CARD' RECORDS. TABLE INFORMATION BELOW IS SHOWN PER CITY GIS DATA. REPLACEMENT LENGTHS SHOWN ARE ESTIMATED BETWEEN THE R.O.W. LINE AND THE EXISTING COMBINED SEWER. ALL SEWER LEADS SHALL BE FIELD VERIFIED DURING CONSTRUCTION TO CONFIRM CONNECTION LOCATIONS, PIPE DIAMETER, AND PIPE MATERIAL. CONTRACTOR SHALL WORK WITH CITY INSPECTION STAFF TO DOCUMENT EXISTING SEWER SERVICES AND CONFIRM NECESSARY REPLACEMENT LENGTHS.

COMBINED SEWER SERVICE SCHEDULE- STA 0+00 TO 4+00

STATION	ADDRESS/DESCRIPTION	EX. SEWER MAIN	SVC. Direction	SVC. DIA.	SVC. MATERIAL	SVC. STATUS	ACTION REQUIRED	LENGTH PVC REQ.(FT)
Unknown	835 Westwood Dr.	18" Comb	Unknown	Unknown	Unknown	Unknown	NA	NA
Unknown	861 Westwood Dr.	18" Comb	Unknown	Unknown	Unknown	Unknown	NA	NA
Unknown	885 Westwood Dr.	18" Comb	Unknown	Unknown	Unknown	Unknown	NA	NA
Unknown	888 Westwood Dr.	18" Comb	Unknown	Unknown	Unknown	Unknown	NA	NA
1+57.06	Unknown	18" Comb	East	6"(Observed)	Unknown	Active	NA	NA
1+61.28	Unknown	18" Comb	West	6"(Observed)	Unknown	Active	NA	NA
2+22.46	Unknown	18" Comb	East	6"(Observed)	Unknown	Active	NA	NA
3+33.92	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA
3+35.73	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA
Unknown	912 Westwood Dr.	15" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	30*
Unknown	915 Westwood Dr.	15" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	22*
3+34.62	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA

EX. SEWER STRUCTURE SCHEDULE

(35) REFER TO SHEET C1

(35a) REFER TO SHEET C1

(35b) REFER TO SHEET C1

(35c) REFER TO SHEET C1

(36) BULKHEAD
1+43.14' 5.49' L
COMB MH 36
RIM 771.39
18" NE INV 763.89 (MAINTAIN)
18" SW INV 763.64 (MAINTAIN)
10" NW INV 766.09 (REMOVE & BAL)

(36a) REMOVE
1+51.52' 15.99' L
CB 36a
RIM 771.12
10" E INV 766.82
10" SE INV 767.52 (T/ELBOW)
10" SE INV 766.77 (T/WATER)
8" SW INV 769.12 (RECONNECT TO 36A6)

(36b) REMOVE
1+55.25' 15.3' R
CB 36b
RIM 771.00
10" W INV 767.35

PR. STORM STRUCTURE SCHEDULE

(36A) INSTALL
PR. STA. 2+22.47' 0.53' L
PR. 4' DIA. STORM M.H.
PR. RIM 771.77
PR. 12" S. INV. 766.78
PR. 12" N. INV. 766.68

(36A6) INSTALL
PR. STA. 1+51.58' 15.36' L
PR. 2' DIA. STORM INLET
PR. RIM 771.10
EX. 8" S.W. INV. 796.12 (RE-CONNECT)
PR. 12" E. INV. 767.60

(36AB) INSTALL
PR. STA. 1+55.27' 15.08' R
PR. 4' DIA. STORM C.B.
W/ 2' SUMP
PR. RIM 770.85
PR. 12" N. INV. 767.35
PR. 12" W. INV. 767.35

(35A) SEE FULL DETAILS SHEET C1
PR. RIM 772.36
PR. 12" S. INV. 765.89
PR. 12" SW. INV. 768.08
PR. 12" E. INV. 768.08
PR. 12" NW. INV. 767.74
PR. 12" N. INV. 765.89
PR. 21" SE. INV. 765.20

(35A6) REFER TO SHEET C1

(35AB) REFER TO SHEET C1

(35AC) REFER TO SHEET C1

WATER MAIN SCHEDULE

(G17) REFER SHEET C1

(H40) REMOVE EX. HYDRANT
1+38.42' 18.26' R
HYD 40
FG 771.59
INSTALL HYDRANT & ASSEMBLY
STA. 1+36.40' 18.42' R
PR. F.G. 771.50
PR. T/PIPE 766.00

(G17B) REFER SHEET C1

(C1) REMOVE EX. WELL & ABANDON VALVE
1+49.71' 13.84' R
GVW 17
RIM 771.05
INSTALL 8" GATE VALVE IN BOX
PR. STA. 2+53.86' 25.47' R
PR. RIM. 771.98
PR. T/PIPE 766.30

(G17B) INSTALL
PR. 8" GATE VALVE IN BOX
PR. STA. 3+27.54' 8.16' R
PR. RIM. 772.29
PR. T/PIPE 766.65

UTILITY CROSSING SCHEDULE

NOTES:
* ALL CROSSINGS SHALL BE FIELD VERIFIED.
* ALL ELEVATIONS ARE ±
* RWSP = REVIEW WITH SERVICE PROVIDER
* MIN 18" VERTICAL CLEARANCE OF CROSSINGS

B PR. 12" STORM B/PIPE 767.52
EX. 18" COMBINED T/PIPE 765.64
CLEARANCE: 1.68"
STA. 1+52.72' 6.10' L

C PR. 12" STORM B/PIPE 767.40
PR. 8" WATER MAIN T/PIPE 765.50
CLEARANCE: 1.9'
STA. 1+54.58' 9.52' R

D PR. 12" STORM SEWER B/PIPE 767.10
PR. 8" WATER MAIN T/PIPE 765.38
CLEARANCE: 1.72'
STA. 1+84.48' 7.73' R

E EX. GAS MAIN B/PIPE R.W.S.P.
EX. 15" COMBINED T/PIPE 766.00
CLEARANCE: 1.5' (MIN.)
STA. 2+68.20' 6.86' L

F EX. GAS MAIN B/PIPE R.W.S.P.
PR. 8" WATER MAIN B/PIPE 766.28
CLEARANCE: 1.5' (MIN.)
STA. 2+47.54' 20.90' R

G PR. 12" STORM SEWER B/PIPE 768.20
EX. 15" COMBINED T/PIPE 766.21
CLEARANCE: 1.99'
STA. 3+10.84' 6.65' L

H PR. 21" STORM B/PIPE 765.15
PR. 8" WATER MAIN. T/PIPE 763.30
CLEARANCE: 1.85' (MIN.)
STA. 3+10.93' 10.04' R

I PR. 12" STORM SEWER B/PIPE 767.80
EX. 15" COMBINED T/PIPE 766.30
CLEARANCE: 1.5'
STA. 3+25.93 8.54 L

J PR. 12" STORM SEWER B/PIPE 768.26
PR. 8" WATER MAIN T/PIPE 763.30
CLEARANCE: 4.96'
STA. 3+17.65' 9.22' R

EXISTING CURB & GUTTER / LATERAL INSTALLATION NOTE:

EXISTING CURB AND GUTTER SHALL REMAIN, UNLESS OTHERWISE INDICATED OR AS DETERMINED BY THE CITY. ALL SEWER AND WATER SERVICE LATERALS MUST BE BORED BENEATH EXISTING CURB AND GUTTER TO REMAIN. THE COST OF BORING UNDER THE CURB SHALL BE INCIDENTAL TO THE COST OF THE WATER AND SEWER LATERALS. ALSO, THE CITY SHALL DETERMINE THE MINIMUM AMOUNT OF CURB AND GUTTER REPLACEMENT NEEDED FOR CURB-LINE DRAINAGE STRUCTURE REPAIRS, REPLACEMENTS, ETC.

RESURFACING NOTES

- REMOVE SUFFICIENT AMOUNT OF EX. CHIP SEAL/BITUMINOUS SURFACE OVER TRENCH TO PERFORM UTILITY MAINS AND SERVICE INSTALLATION WORK
- PERFORM TEMPORARY TRENCH REPAIR OF WATER AND SEWER MAINS AND SERVICE LEADS AT SURFACE WITH MIN. 8" THICK 21AA CRUSHED CONCRETE AS INCIDENTAL TO UTILITY INSTALLATION WORK (TYP)
- AFTER COMPLETION OF UTILITY WORK, PULVERIZE REMAINING EXISTING CHIP SEAL/BITUMOUS PAVEMENT, TRENCH REPAIR AGGREGATE AND GRANULAR BASE, IN PLACE. RESHAPE, REGRADE AND COMPACT TO ACHIEVE 2% CROSS-SLOPE (UP TO 4% MAX) AS NEW BASE COURSE. REMOVE & DISPOSE OF EXCESS PULVERIZED MATERIAL.
- INSTALL CAPE SEAL (APPROX 1/2" THICK) ON COMPACTED NEW BASE COURSE

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
GROUND ELEVATION
EX PAVERS
PR. 8" CONC. PAVT. W/ INT. CURB
PR. 4" CONC. SIDEWALK
PR. PULVERIZE AND CAPE SEAL
PR. 8" CONC. PAVT.

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

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

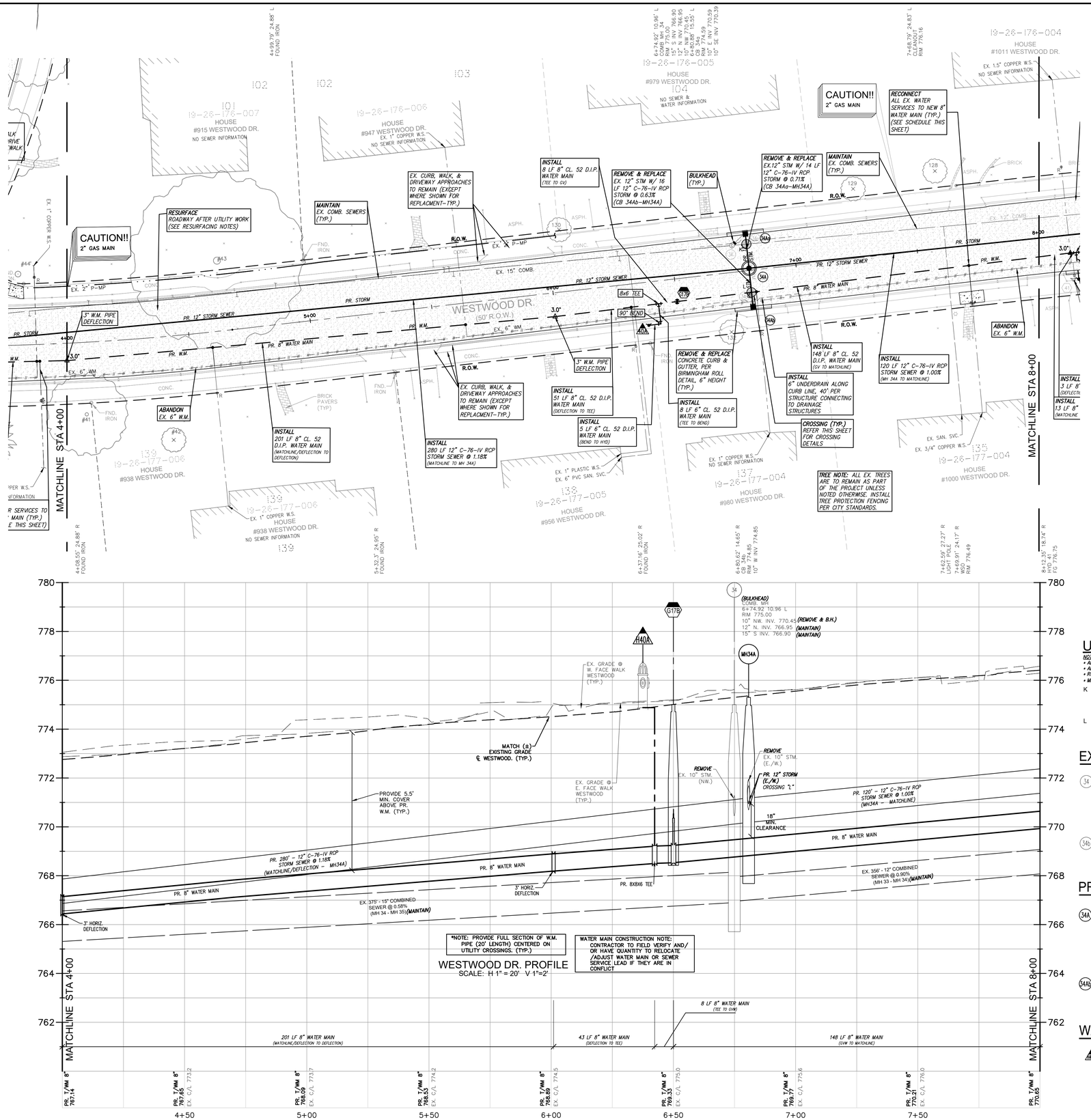
SHEET
Paving & Utility Plan
Westwood Drive
P.O.B. to Sta. 4+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C5



WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED

ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	NEW CURB BOX?
915 WESTWOOD DR.	SEE SHEET C5	SEE SHEET C5	SEE SHEET C5
938 WESTWOOD DR.	1.0" COPPER	8'	N
947 WESTWOOD DR.	1.0" COPPER	0'	N
956 WESTWOOD DR.	1.0" COPPER	4'	N
979 WESTWOOD DR.	UNKNOWN	UNKNOWN	UNKNOWN
980 WESTWOOD DR.	1.0" COPPER	5' (1')	N
1000 WESTWOOD DR.	3/4" COPPER	17' (1')	Y
1011 WESTWOOD DR.	SEE SHEET C7	SEE SHEET C7	SEE SHEET C7

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COMBINED SEWER SERVICE SCHEDULE- STA. 4+00 TO 8+00

STATION	ADDRESS/DESCRIPTION	EX. SEWER MAIN	SVC. Direction	SVC. DIA.	SVC. MATERIAL	SVC. STATUS	ACTION REQUIRED	LENGTH PVC REQ.(FT)
4+09.25	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA
Unknown	938 Westwood Dr.	15" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	31*
Unknown	947 Westwood Dr.	15" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	23*
4+71.46	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA
4+87.55	Unknown	15" Comb	East	6"(Observed)	Unknown	Active	NA	NA
5+56.74	Unknown	15" Comb	East	6"(Observed)	Unknown	Active	NA	NA
5+58.74	Unknown	15" Comb	East	6"(Observed)	Unknown	Active	NA	NA
5+60.44	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA
Unknown	979 Westwood Dr.	15" Comb	Unknown	Unknown	Unknown	Unknown	NA	NA
Unknown	980Westwood Dr.	15" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	27*
6+27.82	Unknown	15" Comb	East	6"(Observed)	Unknown	Active	NA	NA
6+28.63	Unknown	15" Comb	West	6"(Observed)	Unknown	Active	NA	NA
6+32.39	956 Westwood Dr.	15" Comb	West	6"	P.V.C.	Active	NA	NA
7+61.64	1000 Westwood Dr.	12" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	25*
Unknown	1011 Westwood Dr.	12" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	26*

Ex. Tree Information

Tag	Scientific Name	Common Name	Diameter Breast Height (DBH) Trunk 1	Trunk 2	Condition (1)
128	Acer rubrum	Red maple	21.2		Fair
129	Acer plantanoides	Norway maple	13.5		Fair
130	Acer rubrum	Red maple	35.8		Fair
131	Acer rubrum	Red maple	48.4		Fair
132	Acer rubrum	Red maple	53.4		Fair

UTILITY CROSSING SCHEDULE

NOTES:
- *ALL CROSSINGS SHALL BE FIELD VERIFIED.*
- *ALL ELEVATIONS ARE ±*
- *RWSP = REVIEW WITH SERVICE PROVIDER*
- *MIN 18" VERTICAL CLEARANCE OF CROSSINGS*

K *PR. 12" STORM. B/PIPE 770.76*
EX. 8" COMBINED T/PIPE 768.16
CLEARANCE: 2.6'
STA. 6+80.77' 10.83' L

L *PR. 12" STORM B/PIPE 771.01*
PR. 8" WATER MAIN T/PIPE 769.49
CLEARANCE: 1.5' (MIN.)
STA. 6+80.70' 9.02' R

EX. SEWER STRUCTURE SCHEDULE

(34) *BULKHEAD*
6+74.92' 10.96' L
COMB MH 34
RIM 775.00
15" S INV 766.90 *(MAINTAIN)*
12" N INV 766.95 *(MAINTAIN)*
10" NW 770.45 *(REMOVE & B.H.)*

(34a) *REMOVE*
6+80.88' 15.55' L
CB 34a
RIM 774.59
10" E INV 770.59 *(REMOVE)*
10" SE INV 770.39 *(REMOVE)*

(34b) *REMOVE*
6+80.62' 14.65' R
CB 34b
RIM 774.85
10" W INV 774.85 *(REMOVE)*

PR. STORM STRUCTURE SCHEDULE

(34A) *INSTALL*
PR. STA.6+75.73' 0.95' L
PR. 4' DIA. STORM M.H.
W/ 2' SUMP
PR. RIM 775.30
PR. 12" W. INV. 770.69
PR. 12" E. INV. 770.95
PR. 12" N. INV. 770.18
PR. 12" S. INV. 770.18

(34Aa) *INSTALL*
PR. STA. 6+85.73' 15.00' L
PR. 2' DIA. STORM INLET
PR. RIM 774.59
PR. 12" E. INV. 770.79

(34Ab) *INSTALL*
PR. STA. 6+85.73' 15.04' R
PR. 2' DIA. STORM INLET
PR. RIM 774.85
PR. 12" W. INV. 771.05

WATER MAIN SCHEDULE

H40A *PR. HYDRANT*
INSTALL HYDRANT & ASSEMBLY
STA. 6+37.41' 17.65' R
PR. F.G. 774.88
PR. T/PIPE 769.38

G17B *PR. GATE VALVE IN BOX*
INSTALL 8" GATE VALVE IN BOX
PR. STA. 6+50.00' 9.28' R
PR. RIM. 774.74
PR. T/PIPE 769.24

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RESURFACING NOTES

- REMOVE SUFFICIENT AMOUNT OF EX. CHIP SEAL/BITUMINOUS SURFACE OVER TRENCH TO PERFORM UTILITY MAINS AND SERVICE INSTALLATION WORK
- PERFORM TEMPORARY TRENCH REPAIR OF WATER AND SEWER MAINS AND SERVICE LEADS AT SURFACE WITH MIN. 8" THICK 21AA CRUSHED CONCRETE AS INCIDENTAL TO UTILITY INSTALLATION WORK (TYP)
- AFTER COMPLETION OF UTILITY WORK, PULVERIZE REMAINING EXISTING CHIP SEAL/BITUMOUS PAVEMENT, TRENCH REPAIR AGGREGATE AND GRANULAR BASE, IN PLACE. RESHAPE, REGRADE AND COMPACT TO ACHIEVE 2% CROSS-SLOPE (UP TO 4% MAX) AS NEW BASE COURSE. REMOVE & DISPOSE OF EXCESS PULVERIZED MATERIAL.
- INSTALL CAPE SEAL (APPROX 1/2" THICK) ON COMPACTED NEW BASE COURSE

GAS MAIN NOTE

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE AS-BUILT LOCATIONS OF THE NEW GAS MAIN WITH CONSUMER'S PRIOR TO EXCAVATION. THE PROPOSED LOCATION IS BEING PROVIDED PER THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN, AND NEITHER THE CITY NOR NFE IS EXPRESSING ANY GUARANTEE AS TO THE ACCURACY OF THE LOCATION DEPICTED HEREIN.

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. 8" CONC. PAVT. W/ INT. CURB
- PR. 4" CONC. SIDEWALK
- PR. PULVERIZE AND CAPE SEAL
- PR. 6" CONC. PAVT.

NF ENGINEERS
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WWW.NOWAKFRAUS.COM

SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

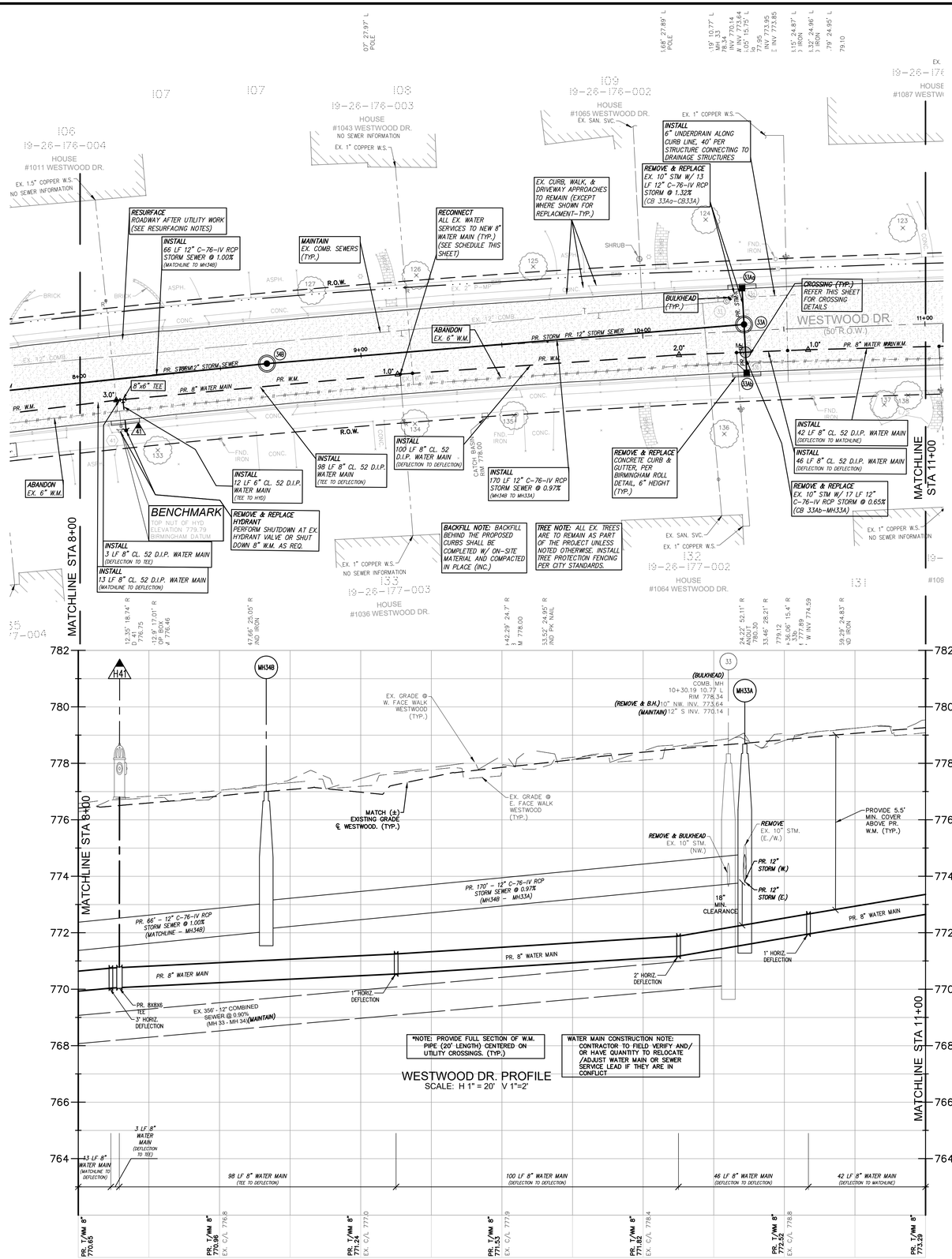
SHEET
Paving & Utility Plan
Westwood Drive
Sta. 4+00 to 8+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C6



WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED			
ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT)	NEW CURB BOX?
1011 WESTWOOD DR.	1.5" COPPER	0'	N
1036 WESTWOOD DR.	1" COPPER	4'(1")	N
1043 WESTWOOD DR.	1" COPPER	0'	N
1064 WESTWOOD DR.	1" COPPER	4'(1")	N
1065 WESTWOOD DR.	1" COPPER	0'	N
1087 WESTWOOD DR.	SEE SHEET C8	SEE SHEET C8	SEE SHEET C8

SANITARY SERVICE NOTE: *LIMITED OR NO SANITARY SERVICE INFORMATION IS AVAILABLE FROM CITY CARD RECORDS. TABLE INFORMATION BELOW IS SHOWN PER CITY GIS DATA. REPLACEMENT LENGTHS SHOWN ARE ESTIMATED BETWEEN THE R.O.W. LINE AND THE EXISTING COMBINED SEWER. ALL SEWER LEADS SHALL BE FIELD VERIFIED DURING CONSTRUCTION TO CONFIRM CONNECTION LOCATIONS, PIPE DIAMETER, AND PIPE MATERIAL. CONTRACTOR SHALL WORK WITH CITY INSPECTION STAFF TO DOCUMENT EXISTING SEWER SERVICES AND CONFIRM NECESSARY REPLACEMENT LENGTHS.*

COMBINED SEWER SERVICE SCHEDULE- STA. 8+00 TO 11+00

STATION	ADDRESS/DESCRIPTION	EX. SEWER MAIN	SVC. Direction	SVC. DIA.	SVC. MATERIAL	SVC. STATUS	ACTION REQUIRED	LENGTH PVC REQ.(FT)
Unknown	1036 Westwood Dr.	12" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	25*
Unknown	1043 Westwood Dr.	12" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	25*
9+30.50	Unknown	12" Comb	East	6"(Observed)	Unknown	Active	NA	NA
9+14.92	Unknown	12" Comb	West	6"(Observed)	Unknown	Active	NA	NA
9+79.54	Unknown	12" Comb	East	6"(Observed)	Unknown	Active	NA	NA
9+84.83	Unknown	12" Comb	West	6"(Observed)	Unknown	Active	NA	NA
10+22.53	1064 Westwood Dr.	12" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	23*
Unknown	1065 Westwood Dr.	12" Comb	Unknown	Unknown	Unknown	Unknown	Field Examine*	27*
10+27.22	Unknown	12" Comb	East	6"(Observed)	Unknown	Active	NA	NA

Ex. Tree Information

Tag	Scientific Name	Common Name	Diameter Breast Height (DBH) Trunk 1	Trunk 2	Condition (1)
123	Acer rubrum	Red maple	45.7		Fair
124	Acer rubrum	Red maple	35.0		Fair
125	Acer rubrum	Red maple	35.6		Fair
126	Acer rubrum	Red maple	23.3		Fair
127	Acer rubrum	Red maple	34.8		Fair
133	Acer saccharum	Sugar maple	27.4		Fair
134	Acer saccharum	Sugar maple	30.3		Fair
135	Acer rubrum	Red maple	33.3		Fair
136	Acer rubrum	Red maple	24.8		Fair
137	Prunus serotina	Black cherry	20.0		Fair
138	Acer rubrum	Red maple	32.8		Fair

EXISTING CURB & GUTTER / LATERAL INSTALLATION NOTE:

EXISTING CURB AND GUTTER SHALL REMAIN, UNLESS OTHERWISE INDICATED OR AS DETERMINED BY THE CITY. ALL SEWER AND WATER SERVICE LATERALS MUST BE BORED BENEATH EXISTING CURB AND GUTTER TO REMAIN. THE COST OF BORING UNDER THE CURB SHALL BE INCIDENTAL TO THE COST OF THE WATER AND SEWER LATERALS. ALSO, THE CITY SHALL DETERMINE THE MINIMUM AMOUNT OF CURB AND GUTTER REPLACEMENT NEEDED FOR CURB-LINE DRAINAGE STRUCTURE REPAIRS, REPLACEMENTS, ETC.

RESURFACING NOTES

- REMOVE SUFFICIENT AMOUNT OF EX. CHIP SEAL/BITUMINOUS SURFACE OVER TRENCH TO PERFORM UTILITY MAINS AND SERVICE INSTALLATION WORK
- PERFORM TEMPORARY TRENCH REPAIR OF WATER AND SEWER MAINS AND SERVICE LEADS AT SURFACE WITH MIN. 8" THICK 21AA CRUSHED CONCRETE AS INCIDENTAL TO UTILITY INSTALLATION WORK (TYP)
- AFTER COMPLETION OF UTILITY WORK, PULVERIZE REMAINING EXISTING CHIP SEAL/BITUMOUS PAVEMENT, TRENCH REPAIR AGGREGATE AND GRANULAR BASE, IN PLACE. RESHAPE, REGRADE AND COMPACT TO ACHIEVE 2% CROSS-SLOPE (UP TO 4% MAX) AS NEW BASE COURSE. REMOVE & DISPOSE OF EXCESS PULVERIZED MATERIAL.
- INSTALL CAPE SEAL (APPROX 1/2" THICK) ON COMPACTED NEW BASE COURSE

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.

UTILITY CROSSING SCHEDULE

NOTES:
- *ALL CROSSINGS SHALL BE FIELD VERIFIED.*
- *ALL ELEVATIONS ARE ±*
- *RWOP = REVIEW WITH SERVICE PROVIDER*
- *MIN 18" VERTICAL CLEARANCE OF CROSSINGS*

M *PR. 12" STORM SEWER B/PIPE 773.84*
PR. 8" WATER MAIN T/PIPE 772.25
CLEARANCE: 1.59'
STA. 10+36.06' 7.60' R

EX. SEWER STRUCTURE SCHEDULE

33 *BULKHEAD*
10+30.19' 10.77' L
COMB MH 33
RIM 778.34
12" S INV 770.14 *(MAINTAIN)*
10" NW INV 773.64 *(REMOVE & B.H.)*

33a *REMOVE*
10+36.05' 15.75' L
CB 33o
RIM 777.95
10" E INV 773.95 *(REMOVE)*
10" SE INV 773.85 *(REMOVE)*

33b *REMOVE*
10+36.06' 15.4' R
CB 33p
RIM 777.89
10" W INV 774.59 *(REMOVE)*

PR. STORM STRUCTURE SCHEDULE

34B *INSTALL*
PR. STA. 8+66.54' 0.00' L/R
PR. 4' DIA. STORM M.H.
PR. RIM 777.00
PR. 12" N. INV. 772.14
PR. 12" S. INV. 772.04

33A *INSTALL*
PR. STA. 10+36.00' 2.25' L
PR. 4' DIA. STORM M.H.
W/ 2' SUMP
PR. RIM 778.68
PR. 12" W. INV. 773.78
PR. 12" E. INV. 773.78
PR. 12" S. INV. 773.78

33Aa *INSTALL*
PR. STA. 10+35.89' 15.11' L
PR. 2' DIA. STORM INLET
PR. RIM 777.95
PR. 12" E. INV. 773.95

33Ab *INSTALL*
PR. STA. 10+36.14' 14.86' R
PR. 2' DIA. STORM INLET
PR. RIM 777.89
PR. 12" W. INV. 773.89

EX. WATER MAIN SCHEDULE

H41 *REMOVE EX. HYDRANT*
8+12.35' 18.74' R
HYD 41
FG 776.75
INSTALL HYDRANT & ASSEMBLY
PR. STA. 8+14.54' 18.69' R
PR. F.G. 776.80
PR. T/PIPE 771.30

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. PAVT. W/ INT. CURB
PR. 4" CONC. SIDEWALK
PR. PULVERIZE AND CAPE SEAL
PR. 6" CONC. PAVT.

NF ENGINEERS
CIVIL ENGINEERS
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WWW.NOWAKFRAUS.COM

SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

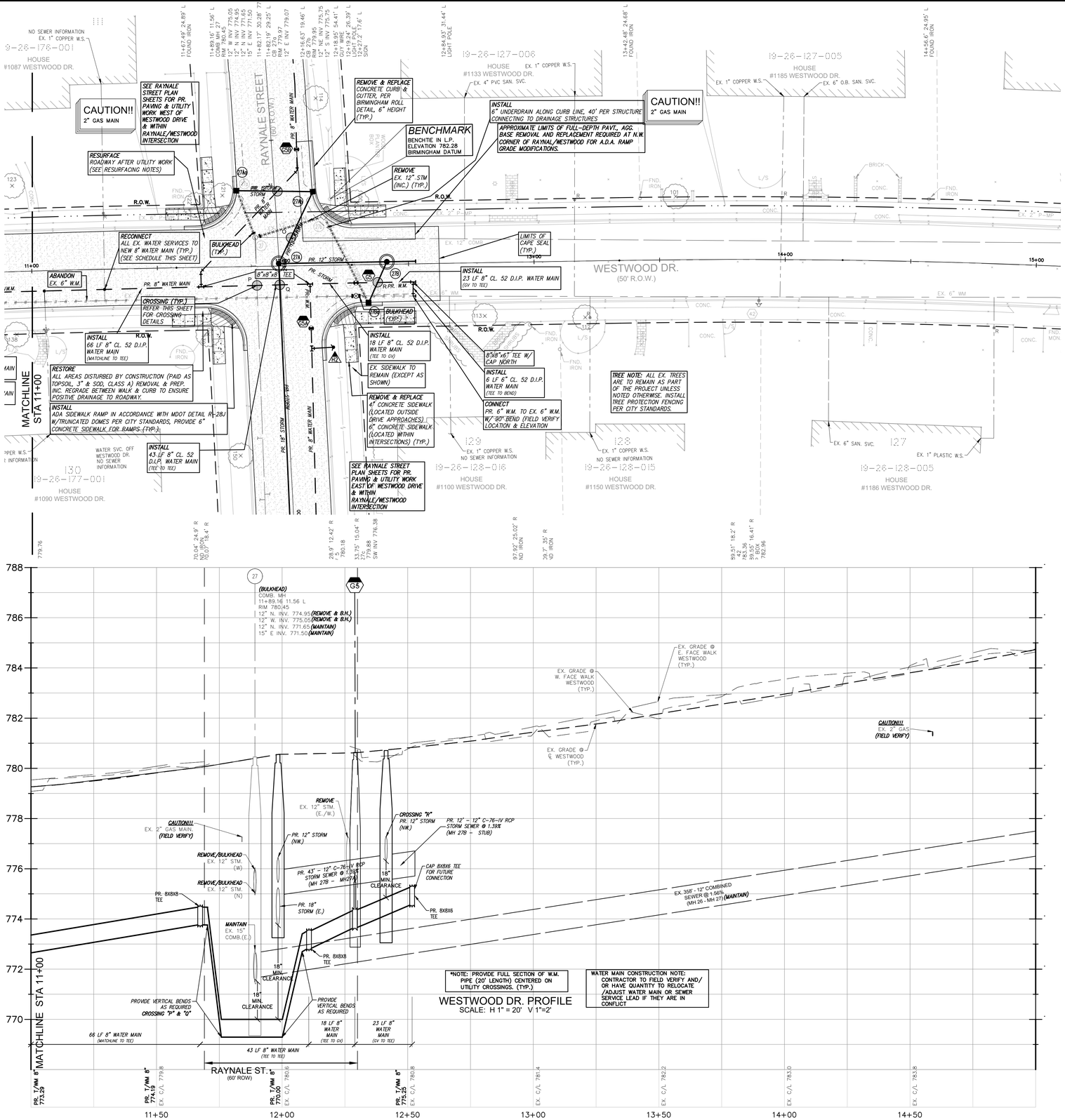
SHEET
Paving & Utility Plan
Westwood Drive
Sta. 8+00 to 11+00

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C7



WATER SERVICE SCHEDULE – LENGTH OF WATER SERVICE NEEDED			
ADDRESS OR DESCRIPTION	EXISTING SERVICE	LENGTH NEEDED (FT1)	NEW CURB BOX?
1087 WESTWOOD DR.	1.0" COPPER	0'	N
1090 WESTWOOD DR.	1.0" COPPER	5'(1.0")	N
1100 WESTWOOD DR.	1.0" COPPER	OUTSIDE PROJECT	N
1133 WESTWOOD DR.	1.0" COPPER	OUTSIDE PROJECT	N

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COMBINED SEWER SERVICE SCHEDULE- STA. 11+00 TO P.O.E.)

STATION	ADDRESS/DESCRIPTION	EX. SEWER MAIN	SVC. Direction	SVC. DIA.	SVC. MATERIAL	SVC. STATUS	ACTION REQUIRED	LENGTH PVC REQ.(FT)
Unknown	1087 Westwood Dr.	Off Raynale	Off Raynale	Unknown	Unknown	Unknown	Field Examine*	55*
Unknown	1090 Westwood Dr.	Off Raynale	Off Raynale	Unknown	Unknown	Unknown	Field Examine*	29*
Unknown	1100 Westwood Dr.	12" Comb	West	Unknown	Unknown	Unknown	NA	NA
Unknown	1133 Westwood Dr.	12" Comb	East	Unknown	Unknown	Unknown	NA	NA

Ex. Tree Information

Tag	Scientific Name	Common Name	Diameter Breast Height (DBH) Trunk 1	Trunk 2	Condition (1)
100	Acer saccharum	Sugar maple	30.5		Fair
101	Acer saccharum	Sugar maple	25.6		Fair
112	Acer saccharum	Sugar maple	25.5		Fair
113	Acer saccharum	Sugar maple	30.0		Fair
121	Acer saccharum	Sugar maple	16.9		Fair
122	Acer rubrum	Red maple	30.9		Fair
139	Acer rubrum	Red maple	34.5		Fair

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- INSTALL CAPE SEAL (APPROX 1/2" THICK) ON COMPACTED NEW BASE COURSE

GAS MAIN NOTE

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE AS-BUILT LOCATIONS OF THE NEW GAS MAIN WITH CONSUMER'S PRIOR TO EXCAVATION. THE PROPOSED LOCATION IS BEING PROVIDED PER THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN, AND NEITHER THE CITY NOR NFE IS EXPRESSING ANY GUARANTEE AS TO THE ACCURACY OF THE LOCATION DEPICTED HEREIN.

UTILITY NOTE

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UTILITY CROSSING SCHEDULE

NOTES:
- *ALL CROSSINGS SHALL BE FIELD VERIFIED.*
- *ALL ELEVATIONS ARE ±*
- *RWSP = REVIEW WITH SERVICE PROVIDER*
- *MIN 18" VERTICAL CLEARANCE OF CROSSINGS*

N *SEE SHEET C3*

O *PR. 12" STORM. B/PIPE 775.82*
EX. 12" COMBINED T/PIPE 773.92
CLEARANCE: 2.00'
STA. 12+31.41' 11.23' L

P *EX. 15" COMBINED B/PIPE 771.50*
PR. 8" WATER MAIN T/PIPE 770.00
CLEARANCE: 1.5'
STA. 11+89.42' 7.66' R

Q *PR. 18" STORM. B/PIPE 773.75*
PR. 8" WATER MAIN T/PIPE 770.00
CLEARANCE: 3.75'
STA. 11+98.40' 7.48' R

R *PR. 12" STORM B/PIPE 776.35*
PR. 8" WATER MAIN T/PIPE 774.67
CLEARANCE: 1.68'
STA. 12+37.59' 7.20' R

EX. SEWER STRUCTURE SCHEDULE

27 *REFER TO SHEET C3*
27a *REFER TO SHEET C3*
27b *REFER TO SHEET C3*
27c *REFER TO SHEET C3*

PR. SEWER STRUCTURE SCHEDULE

27A *REFER TO SHEET C3*
27B *REFER TO SHEET C3*
27Aa *REFER TO SHEET C3*
27Ab *REFER TO SHEET C3*
27Ba *REFER TO SHEET C3*

WATER MAIN SCHEDULE

65 *REMOVE EX. WELL & ABANDON VALVE*
12+28.9' 12.42' R
GVW 5
RIM 780.18
W/ 8" GATE VALVE IN BOX
PR. STA. 12+28.98' 7.20 R
PR. RIM. 780.64
PR. T/PIPE 769.68

250A *SEE SHEET C3*

250B *SEE SHEET C3*

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SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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BIRMINGHAM
A WALKABLE CITY
Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
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Range 10 East
City of Birmingham,
Oakland County, Michigan

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Paving & Utility Plan
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DESIGNED BY: P. Tulikangas
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DATE: November 03, 2022
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NFE JOB NO. L733
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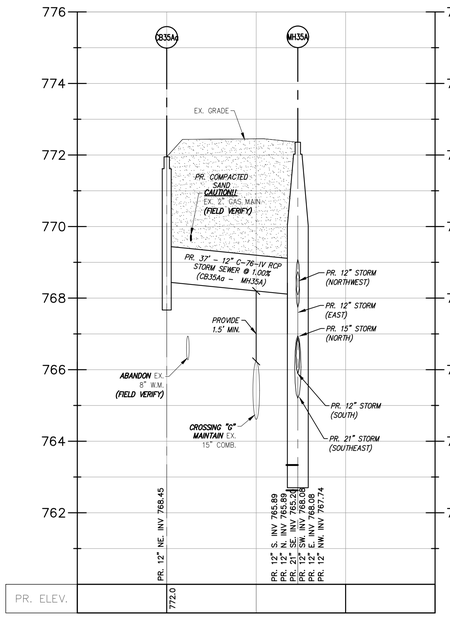
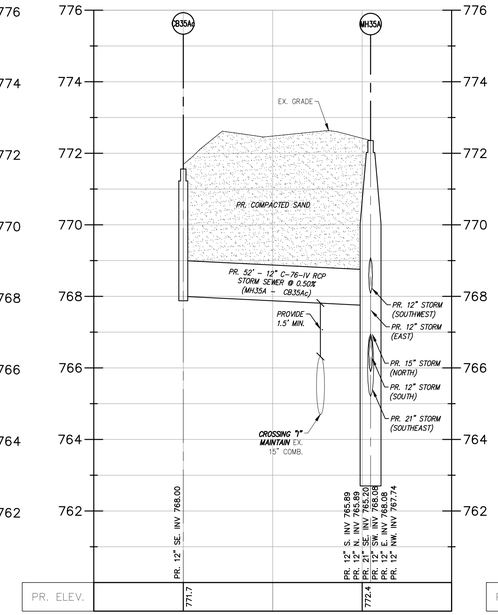
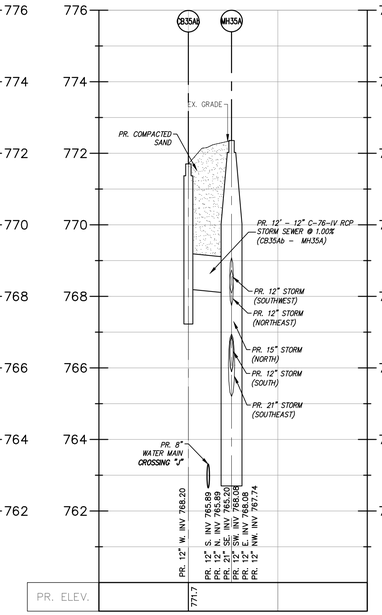


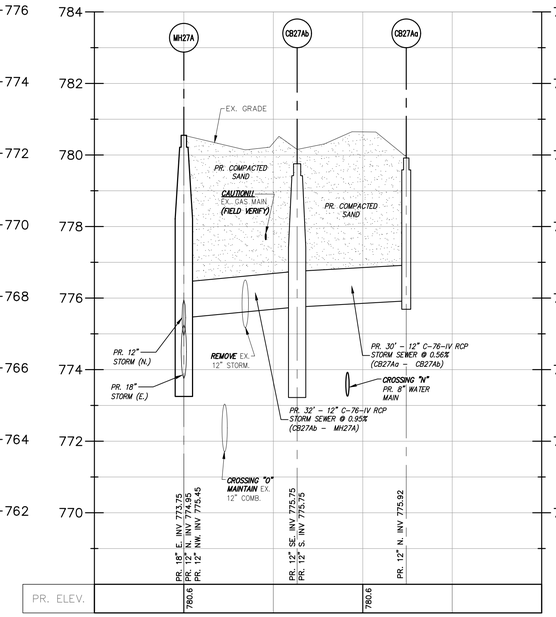
OAK STREET
STORM PROFILE (CB35Aa-MH35A)
SCALE: 1"=20' (H), 1"=2'(V)



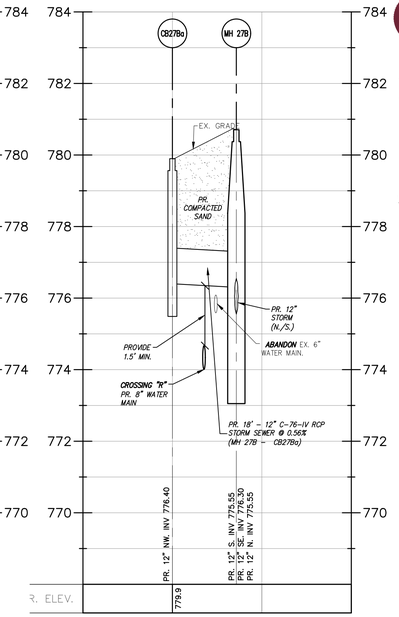
OAK STREET
STORM PROFILE (CB35Ac-MH35A)
SCALE: 1"=20' (H), 1"=2'(V)



OAK STREET
STORM PROFILE (CB35Ab-MH35A)
SCALE: 1"=20' (H), 1"=2'(V)



RAYNALE STREET
STORM PROFILE (CB27Aa-CB27Ab-MH27A)
SCALE: 1"=20' (H), 1"=2'(V)



RAYNALE STREET
STORM PROFILE (CB27Ba-MH27B)
SCALE: 1"=20' (H), 1"=2'(V)

UTILITY CROSSING SCHEDULE

NOTES:
- ALL CROSSINGS SHALL BE FIELD VERIFIED.
- ALL ELEVATIONS ARE ±
- RWSP = REVIEW WITH SERVICE PROVIDER
- MIN 18" VERTICAL CLEARANCE OF CROSSINGS

A PR. 21" STORM B/PIPE 764.62
PR. 8" WATER MAIN T/PIPE 763.12
CLEARANCE: 1.50'
STA. 4+73.64 1.73' R

B PR. 12" STORM B/PIPE 767.52
EX. 18" COMBINED T/PIPE 765.64
CLEARANCE: 1.88'
STA 1+52.72' 6.10' L

C PR. 12" STORM B/PIPE 767.40
PR. 8" WATER MAIN T/PIPE 765.50
CLEARANCE: 1.9'
STA. 1+54.58' 9.52' R

D PR. 12" STORM SEWER B/PIPE 767.10
PR. 8" WATER MAIN T/PIPE 765.38
CLEARANCE: 1.72'
STA. 1+84.48' 7.73' R

E EX. GAS MAIN B/PIPE R.W.S.P
EX. 15" COMBINED T/PIPE 766.00
CLEARANCE: 1.5' (MIN.)
STA. 2+68.20' 6.86' L

F EX. GAS MAIN B/PIPE R.W.S.P.
PR. 8" WATER MAIN B/PIPE 766.28
CLEARANCE: 1.5' (MIN.)
STA. 2+47.54' 20.90' R

G PR. 12" STORM SEWER B/PIPE 768.20
EX. 15" COMBINED T/PIPE 766.21
CLEARANCE: 1.99'
STA. 3+10.84' 6.65' L

H PR. 21" STORM B/PIPE 765.15
PR. 8" WATER MAIN T/PIPE 763.30
CLEARANCE: 1.85' (MIN.)
STA. 3+10.93' 10.04 R

I PR. 12" STORM SEWER B/PIPE 767.80
PR. 15" COMBINED T/PIPE 766.30
CLEARANCE: 1.5'
STA. 3+25.93' 8.54' L

J PR. 12" STORM SEWER B/PIPE 768.26
PR. 8" WATER MAIN T/PIPE 763.30
CLEARANCE: 4.96'
STA. 3+17.65' 9.22' R

K PR. 12" STORM. B/PIPE 770.76
EX. 8" COMBINED T/PIPE 768.16
CLEARANCE: 2.6'
STA. 6+80.77' 10.83' L

L PR. 12" STORM B/PIPE 771.01
PR. 8" WATER MAIN T/PIPE 769.49
CLEARANCE: 1.5' (MIN.)
STA. 6+80.70' 9.02' R

M PR. 12" STORM SEWER B/PIPE 773.84
PR. 8" WATER MAIN T/PIPE 772.25
CLEARANCE: 1.59'
STA. 10+36.06' 7.60' R

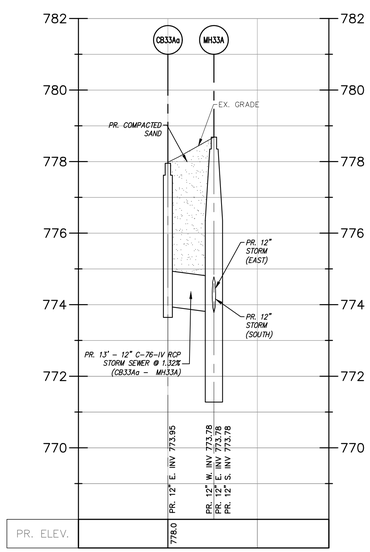
N PR. 12" STORM. B/PIPE 775.56
PR. 12" COMBINED T/PIPE 773.02
CLEARANCE: 2.54'
STA. 1+70.41' 1.76' L

O PR. 12" STORM. B/PIPE 775.82
PR. 12" COMBINED T/PIPE 773.92
CLEARANCE: 2.00'
STA. 12+3.41' 11.23' L

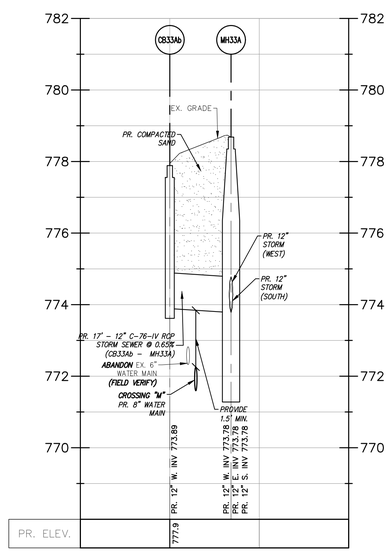
P EX. 15" COMBINED B/PIPE 771.50
PR. 8" WATER MAIN T/PIPE 770.00
CLEARANCE: 1.5'
STA. 11+89.42' 7.66' R

Q PR. 18" STORM. B/PIPE 773.75
PR. 8" WATER MAIN T/PIPE 770.00
CLEARANCE: 3.75'
STA. 11+98.40' 7.48' R

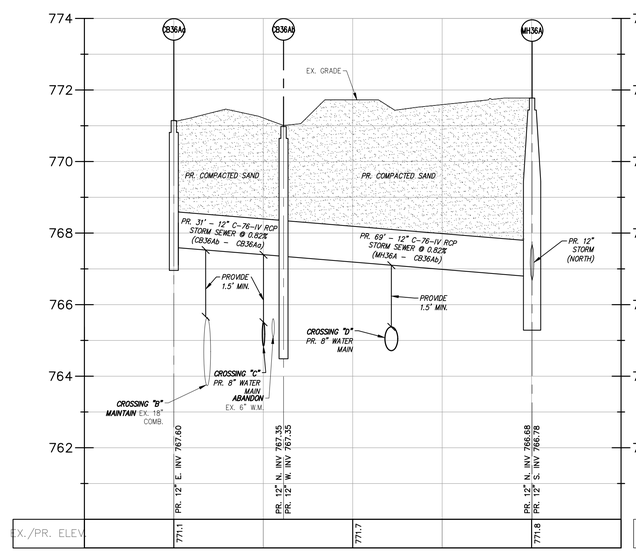
R PR. 12" STORM B/PIPE 776.35
PR. 8" WATER MAIN T/PIPE 774.67
CLEARANCE: 1.68'
STA. 12+37.59' 7.20' R



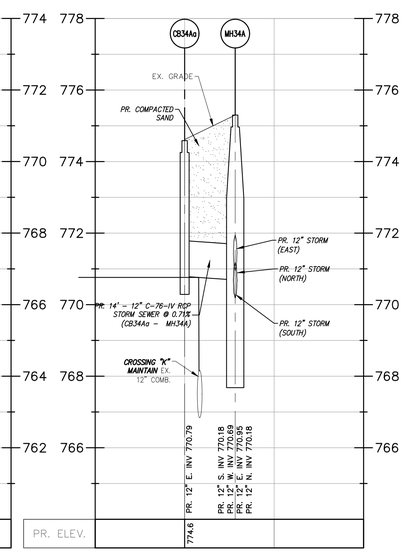
WESTWOOD DRIVE
STORM PROFILE (CB33Aa-MH33A)
SCALE: 1"=20' (H), 1"=2'(V)



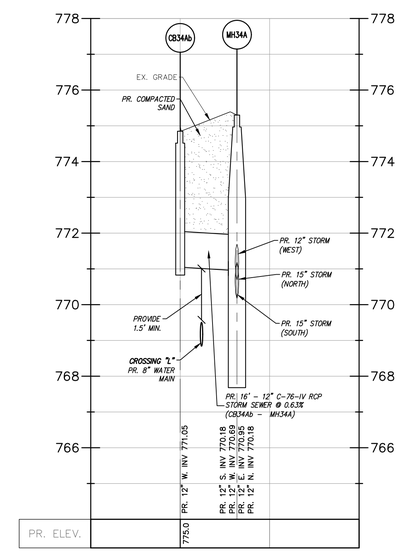
WESTWOOD DRIVE
STORM PROFILE (CB33Ab-MH33A)
SCALE: 1"=20' (H), 1"=2'(V)



WESTWOOD DRIVE
STORM PROFILE (CB36Aa-CB36Ab-MH36A)
SCALE: 1"=20' (H), 1"=2'(V)



WESTWOOD DRIVE
STORM PROFILE (CB34Aa-MH34A)
SCALE: 1"=20' (H), 1"=2'(V)



WESTWOOD DRIVE
STORM PROFILE (CB34Ab-MH34A)
SCALE: 1"=20' (H), 1"=2'(V)

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
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FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

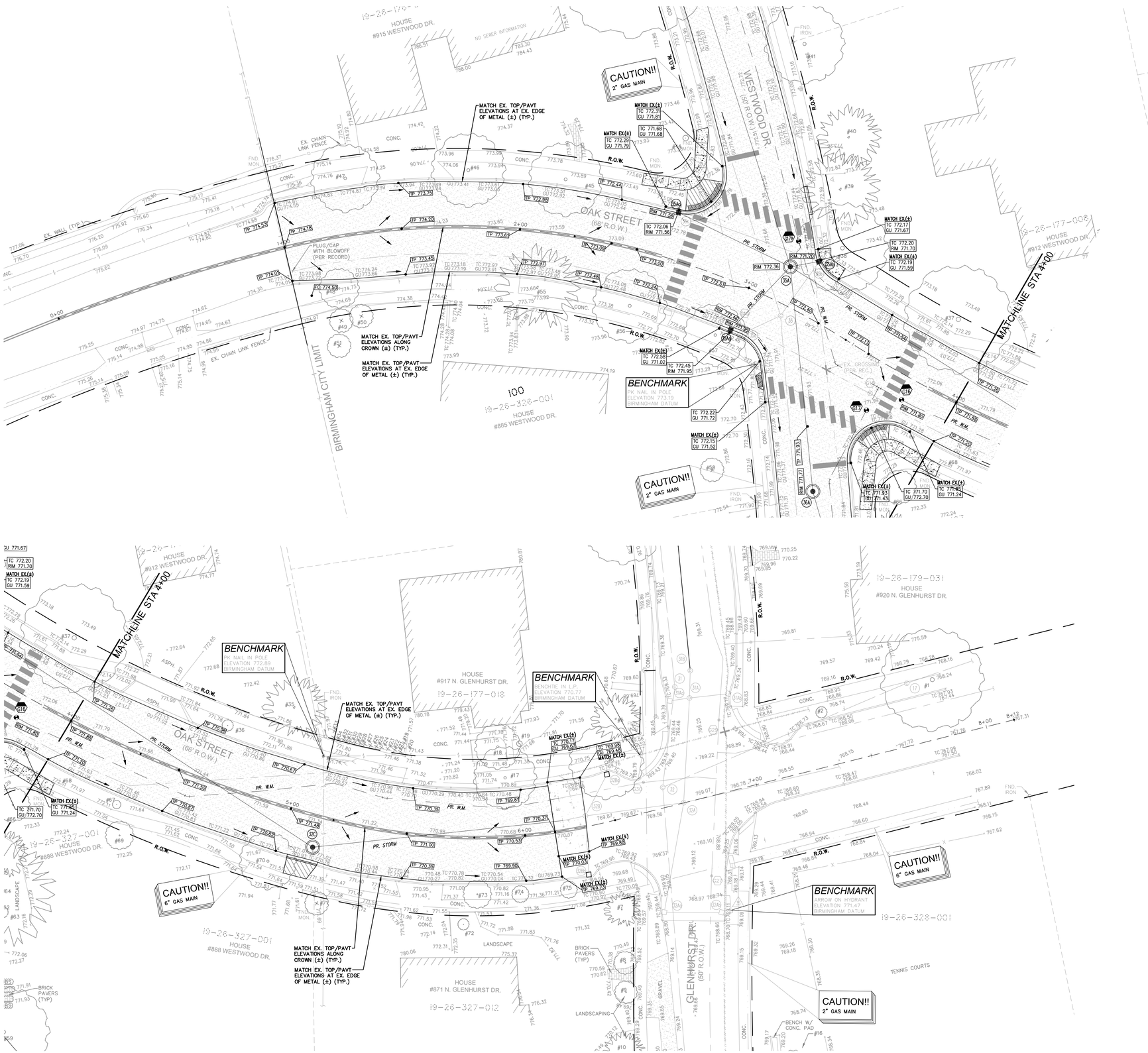
SHEET
Storm Sewer Profiles

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20' / 1"=2'

NFE JOB NO. L733
SHEET NO. C9



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SHEET
Grading Plan
Oak Street
P.O.B. to Sta. P.O.E.

811
Know what's below
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UTILITY NOTE

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LEGEND

- EXISTING SAN/COMB SEWER (CLEAN-OUT, MANHOLE, COMB, SAN)
- EXISTING WATER MAIN (GWB, GVW, HYDRANT)
- EXISTING STORM SEWER (RCCB, MANHOLE, CB, END SECTION)
- EXISTING BURIED CABLES (ELEC. METER, ELECTRIC MANHOLE, TELEPHONE MANHOLE)
- EXISTING GAS MAIN (GAS METER, GAS MARKER, GAS VALVE)
- OVERHEAD LINES (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
- ×000.00 GROUND ELEVATION
- EX PAVERS
- PR. 8" CONC. PAVT. W/ INT. CURB
- PR. 4" CONC. SIDEWALK
- PR. PULVERIZE AND CAPE SEAL
- PR. 6" CONC. PAVT.

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DRAWN BY: G. Viju

DESIGNED BY: P. Tulikangas

APPROVED BY: B. Buchholz

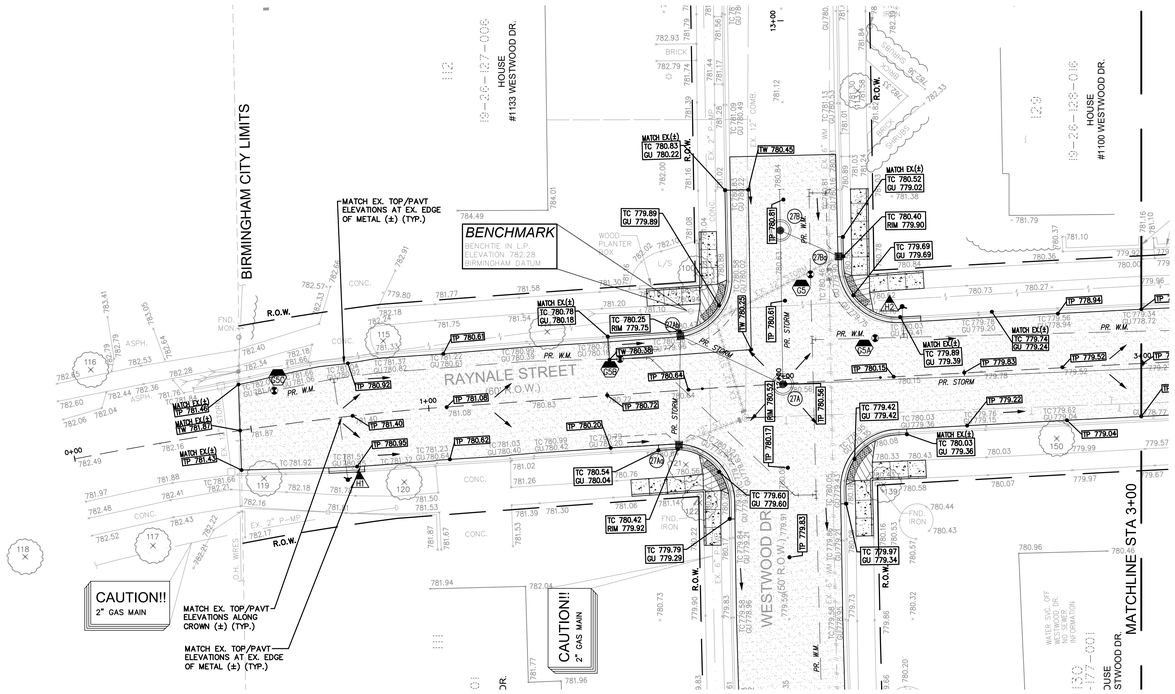
DATE: November 03, 2022

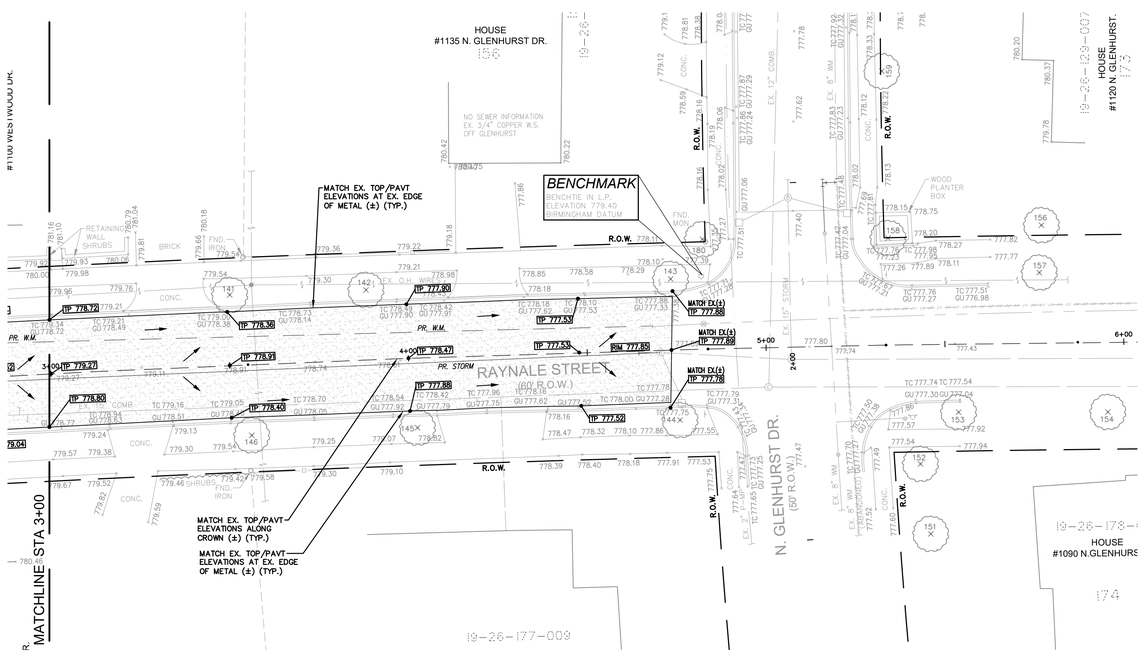
SCALE: 1" = 20'

20 10 0 10 20 30

NFE JOB NO. L733

SHEET NO. C10





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SHEET
Grading Plan
Raynale Street
P.O.B. to P.O.E.

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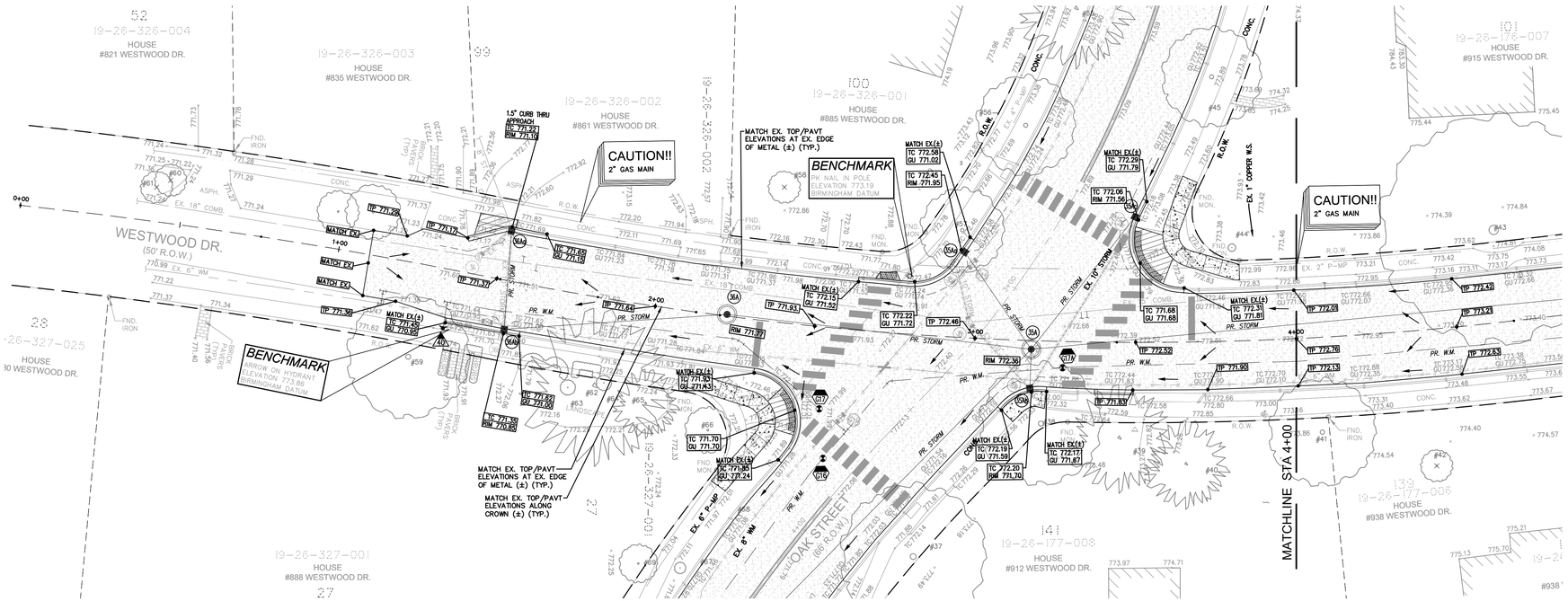
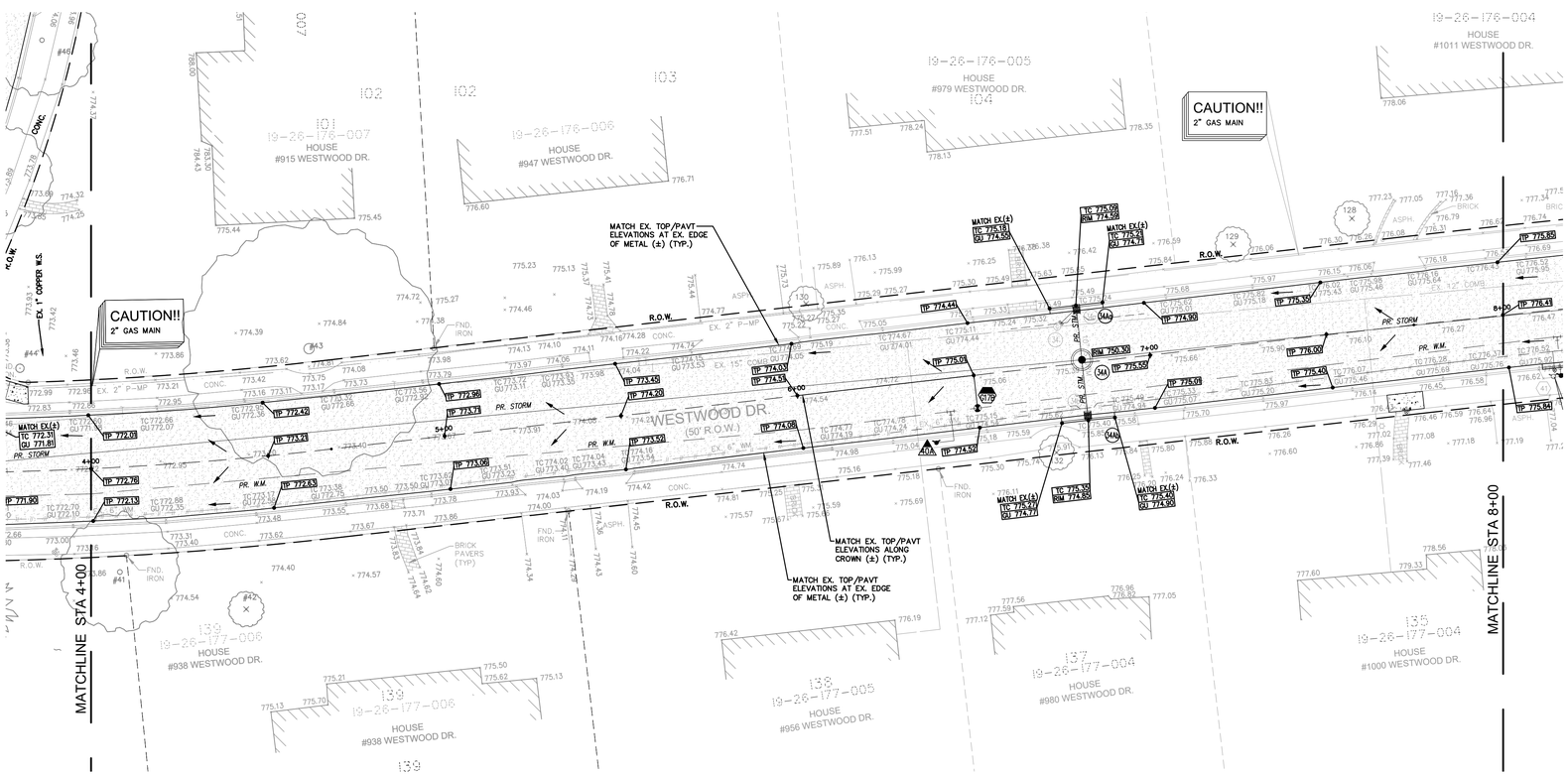
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C11





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SHEET
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DRAWN BY:
G. Viju

DESIGNED BY:
P. Tulikangas

APPROVED BY:
B. Buchholz

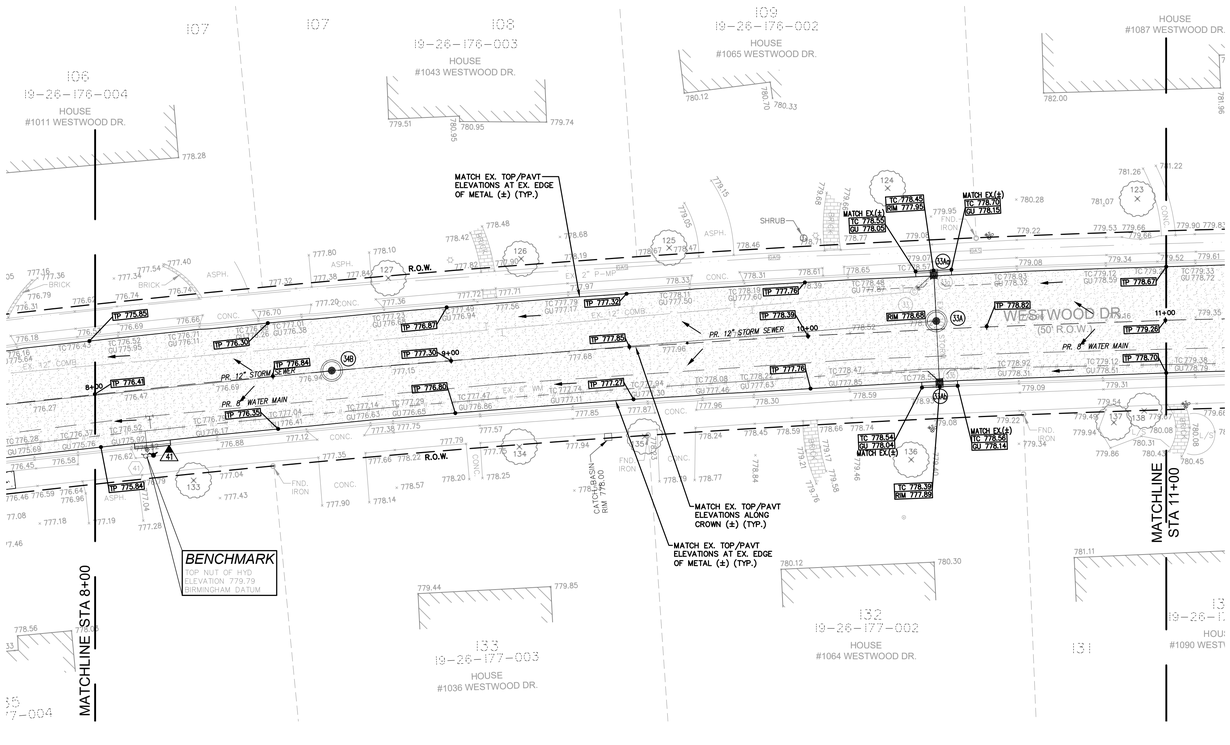
DATE:
November 03, 2022

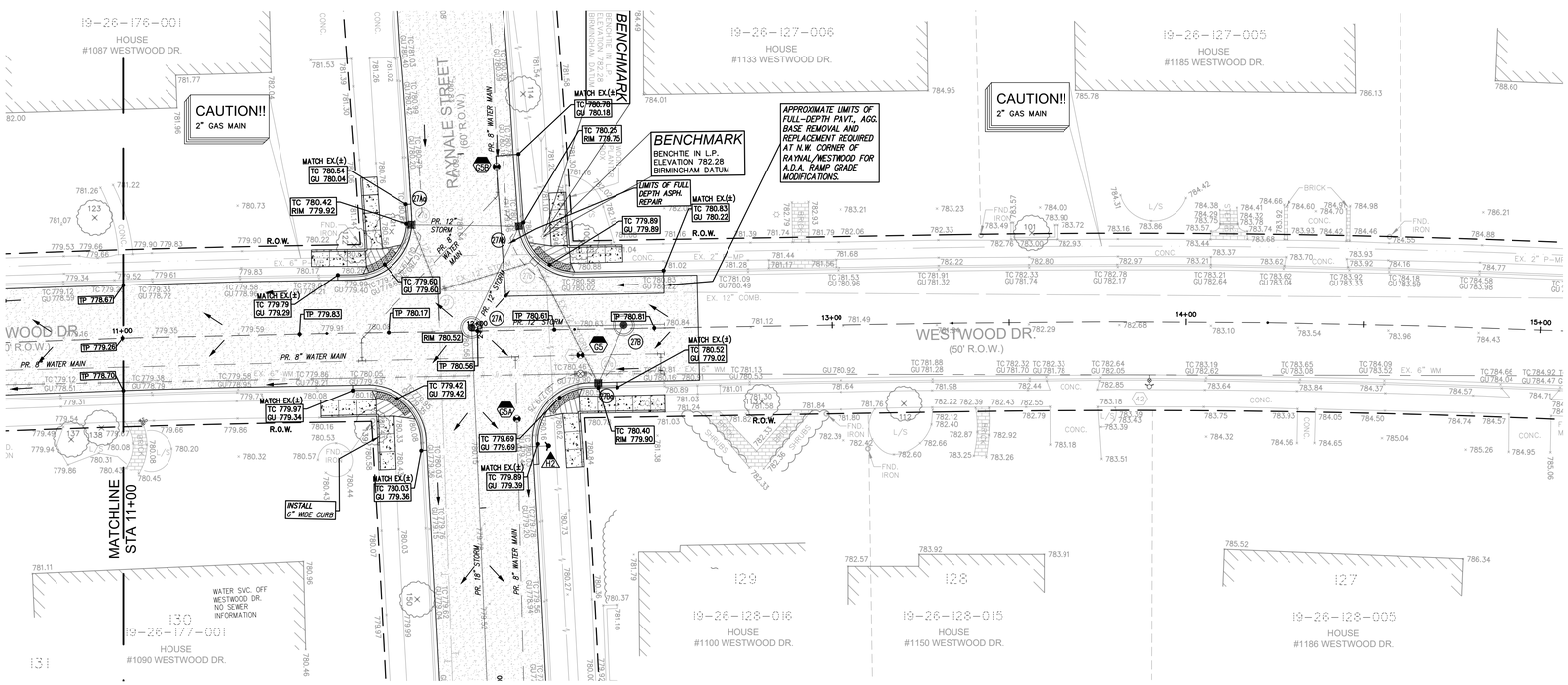
SCALE: 1" = 20'

20 10 0 10 20 30

NFE JOB NO. L733

SHEET NO. C12





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SHEET
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Westwood Drive
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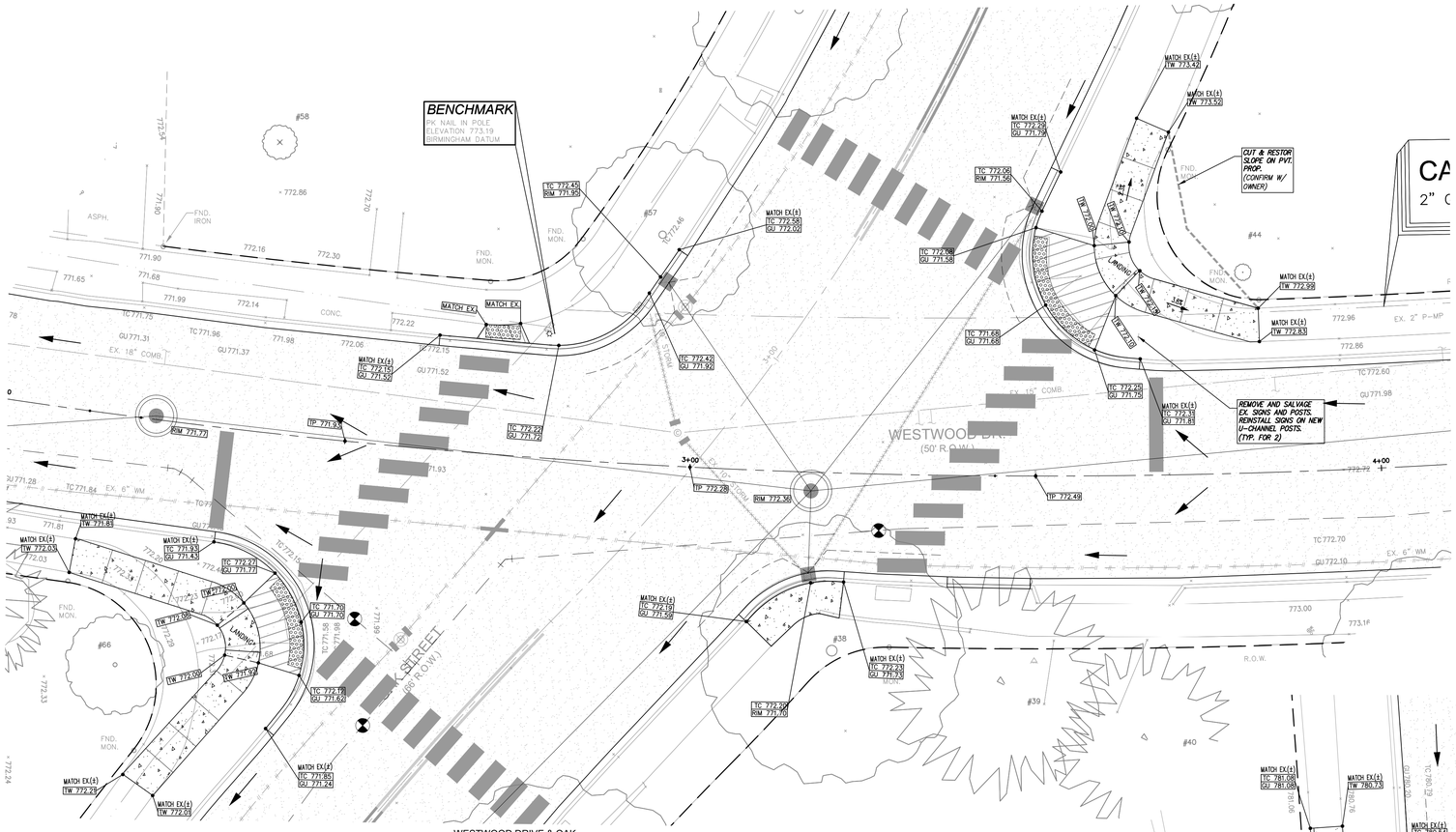
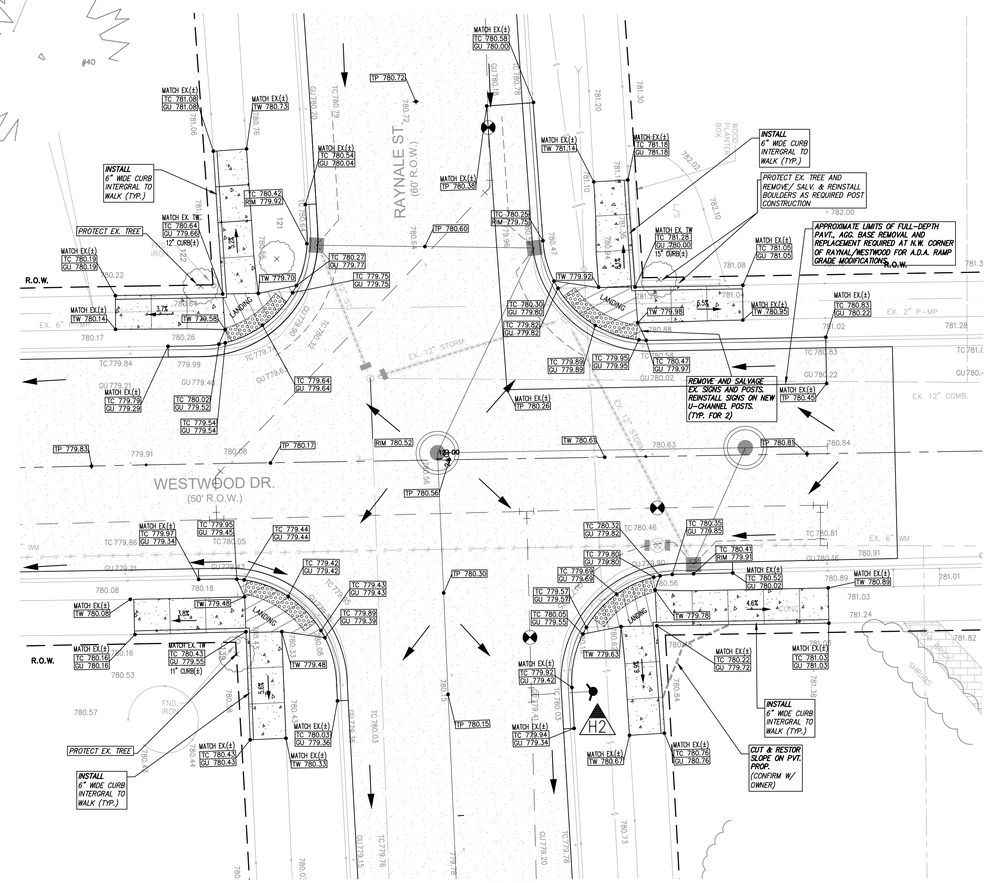
DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: 1" = 20'

NFE JOB NO. L733
SHEET NO. C13



WESTWOOD DRIVE & OAK STREET INTERSECTION



WESTWOOD DRIVE & RAYNALE STREET INTERSECTION

LEGEND

- CLEAN-OUT
- MANHOLE COMB SAN — EXISTING SAN/COMB SEWER
- GVB GVW HYDRANT — EXISTING WATER MAIN
- RYCB MANHOLE CB END SECTION — EXISTING STORM SEWER
- ELEC. METER — EXISTING BURIED CABLES
- GAS METER — ELECTRIC MANHOLE — TELEPHONE MANHOLE
- GAS MARKER — GAS VALVE — EXISTING GAS MAIN
- UTILITY POLE — LIGHT POLE — OVERHEAD LINES
- STRAIN POLE — GUY WIRE
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SHEET
Intersection Grading Plan
Westwood Drive

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DRAWN BY:
G. Viju

DESIGNED BY:
P. Tulikangas

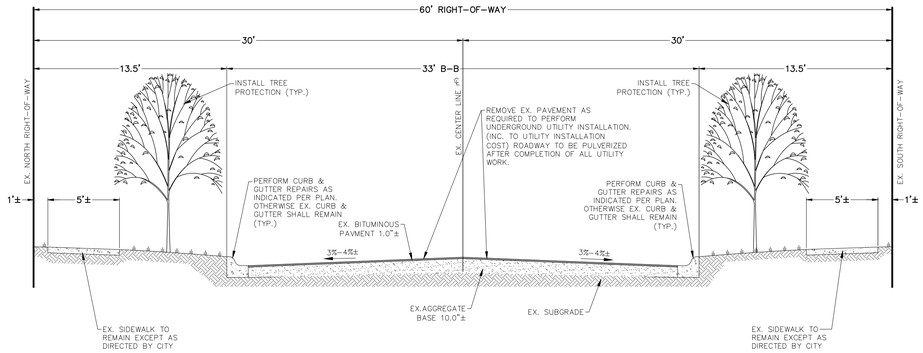
APPROVED BY:
B. Buchholz

DATE:
November 03, 2022

SCALE: 1" = 10'

NFE JOB NO. L733

SHEET NO. C14

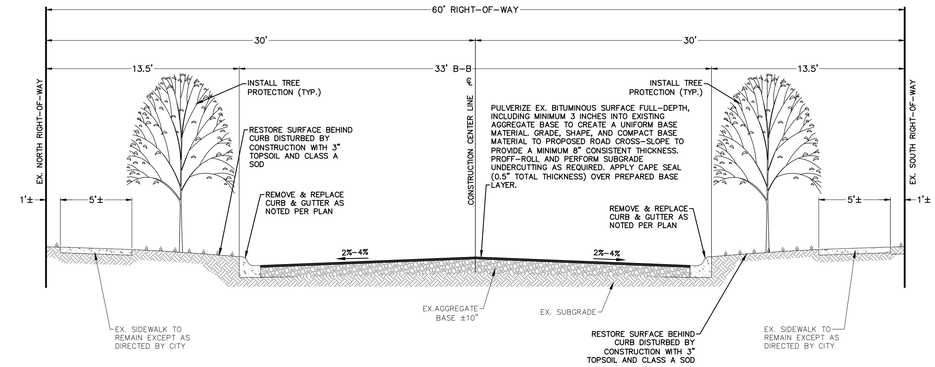


EXISTING CHIPSEAL PAVEMENT SECTION

N.T.S.

RAYNALE ROAD

APPLIES TO: STA. 0+87 TO P.O.E.
ROAD WIDTH TRANSITIONS FROM 27'± AT CITY LIMITS
(APPROX. STA. 0+47) TO 33'± AT STA. 0+87



PROPOSED CHIPSEAL PAVEMENT SECTION

N.T.S.

RAYNALE ROAD

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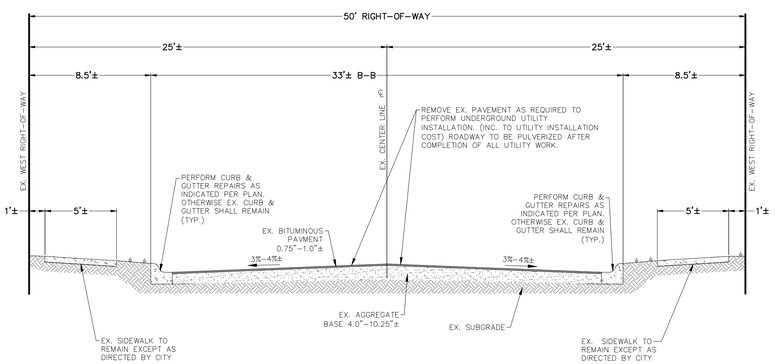
ROAD WIDTH TRANSITIONS FROM 27'± AT CITY LIMITS
(APPROX. STA. 0+47) TO 33'± AT STA. 0+87

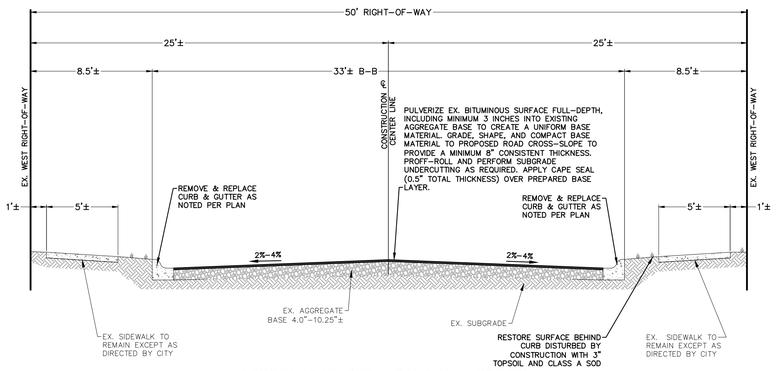


EXISTING CHIPSEAL PAVEMENT SECTION

N.T.S.

WESTWOOD DRIVE

APPLIES TO: STA. 1+54 TO P.O.E.
ROAD IS UNCURBED AND APPROXIMATELY 21' WIDE AT
THE P.O.B. (APPROX. STA. 1+10), AND TRANSITIONS TO
33' WHERE CURBING STARTS AT APPROXIMATE STA. 1+54



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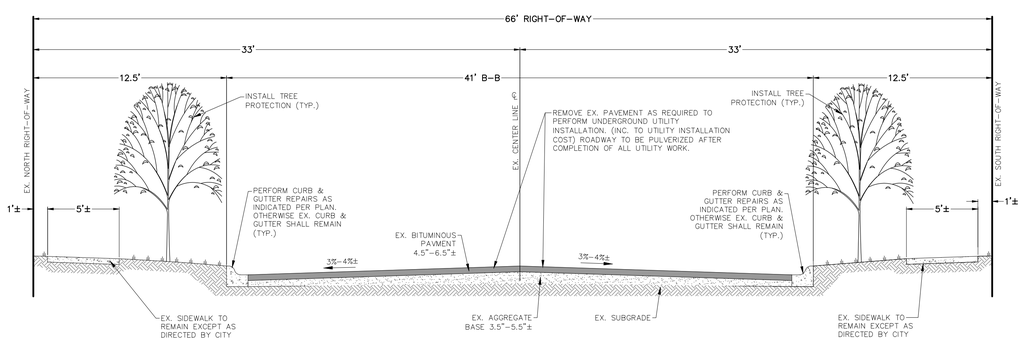
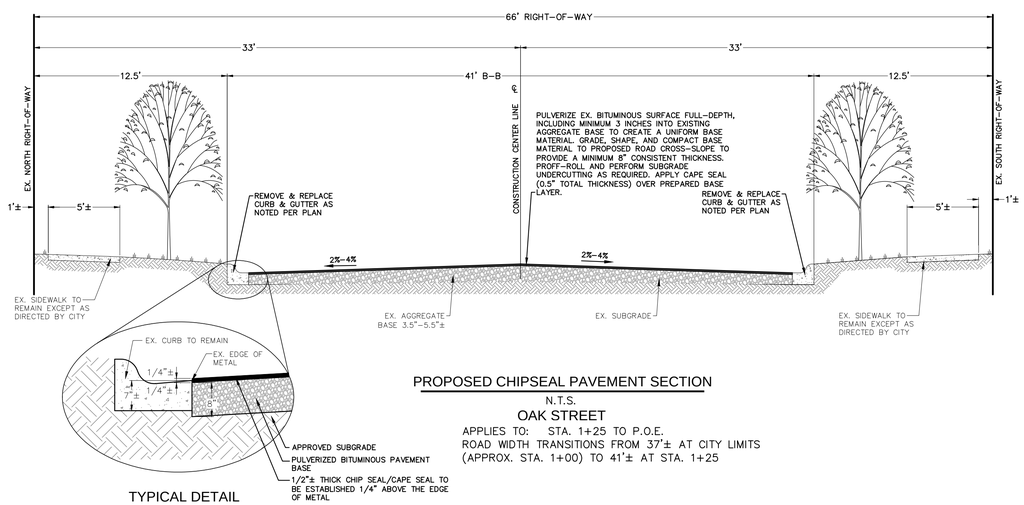


EXISTING CHIPSEAL PAVEMENT SECTION

N.T.S.

OAK STREET

APPLIES TO: STA. 1+25 TO P.O.E.
ROAD WIDTH TRANSITIONS FROM 37'± AT CITY LIMITS
(APPROX. STA. 1+00) TO 41'± AT STA. 1+25



TYPICAL DETAIL

TYP. FOR ALL STREETS

PROPOSED CHIPSEAL PAVEMENT SECTION

N.T.S.

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ROAD WIDTH TRANSITIONS FROM 37'± AT CITY LIMITS
(APPROX. STA. 1+00) TO 41'± AT STA. 1+25

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SHEET
Existing & Proposed Road
Cross-Sections

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DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: N.T.S.

NFE JOB NO. L733
SHEET NO. C15

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 P1M 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 P1 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, 2012 EDITION.

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

   LEVELING COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 4E1 (MAX. APPLICATION RATE 275 POUNDS PER SQUARE YARD)
   REPAIR AREAS – MDOT HMA MIXTURE NO. 13A (MAX. APPLICATION RATE 220 POUNDS PER SQUARE YARD)

   SURFACE COURSES:
   ASPHALT ROAD – MDOT HMA MIXTURE NO. 5E1 (MAX. APPLICATION RATE 165 POUNDS PER SQUARE YARD)
   REPAIR AREAS – MDOT HMA MIXTURE NO. 13A (MAX. APPLICATION RATE 165 POUNDS PER SQUARE YARD)

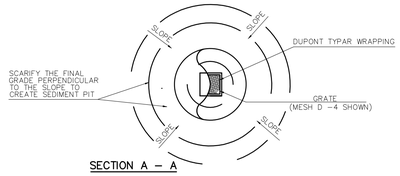
   BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD
2. PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
3. ALL CONCRETE 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

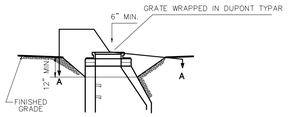
1. ALL WATER MAINS 4" AND LARGER SHALL BE DUCTILE IRON PIPE THICKNESS CLASS 52, WITH PUSH ON TYPE JOINTS PER CITY REQUIREMENTS.
2. ALTERNATE WATER MAIN PIPE MATERIALS SHALL ONLY BE ALLOWABLE UPON APPROVAL FROM CITY OF BIRMINGHAM AND IN ACCORDANCE WITH CITY SPECIFICATIONS.
3. NEW WATER MAINS SHALL BE INSTALLED WITH A MINIMUM 5 FEET OF COVER. EXCEPTIONS WILL BE ALLOWED WHEN NECESSARY TO CONNECT TO EXISTING MAIN OR WHEN AUTHORIZED BY THE ENGINEER.
4. 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.
5. COAT ALL BOLTS ON MECHANICAL FITTINGS WITH TAR.
6. 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.
7. INSTALL GATE VALVE AS CLOSE TO HYDRANT AS PRACTICABLE.
8. GATE VALVES 4" AND LARGER MAY BE MUELLER BRAND SPECIFIED, OR APPROVED EQUIVALENT. ALL MATERIALS RELATIVE TO WATER SERVICE CONNECTIONS SHALL BE MUELLER BRAND.
9. 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.
10. WORK INDICATED BY (A) SHALL BE PERFORMED AFTER THE NEW MAINS ARE PLACED IN SERVICE.
11. 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.
12. 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, 9'S 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.

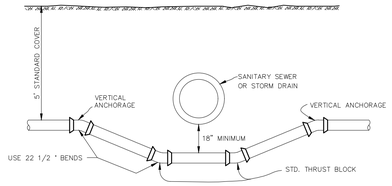


SECTION A – A



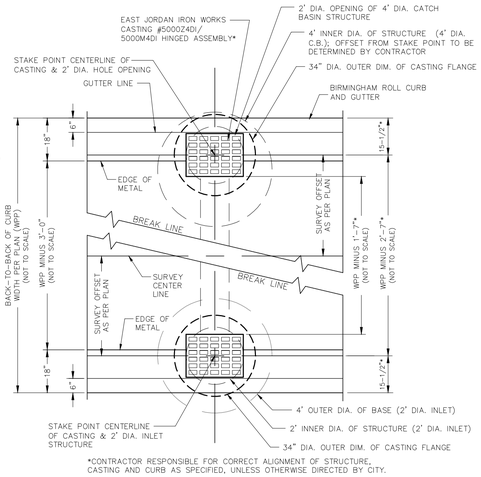
LOW POINT INLET FILTER & SEDIMENT PIT DETAIL

N.T.S.



STANDARD SEWER OR STORM CROSSING

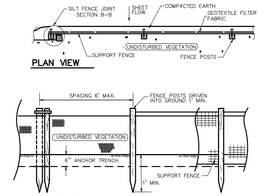
N.T.S.



*CONTRACTOR RESPONSIBLE FOR CORRECT ALIGNMENT OF STRUCTURE, CASTING AND CURB AS SPECIFIED, UNLESS OTHERWISE DIRECTED BY CITY.

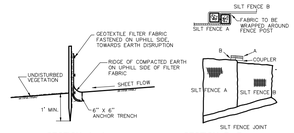
CURB, CATCH BASIN & INLET ALIGNMENT DETAIL PLAN VIEW

SCALE: 1" = 2'



PLAN VIEW

FRONT VIEW

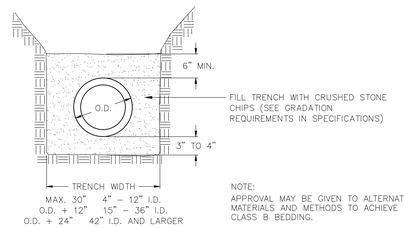


SECTION A–A

SECTION B–B

SILT FENCE DETAIL

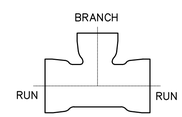
N.T.S.



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

STANDARD PIPE BEDDING

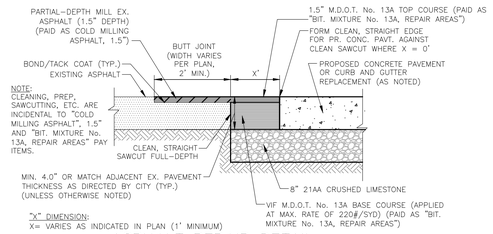
N.T.S.



RUN X RUN X BRANCH

WATER MAIN TEE FITTING SIZE DESIGNATION SCHEMATIC

N.T.S.

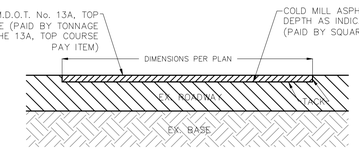


NOTE:
CLEANING, PREP, SAWCUTTING, ETC. ARE INCIDENTAL TO "COLD MILLING ASPHALT", 1.5" AND "BIT. MIXTURE No. 13A, REPAIR AREAS" PAY ITEMS.

"X" DIMENSION:
X= VARIES AS INDICATED IN PLAN (1' MINIMUM)

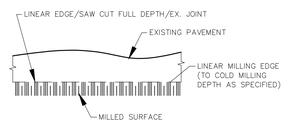
ASPHALT REPAIR DETAIL

N.T.S.



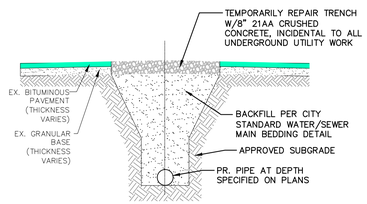
COLD MILL ASPHALT DETAIL

N.T.S.



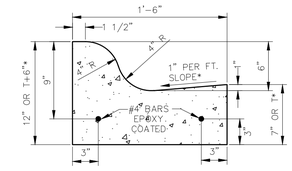
LINEAR MILLING/SAWCUT EDGE DETAIL

PLAN VIEW N.T.S.



TEMPORARY UTILITY TRENCH REPAIR DETAIL

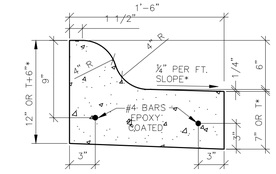
N.T.S.
APPLIES TO ALL MAINLINE WATER MAIN,STORM, AND SERVICE LEAD TRENCHES



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.

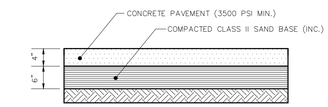


NOTE: OMIT #4 LONGITUDINAL BARS WHEN CURB & GUTTER IS POURED INTEGRAL OR TIED TO A NON-REINFORCED CONCRETE PAVEMENT.

BIRMINGHAM 6" ROLL CURB CONCRETE CURB & REVERSE GUTTER DETAIL

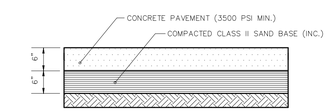
N.T.S.

*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.



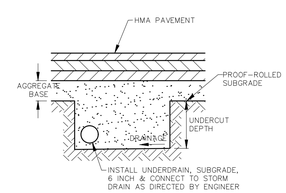
4" CONCRETE SIDEWALK SECTION

STANDARD SIDEWALK REPLACEMENTS/INSTALLATIONS N.T.S.



6" CONCRETE SIDEWALK SECTION

TO MATCH SPECIFIED PAVEMENT THICKNESS THROUGH DRIVE APPROACH N.T.S.



UNDERCUT DETAIL

N.T.S.

UTILITY CONTACTS

ELECTRIC
DTE ENERGY
1970 ORCHARD LAKE ROAD
SYLVAN LAKE, MI 48320-1743
CONTACT: JAMES HUMASON
(248) 924-4268

DTE ENERGY - COMMUNITY LIGHTING
8001 HAGGERTY
BELLEVILLE, MI 48111
CONTACT: BRANDON FARON
(734) 397-4017

NATURAL GAS
CONSUMERS ENERGY GROVELAND SERVICE CENTER
14500 DIXIE HIGHWAY,
HOLLY, MI 48442
CONTACT: CHERI PAYNE
(248) 769-5704

CABLE TELEVISION
COMCAST CABLE TELEVISION
25626 TELEGRAPH ROAD
SOUTHFIELD, MI 48033
CONTACT: MIKE MARLOW
(248) 809-2707

AT & T
54 N. MILL STREET
PONTIAC, MI 48342
CONTACT: MATTHEW SILWA
(248) 877-0762

123 NET
24700 MORTHWESTERN HIGHWAY
SOUTHFIELD, MI 48075
CONTACT: AMANDA GRIFFITH
(248) 228-8286

WOW NETWORK
950 E. WHITCOMB
MADISON HEIGHTS, MI 48071
CONTACT: FRANK BINAGHI
(248) 677-9008

FIBER
123 NET
24700 NORTHWESTERN HWY,
SOUTHFIELD, MI 48075
CONTACT: AMANDA GRIFFITH
(248) 228-8286

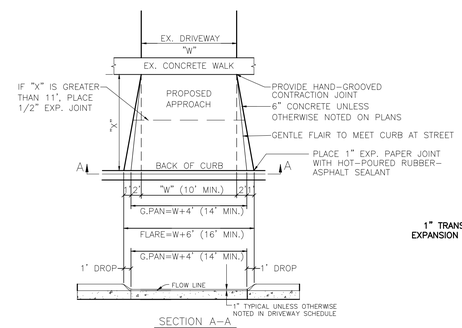
TELEPHONE
AT & T
54 N. MILL STREET
PONTIAC, MI 48342
CONTACT: MATT SLIWA
(248) 877-0762

STORM, WATER MAIN AND SANITARY SEWER
CITY OF BIRMINGHAM
ENGINEERING DEPARTMENT
151 MARTIN STREET
BIRMINGHAM, MI 48009
CONTACT: MELISSA COATTA, P.E.
(248) 530-1839

OAKLAND COUNTY WATER RESOURCE COMMISSIONER
1 PUBLIC WORKS DRIVE

WATERFORD, MI 48328

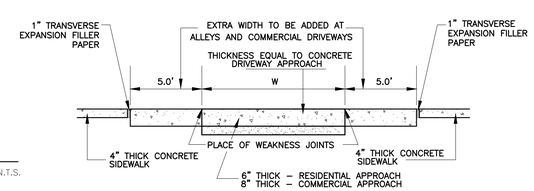
TRAFFIC SIGNALS & LIGHTING
ROAD COMMISSION FOR OAKLAND COUNTY
1200 N. TELEGRAPH ROAD
PONTIAC, MI 48341
CONTACT: STEVE WHEELER
(248) 858-7250



SECTION A–A

CONCRETE DRIVE APPROACH – DETAIL 'L'

N.T.S.



THICKENED CONCRETE SIDEWALK (PLAIN)

N.T.S.

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

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest ¼ of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Notes and Details
(1 of 2)

811
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: N.T.S.

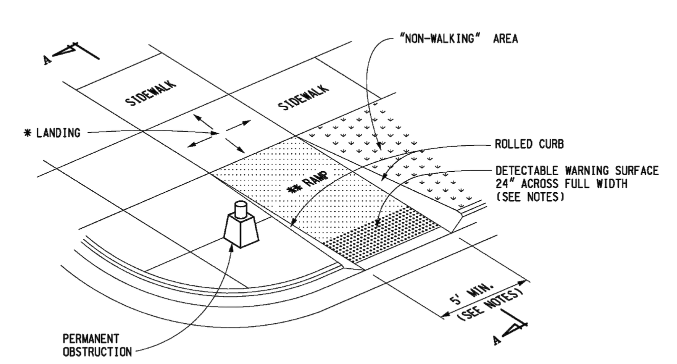
NFE JOB NO. L733
SHEET NO. C16

CURB RAMP AND DETECTABLE WARNING DETAILS (R-28-J)

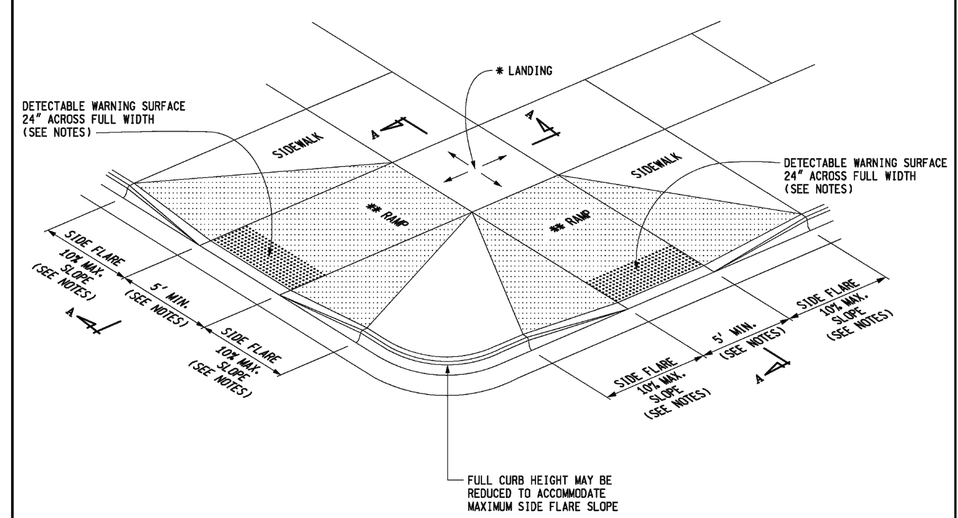
Sheet 1 of 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE R
(ROLLED SIDES)



CURB RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)

MDOT Michigan Department of Transportation
PREPARED BY DESIGN DIVISION
DRAWN BY: B.L.T.
CHECKED BY: W.K.P.

DEPARTMENT DIRECTOR
Paul C. Ajegba

APPROVED BY: Gregg Brunner, P.E. Gregg Brunner Oct 14 2021 12:32 PM
DIRECTOR, BUREAU OF FIELD SERVICES

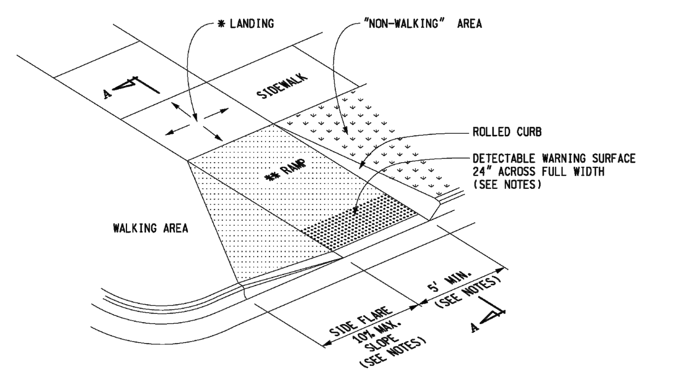
APPROVED BY: Bradley C. Wieferich Bradley C. Wieferich Oct 14 2021 11:01 AM
DIRECTOR, BUREAU OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS
4-7-2022 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 1 OF 7

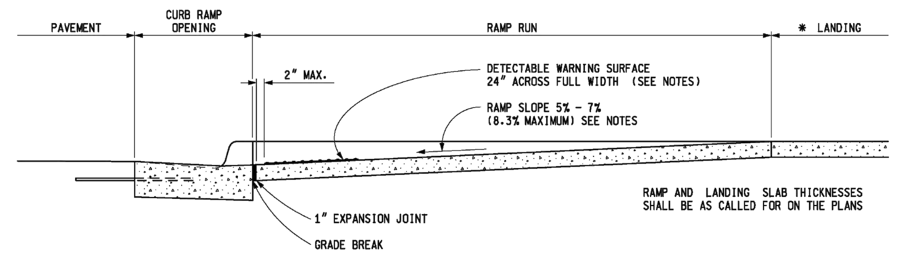
Sheet 2 of 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



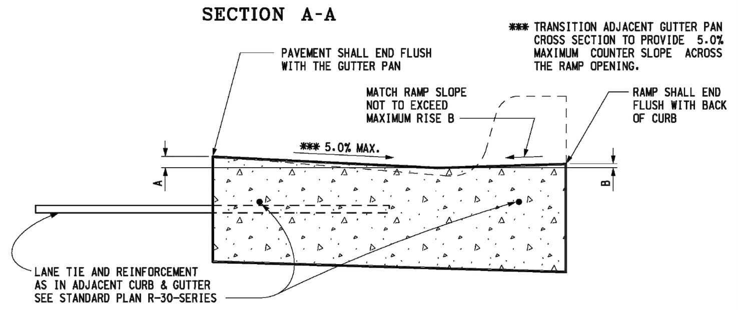
CURB RAMP TYPE RF
(ROLLED / FLARED SIDES)



SECTION A-A

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



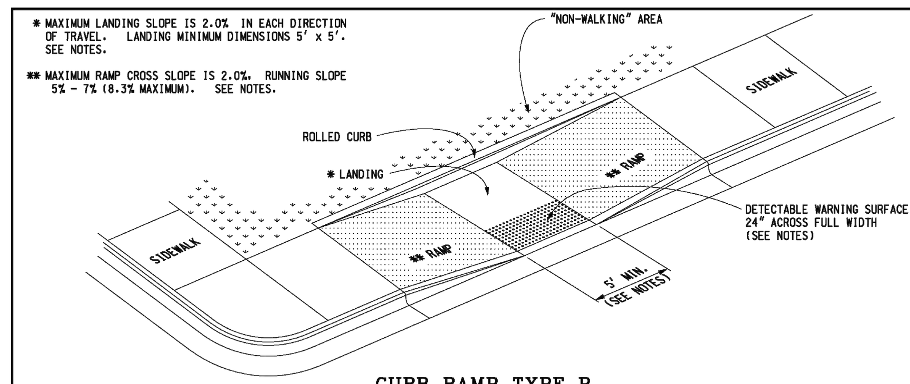
SECTION THROUGH CURB RAMP OPENING
(TYPICAL ALL RAMP TYPES)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS
4-7-2022 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 2 OF 7

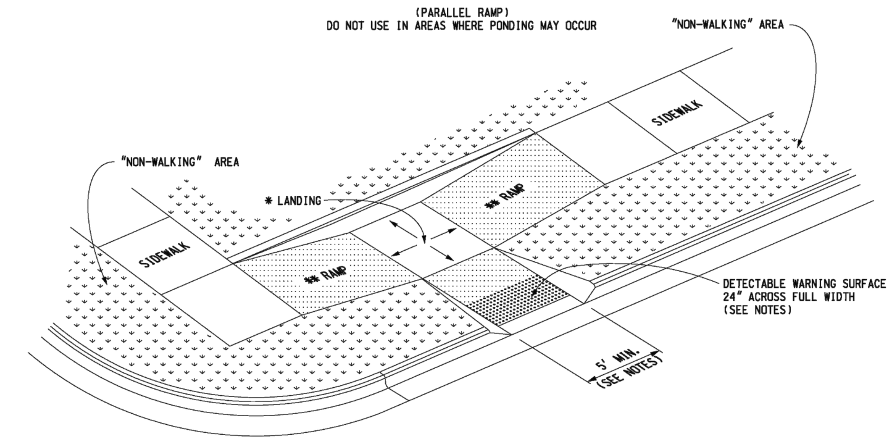
Sheet 3 of 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

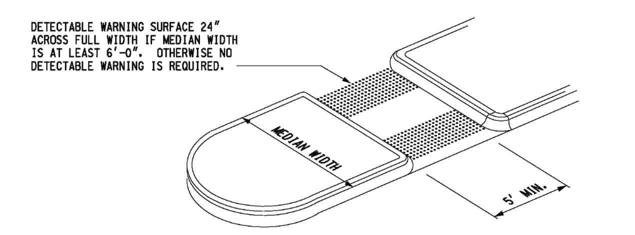
** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE P
(PARALLEL RAMP)
DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



CURB RAMP TYPE C
(COMBINATION RAMP)



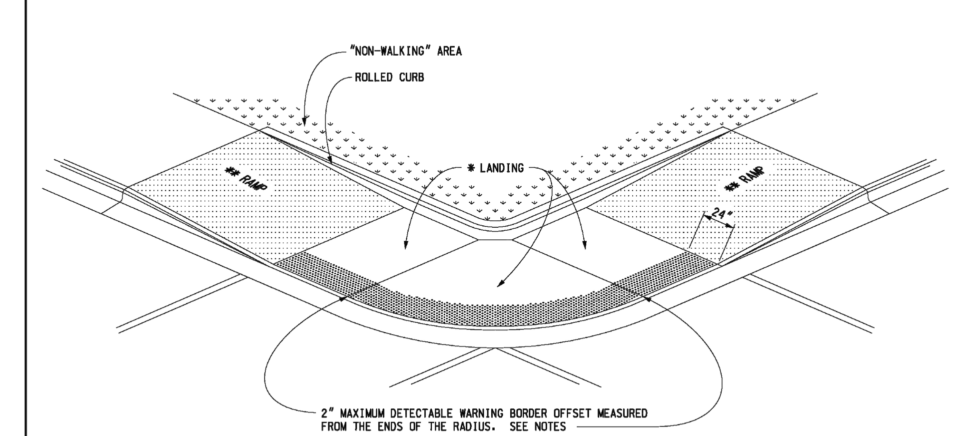
CURB RAMP TYPE M
(MEDIAN ISLAND)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS
4-7-2022 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 3 OF 7

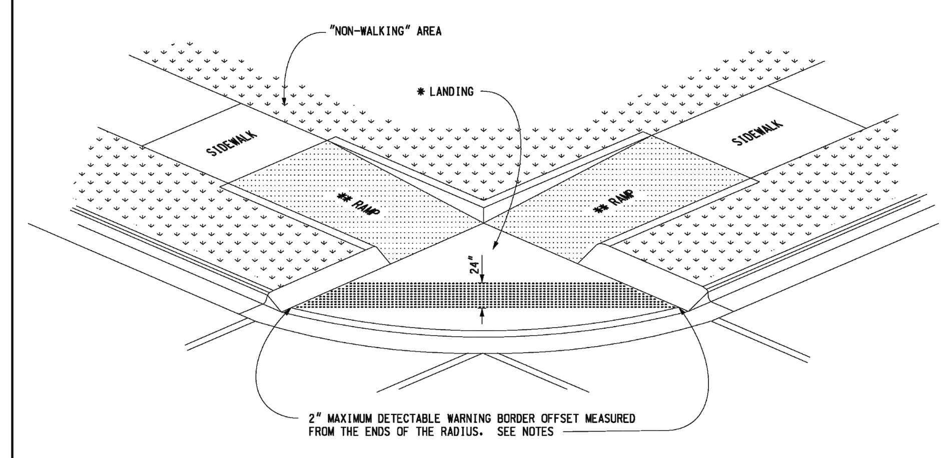
Sheet 4 of 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



(RADIAL DETECTABLE WARNING SHOWN)



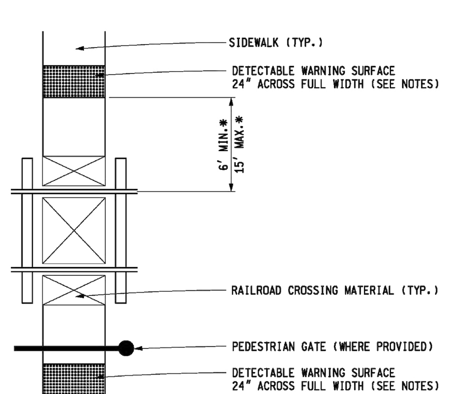
(TANGENT DETECTABLE WARNING SHOWN)

CURB RAMP TYPE D
(DEPRESSED CORNER)
USE ONLY WHEN INDEPENDENT DIRECTIONAL RAMPS CAN NOT BE CONSTRUCTED FOR EACH CROSSING DIRECTION

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS
4-7-2022 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 4 OF 7

Sheet 5 of 7

* THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE RAIL CROSSING IS 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. DO NOT PLACE DETECTABLE WARNING ON RAILROAD CROSSING MATERIAL.

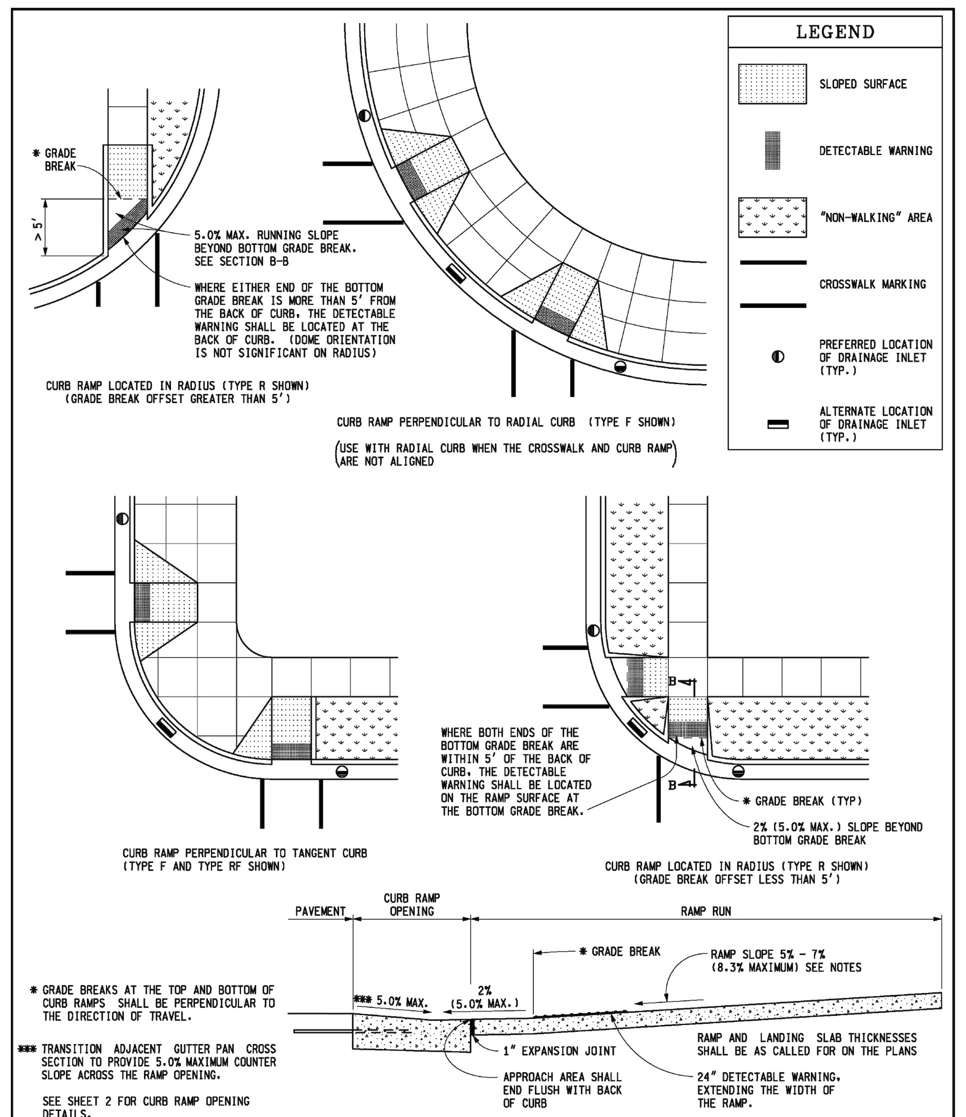


DETECTABLE WARNING AT RAILROAD CROSSING

DETECTABLE WARNING AT FLUSH SHOULDER OR ROADWAY

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS
4-7-2022 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 5 OF 7

Sheet 6 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.

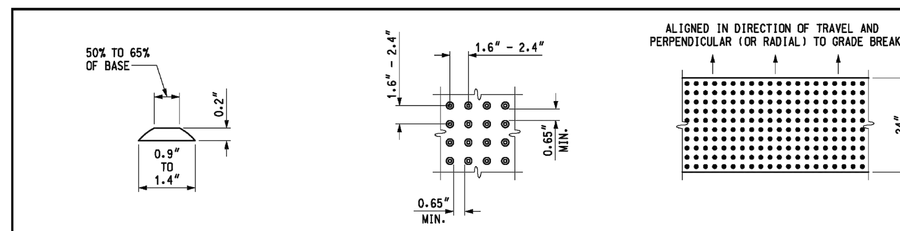
SEE SHEET 2 FOR CURB RAMP OPENING DETAILS.

SECTION B-B

CURB RAMP ORIENTATION

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
CURB RAMP AND DETECTABLE WARNING DETAILS
4-7-2022 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 6 OF 7

Sheet 7 of 7



DETECTABLE WARNING DETAILS

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 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. 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/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 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 1/2". 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, 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 F.H.W.A. APPROVAL | 5-8-2020 PLAN DATE | R-28-J | SHEET 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
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL

PROJECT
2022 Quarton Lake Estates Phase 2
#1-23(P)

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

PROJECT LOCATION
Part of the Northwest 1/4 of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Notes and Details
(2 of 2)

811 Know what's below Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY: G. Viju
DESIGNED BY: P. Tulikangas
APPROVED BY: B. Buchholz
DATE: November 03, 2022
SCALE: N.T.S.

NFE JOB NO. L733
SHEET NO. C17

NO.	ITEM DESCRIPTION	PAY UNIT	SHEET C1 OAK	SHEET C2 OAK	SHEET C3 RAYNALE	SHEET C4 RAYNALE	SHEET C5 WESTWOOD	SHEET C6 WESTWOOD	SHEET C7 WESTWOOD	SHEET C8 WESTWOOD	TOTAL QUANTITY
	SEWER PAY ITEMS										
1	21" Storm Sewer, C76, CL-IV, Trench A	LF	89	222	-	-	-	-	-	-	311
2	18" Storm Sewer, C76, CL-IV, Trench A	LF	-	-	100	171	-	-	-	-	271
3	12" Storm Sewer, C76, CL-IV, Trench A	LF	101	-	135	-	278	400	266	-	1,180
4	Sewer Service, 6" PVC SDR 23.5	LF	-	-	-	-	52	132	100	84	368
5	New 5'-0" Diameter Storm Sewer Manhole w/ 2' Sump	EA	1	-	-	-	-	-	-	-	1
6	New 4'-0" Diameter Storm Sewer Manhole w/ 2' Sump	EA	-	-	1	-	-	1	1	-	3
7	New 4'-0" Diameter Storm Sewer Manhole	EA	-	1	1	-	1	-	1	-	4
8	New 4'-0" Diameter Catch Basin w/ 2' Sump	EA	-	-	1	-	1	-	-	-	2
9	New 2'-0" Diameter Inlet	EA	3	-	2	-	1	2	2	-	10
10	6" Perforated Pipe Underdrain (No sock)	LF	120	-	200	-	80	80	80	-	560
11	Sewer Service Tap, 6"	EA	-	-	-	-	-	-	-	-	2
12	Sewer Service Connection, 6"	EA	-	-	-	-	2	5	4	2	13
13	Reconstruct Manhole (if and where needed)	VF	-	-	-	-	-	-	-	-	15
14	Remove & Replace Structure Cover (as directed by City)	LB	-	-	-	-	-	-	-	-	1,375
15	Remove Ex. Drainage Structure	EA	3	-	3	-	2	2	2	-	12
16	Bulkhead Structure, 12"	EA	-	-	2	-	-	-	-	-	2
17	Bulkhead Structure, 10"	EA	2	-	-	-	1	1	1	-	5
18	CCTV Sewer Acceptance Inspection	LS	-	-	-	-	-	-	-	-	1
	SUBTOTAL SEWER PAY ITEMS										
	WATER MAIN PAY ITEMS										
19	Remove Hydrant	EA	-	-	-	-	1	-	1	-	2
20	Remove Existing Gate Valve Well	EA	2	-	-	-	1	-	-	1	4
21	Fire Hydrant Assembly, Complete	EA	-	-	2	-	1	1	1	-	5
22	8" Gate Valve & Box	EA	1	-	3	-	2	1	-	1	8
23	8" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	50	217	265	167	281	400	302	150	1,832
24	6" D.I. CL 52 Water Main w/ Polywrap, Trench A	LF	-	-	38	-	12	13	12	6	81
25	8" Water Main Connection to Ex. 8" Water Main	EA	-	1	-	1	-	-	-	-	2
26	6" Water Main Connection to Ex. 6" Water Main	EA	-	-	-	-	1	-	-	1	2
27	New Water Service, 1", Trench A, Copper	LF	-	-	-	-	7	33	8	5	53
28	Water Service Connection, 1.5"	EA	-	-	-	-	-	-	1	-	1
29	Water Service Connection, 1"	EA	-	-	-	-	4	6	4	2	16
30	Install Curb Stop & Box (Materials Provided by City), 1"	EA	-	-	-	-	-	1	-	-	1
31	Hydra-Stop, 8"	EA	-	-	-	-	-	-	-	-	2
32	Hydra-Stop, 6"	EA	-	-	-	-	-	-	-	-	2
33	Abandon Existing Water Mains, Entire Project	LS	-	-	-	-	-	-	-	-	1
	SUBTOTAL WATER MAIN PAY ITEMS										
	PAVING PAY ITEMS										
34	Subgrade Undercutting	CY	-	-	-	-	-	-	-	-	350
35	Removing Concrete Drive Approach	SY	-	9	-	-	4	-	-	-	13
36	Removing Concrete Sidewalk & Ramp (sawcutting included)	SY	-	-	-	-	86	6	-	98	190
37	Removing Pavement Full Depth (Curb & Gutter included)	SY	-	48	-	-	-	-	-	-	48
38	Aggregate Base, MDOT 21AA Limestone, 8"	SY	-	48	-	-	-	-	-	-	48
39	Concrete Pavement, Non-reinforced, 8", Incl. integral 6" curb	SY	-	48	-	-	-	-	-	-	48
40	Remove & Replace Concrete Curb & Gutter, "Birmingham Roll"	LF	-	-	10	-	180	30	20	175	415
41	Pulverize and Reshape Ex. Bituminous Pavement	SY	1,290	915	850	580	855	1,340	1,000	470	7,300
42	Capeseal Surface	SY	1,290	915	850	580	855	1,340	1,000	470	7,300
43	Concrete Drive Approach, 6"	SY	-	9	-	-	5	-	-	-	14
44	Concrete Sidewalk, 6" (Includes Ramps)	SF	-	-	-	-	225	-	-	205	430
45	Concrete Sidewalk, 4"	SF	-	-	-	-	565	50	-	660	1,925
46	Handicap Ramp Truncated Domes	SF	-	-	-	-	72	-	-	83	155
47	Adjust Structure Cover	EA	-	-	-	-	-	-	-	-	5
48	Maintenance Aggregate for Entire Project	LS	-	-	-	-	-	-	-	-	1
	SUBTOTAL PAVING PAY ITEMS										
	GENERAL PAY ITEMS										
49	Mobilization (Max. 5% of Bid)	LS	-	-	-	-	-	-	-	-	1
50	Pavement Marking, Waterborne, 24 inch Stop Bar, White	LF	30	-	-	-	-	-	-	-	30
51	Pavement Marking, Waterborne, 24 inch Crosshatching, White	LF	250	-	-	-	-	-	-	-	250
52	Pavement Marking, Waterborne, 4 inch, Yellow	LF	325	480	-	-	-	-	-	-	805
53	Water and Sewer Allowance	LS	-	-	-	-	-	-	-	-	1
54	Salvage Existing Signs	LS	-	-	-	-	-	-	-	-	1
55	Sign Post, U-Channel	LF	-	-	-	-	24	-	-	24	48
56	Tree Protection, 3" Dia. Or Greater	EA	7	7	7	6	-	-	-	-	27
57	Mulch, 3"	SY	-	-	-	-	-	-	-	25	25
58	Topsoil, 3"	SY	-	12	8	-	55	8	4	153	240
59	Sod, Class A	SY	-	12	8	-	55	8	4	153	240
60	Inlet Filter	EA	3	-	3	-	2	2	2	-	12
61	Inlet Sediment Pit	EA	3	-	3	-	2	2	2	-	12
62	Traffic Maintenance & Control	LS	-	-	-	-	-	-	-	-	1
63	Inspector Crew Days	DAYS	-	-	-	-	-	-	-	-	-
	SUBTOTAL GENERAL PAY ITEMS										

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SEAL

PROJECT
2022 Quarton Lake Estates
Phase 2
#1-23(P)

CLIENT
BIRMINGHAM
A WALKABLE CITY

Engineering Department
151 Martin Street
Birmingham, MI 48012

PROJECT LOCATION
Part of the Northwest ¼
of Section 26
Town 2 North,
Range 10 East
City of Birmingham,
Oakland County, Michigan

SHEET
Quantities

811
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
01-28-21	ISSUED SURVEY
11-03-22	CITY REVIEW
11-30-22	REVISED PER CITY
12-14-22	ISSUED FOR BIDS
01-03-23	REVISED PER EGLE REVIEW

DRAWN BY:
G. Viju

DESIGNED BY:
P. Tulikangas

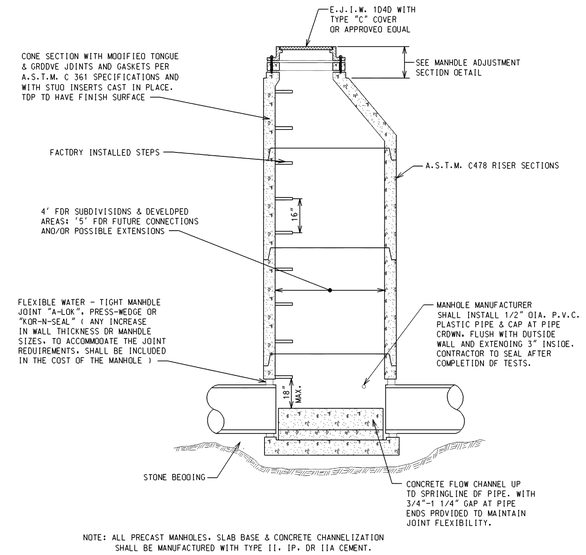
APPROVED BY:
B. Buchholz

DATE:
November 03, 2022

SCALE: N.T.S.

NFE JOB NO.
L733

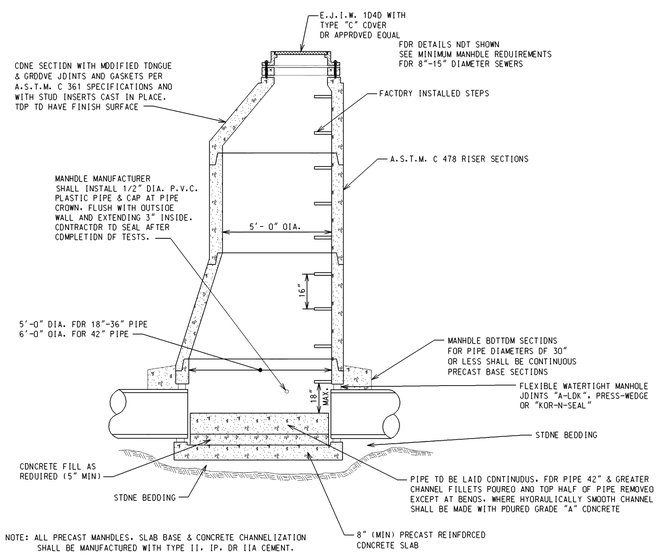
SHEET NO.
Q1



NOTE: ALL PRECAST MANHOLES, SLAB BASE & CONCRETE CHANNELIZATION SHALL BE MANUFACTURED WITH TYPE II, IP, OR IIA CEMENT.

SEWER MANHOLE

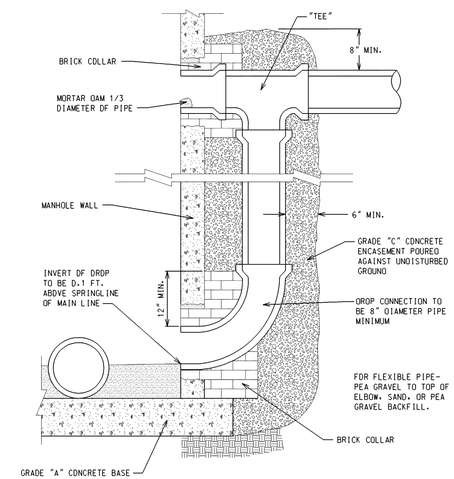
(8" THRU 15" DIA. SEWERS)



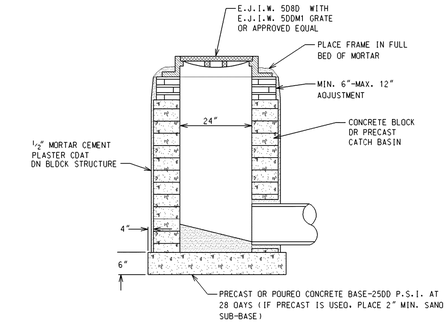
NOTE: ALL PRECAST MANHOLES, SLAB BASE & CONCRETE CHANNELIZATION SHALL BE MANUFACTURED WITH TYPE II, IP, OR IIA CEMENT.

SEWER MANHOLE

(18" THRU 42" DIA. SEWERS)

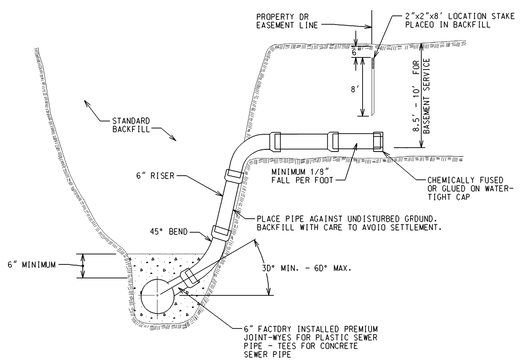


EXTERNAL DROP CONNECTION



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

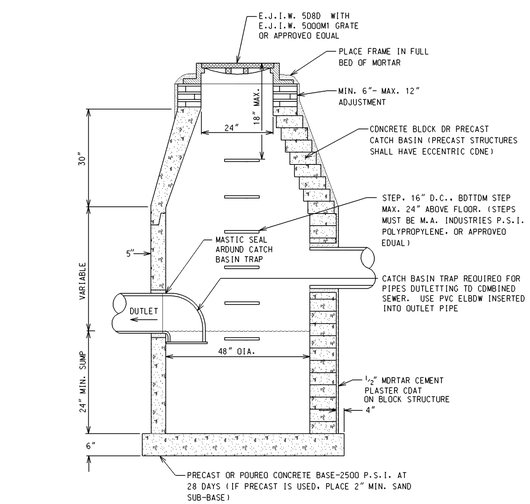


BUILDING LEAD DETAIL

0' - 15' COVER

KOR-N-TEE TAP FOR CONCRETE

NO SCALE



4 FT. DIAMETER CATCH BASIN

TRENCH DETAIL "A"

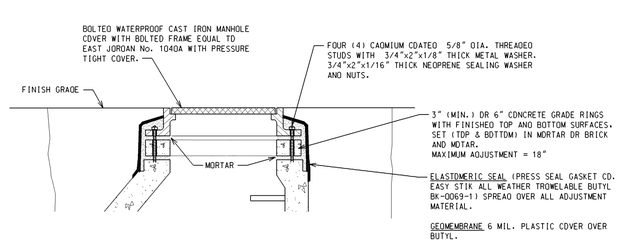
SEWER UNDER ROAD BED OR WITHIN THE INFLUENCE OF ROAD BED

NOT TO SCALE

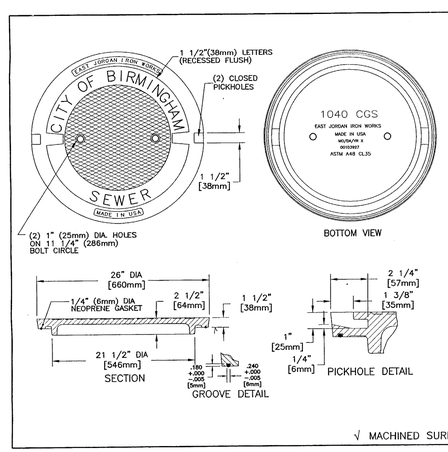
TRENCH DETAIL "B"

SEWER NOT UNDER ROAD BED

NOT TO SCALE



SANITARY MANHOLE ADJUSTMENT SECTION DETAIL



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

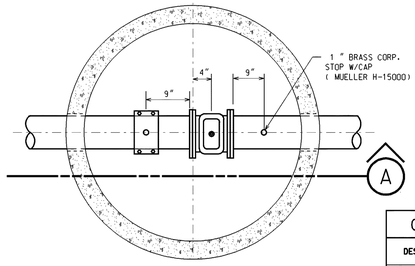
LOAD RATING HEAVY DUTY

City of Birmingham
A Walkable Community

151 MARTIN STREET BIRMINGHAM, MICHIGAN 48102

SEWER STANDARD DETAILS

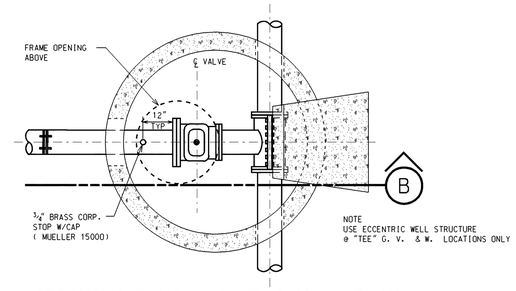
DATE	ADDITION AND/OR REVISION	DRAWN	PROJECT NO.	SHEET NO.
		DESIGNED	DATE JANUARY 2007	
		APPROVED	SCALE	



GATE WELL PLAN

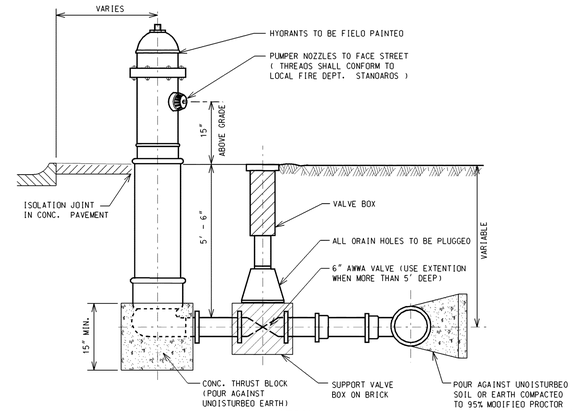
NO SCALE

GATE WELL SCHEDULE				
		PIPE DIA. INCHES		
DESCRIPTION	DIM.	6" & 8"	12"	16"
INSIDE DIA.	A	60"	72"	72"
WALL THICK.	B	5"	7"	7"
VALVE BLOCK THICK.	C	4"	4"	4"

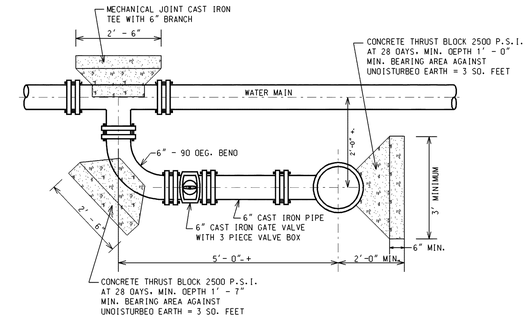


TAPPING SLEEVE, VALVE & WELL PLAN

NO SCALE



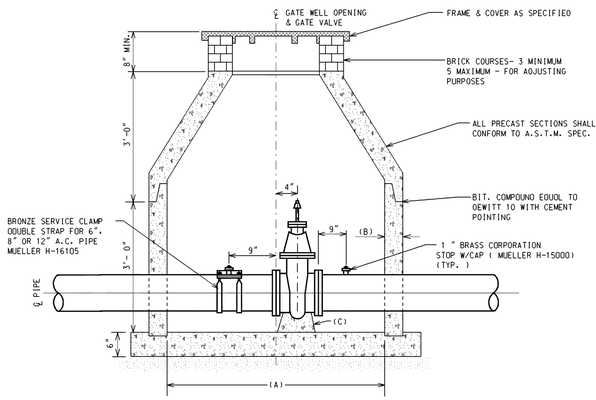
ELEVATION



"L" HYDRANT CONNECTION

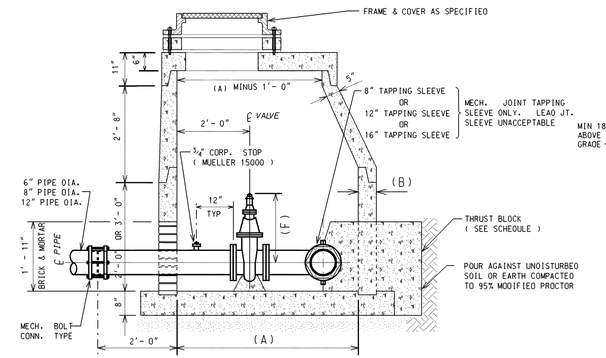
NO SCALE
W-9

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 .



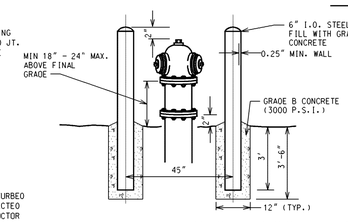
SECTION "A" GATE WELL

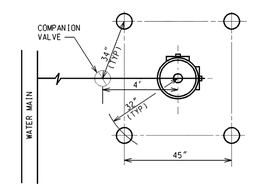
NO SCALE
W-1 & W-3



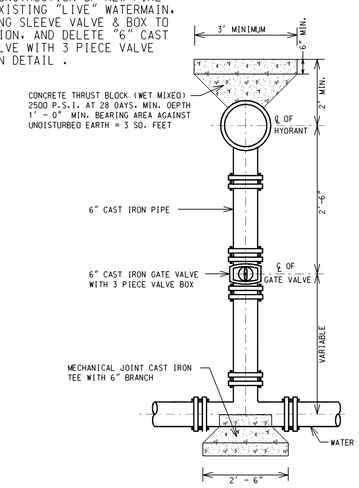
SECTION "B" TAPPING SLEEVE, VALVE & WELL

NO SCALE
W-4





FIRE HYDRANT GUARD POSTS DETAIL

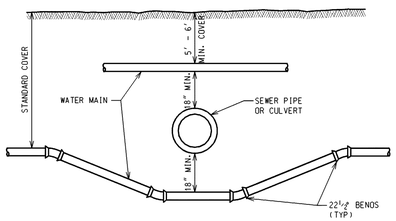


STRAIGHT HYDRANT CONNECTION

NO SCALE
W-10

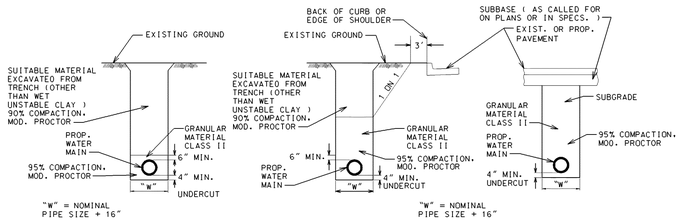
DITCH AND STREAM CROSSING

NO SCALE



SEWER OR CULVERT CROSSING

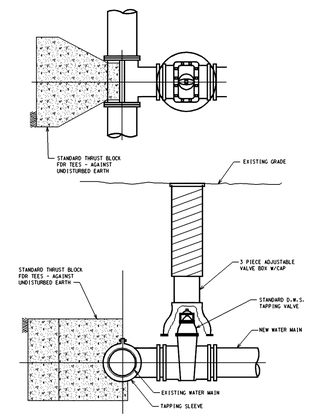
NO SCALE



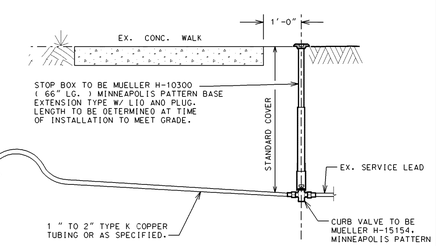
PROP. WATER MAINS NOT UNDER PAVED SURFACE

PROP. WATER MAINS UNDER PAVED SURFACE OR WITHIN INFLUENCE OF PAVED SURFACE

BEDDING DETAILS

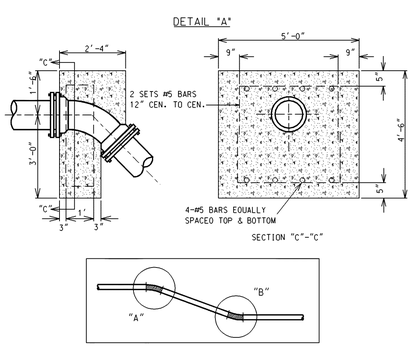


TAPPING SLEEVE & VALVE W/VALVE BOX

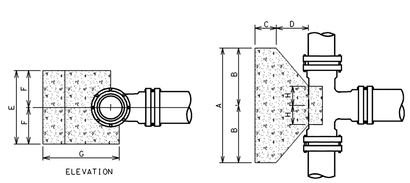


WATER SERVICE CONNECTION (TYP)

NO SCALE



VERTICAL BEND THRUST BLOCKS FOR 8"-12" MAINS



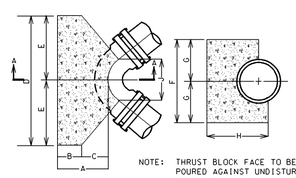
THRUST BLOCK FACE SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR THRUST BLOCKS TO BE WET MIXED 2500 P.S.I.

SCHEDULE OF THRUST BLOCK DIMENSIONS			
	TEE SIZE		
CODE	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"
	24"	3'-3"	3'-7"
H	8"	0'-6"	
	12"	0'-6"	0'-10"
	16"	0'-6"	0'-10"
	24"	0'-6"	0'-10"

CONCRETE THRUST BLOCK FOR TEES

N.T.S.



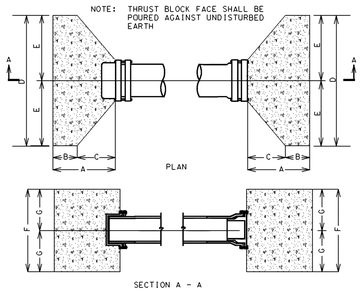
NOTE: THRUST BLOCK FACE TO BE POURED AGAINST UNDISTURBED EARTH

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.



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	PROJECT NO.	SHEET NO.
		DESIGNED	DATE APRIL 2005	WM-1
		APPROVED	SCALE	

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Engineering Department

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Melissa A. Coatta, City Engineer**

SUBJECT: **2022 - 2023 Cape Seal Program**
Contract #6-22 (P) Contract Award

INTRODUCTION:
Bids for the 2022 - 2023 Cape Seal Program #6-22 (P) were opened on December 1, 2022. One (1) bid was received for consideration, and the Engineering Department is recommending the award of the project to Highway Maintenance and Construction.

BACKGROUND:
The 2022-2023 Cape Seal Program includes work on Taunton between Woodward and Lincoln, Torry between Emmons and Sheffield, Bradford between Sheffield and Eton, Croft between Bradford and 14 Mile Road, Penistone between Torry and 14 Mile Road, Banbury between Torry and Sheffield, Humphrey between Torry and Eton, and Melton between Taunton to Eton. These streets in the project area are located in the southeast portion of the City. During the 2021 PASER (Pavement Surface Evaluation and Rating) Study, these streets were rated in poor condition.

The City policy has been to defray the costs of cape-seal treatments on unimproved streets by creating a Special Assessment District (SAD) consisting of the properties that are benefitting from this treatment. The public hearing of necessity for a cape seal SAD was September 12, 2022, and the public hearing to confirm the assessment roll was September 19, 2022.

The Engineering Department opened and read bids on December 1, 2022. One (1) bid was received as listed in the attached summary. The Engineering Department recommends awarding this contract to Highway Maintenance and Construction, which has completed previous cape seal programs in this City and understands expectations.

LEGAL REVIEW:
The City's standard contract language was used for this bidding document which the City Attorney has reviewed and approved. No legal issues exist based on the documentation.

FISCAL IMPACT:
This project was budgeted for in 2022/2023 in the Local Street Fund. The total construction cost of the project is estimated to be $480,025.81 which includes Highway Maintenance and Construction bid amount of $436,387.10 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
Local Street Fund	203.0-449.001-981.0100	$436,387.10	$43,638.71	$480,025.81

Amendments to the budget will be necessary for the extra local street work to complete the area east of Woodward Ave., north of 14 Mile Road, and south of Lincoln Street.

PUBLIC COMMUNICATIONS:
Property owners received notification of the cape seal SAD in September 2022. Construction communication with property owners in the area will include a project announcement with the project start date and regular updates. Property owners will be encouraged to sign up for the City's Constant Contact to receive additional information during the project.

SUMMARY:
It is recommended that the 2022-2023 Cape Seal Program #6-22 (P) be awarded to Highway Maintenance and Construction.

ATTACHMENTS:

- Project Area Map (1 page)
- Bid Summary (1 page)
- Contract Book (117 pages)

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the construction project budget and award the 2022-2023 Cape Seal Program #6-22 (P) to Highway Maintenance and Construction in the amount of $436,387.10. In addition, to authorized the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for this project will be charged to the following accounts:

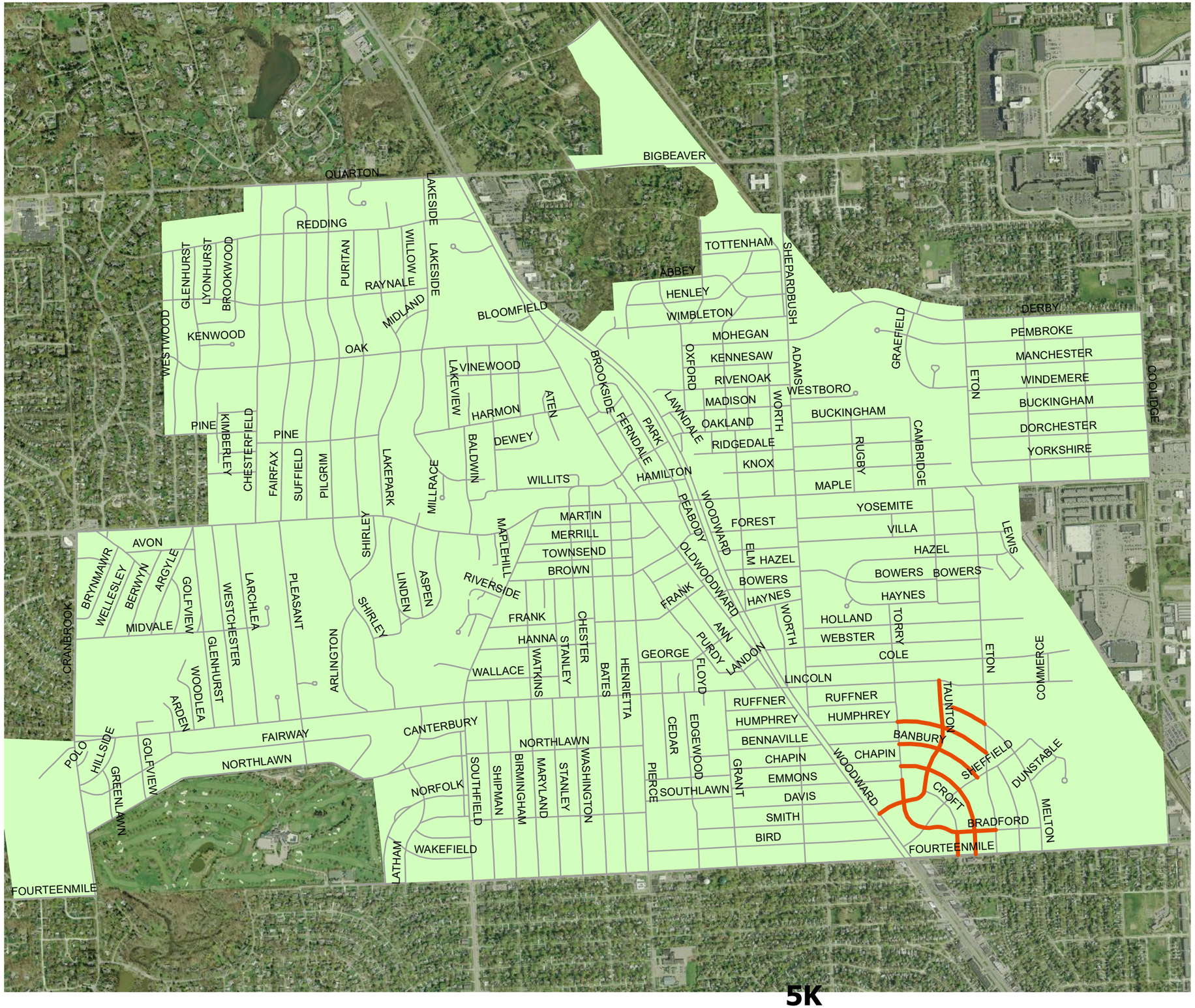
Fund Account	Fund ID Number	Project Award	10% Contingencies	Total
Local Street Fund	203.0-449.001-981.0100	$436,387.10	$43,638.71	$480,025.81

To approve the appropriation and amendment of the fiscal year 2022/2023 budget as follows:
Local Street Fund:

Revenues:		
203.0-000.000-400.0000	Draw from Fund Balance	$160,030
Total Revenue		$160,030
Expenditures:		
203.0-449.001-981.0100	Public Improvement	$160,030
Total Expenses		$160,030

BIRMINGHAM
A WALKABLE CITY

2022 CAPE SEAL 6-22(P) TARGET AREAS



Legend

2022 Cape Seal Area

N

0 1,400 2,800 5,600 Feet

1 inch = 1,472 feet

Disclaimer: The information provided by this program has been compiled from recorded deeds, plats, taxmaps, surveys, and other public records and data. It is not a legally recorded map or survey.

The data provided hereon may be inaccurate or out of date and any person or entity who relies on said information for any purpose whatsoever does so solely at his or her own risk.

Data Sources: Oakland County GIS Utility, City of Birmingham

5K

CITY OF BIRMINGHAM
2022 - 2023 CAPESEAL PROGRAM - CONTRACT #06-22(P)
PRICING SUBMITTED OCTOBER 28,2022

Bids due: December 2, 2022 2:00 PM
HRC Job 20220234

Highway Maintenance and Construction
PO Box 74411 Romulus, MI 48174

No.	DESCRIPTION	QTY	UNITS	UNIT PRICE	AMOUNT
1	Mobilization, Maximum $25,000	1	LS	$ 5,000.00	$ 5,000.00
2	Erosion Control, Inlet Protection, Fabric Drop	43	EA	$ 400.00	$ 17,200.00
3	Capeseal Surface	19,214	SY	$ 11.15	$ 214,236.10
4	Supplemental Aggregate, MDOT 23A Limestone, as Required	200	TON	$ 34.00	$ 6,800.00
5	Sidewalk, Remove	2,063	SF	$ 2.00	$ 4,126.00
6	Curb and Gutter, Remove	300	FT	$ 5.00	$ 1,500.00
7	Curb and Gutter, Concrete, Detail F4	120	FT	$ 50.00	$ 6,000.00
8	Curb Ramp Opening, Concrete	400	FT	$ 50.00	$ 20,000.00
9	Curb Ramp, 6 inch	1,553	SF	$ 15.00	$ 23,295.00
10	Sidewalk, Concrete, 4 inch	510	SF	$ 12.00	$ 6,120.00
11	Detectable Warning Surface, Modified	380	FT	$ 180.00	$ 68,400.00
12	Subgrade Undercutting, 1 x 3, Special	225	CY	$ 35.00	$ 7,875.00
13	Subgrade Undercutting, 21AA	80	CY	$ 35.00	$ 2,800.00
14	Cement Stabilization	915	SY	$ 9.00	$ 8,235.00
15	Additional Cement Added	10	Ton	$ 400.00	$ 4,000.00
16	Structure Cover, Adjust, Case 1	36	EA	$ 500.00	$ 18,000.00
17	Traffic Maintenance & Control	1	LS	$ 3,000.00	$ 3,000.00
18	Turf Establishment, THM Seed Mix	1	LS	$ 5,000.00	$ 5,000.00
19	Inspector Crew Days	37	DAY	$ 400.00	$ 14,800.00
	Subtotal without Crew Days				$ 421,587.10

Total Including Crew Days **$ 436,387.10**

2022 - 2023 CAPE SEAL PROGRAM

CONTRACT #06-22 (P)

CITY OF BIRMINGHAM

ENGINEERING DEPARTMENT

Contractor's Name: HIGHWAY MAINTENANCE & CONSTRUCTION

5K

2022 – 2023 CAPE SEAL PROGRAM
CONTRACT #06-22(P)
INDEX

095	Sworn Statement of Qualifications	6 Pages
100	Proposal	7 Pages
110	Contract	2 Pages
120	Performance Bond	2 Pages
130	Payment Bond	2 Pages
140	Payment Forms	6 Pages
	Request For Partial Payment Request For Final Payment Sworn Statement Work Directive	
200	Advertisement	2 Pages
301	Supplemental Instructions to Bidders	4 Pages
310	General Instructions to Bidders	4 Pages
400	General Requirements	16 Pages
410	Iran Certification Form	1 Page
711	Portland Cement Concrete Durability	5 Pages
712	Concrete Sidewalks	8 Pages
715	Dense Graded Aggregate	1 Page
720	Subgrade Improvement	1 Page
730	DPW Structure Adjustment	3 Pages
735	Overlay Structure Adjustment	2 Pages
761	Surface Course Pulverizing	2 Pages
762	Cape Seal Surface	8 Pages
763	Cement Treated Base Course	3 Pages
770	Turf Establishment	13 Pages

Appendices:

Breakdown of Quantities by Street

Figure 1: MAP OF WORK TO BE COMPLETED (1 Page – 11" x 17")

Figure 2: MAP OF PERMITTED HAUL / CONSTRUCTION TRAFFIC ROUTES (1 Page – 11" x 17")

MDOT CURB RAMP AND DETECTABLE WARNING DETAILS (7 Pages)

2022 – 2023 CAPE SEAL PROGRAM - CONTRACT # 06-22(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 AT **2:00 p.m., August 31, 2022**. 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 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: HIGHWAY MAINTENANCE & CONSTRUCTION CO.

Address: P.O. Box 74411 • Romulus, MI 48174-0411
(734) 941-8885

Telephone: _____ Fax: 734) 941-8962 Email: HIGHWAYMAINT@COMCAST.NET Website: _____

Number of Years Operating Under Your Present Name: 50 YRS

General Nature of Work Performed: CRKSEAL, SLURRY SEAL, CHIPSEAL, SPRAY PATCH

Number of construction crews **employed by your company** relating to the type of work under this contract: (3)

Number of construction personnel that constitutes a crew (foreman, pipe layers, excavator, and loader operators, etc.): 16

Number of construction crews the company **will place on site full-time** in order to complete this project, in its entirety, within the designated time frame: (1)

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: 2022 CAPESEAL

Owner: GARDEN CITY

Contact Person: BRAD OHMAN Telephone No.: 734) 793-1800

Contract Amount: $ 319,677.00

Final Contract Price: $ 319,677.00

Date Completed: 10/24/22

Description of Work Performed:

SPRAY PATCH REPAIR & CAPESEAL CITY STREETS

REFERENCE PROJECT#2:

Project Name:

Owner:

Contact Person: Telephone No.:

Contract Amount: $

Final Contract Price: $

Date Completed:

Description of Work Performed:

REFERENCE PROJECT #3:

Project Name: _____

Owner: _____

Contact Person: _____ Telephone No.: _____

Contract Amount: $_____

Final Contract Price: $_____

Date Completed: _____

Description of Work Performed:

_____

_____

_____

_____

_____

List major work presently under contract:

Name of Project	Percent Complete	Owner	Engineer	Contract Amount
_____	____%	_____	_____	$_____
_____	____%	_____	_____	$_____
_____	____%	_____	_____	$_____
_____	____%	_____	_____	$_____
_____	____%	_____	_____	$_____

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
PAVEMENT RECYCLING	PULVERIZATION & GRADING CEMENT STABILIZATION	12%
LUIGI CEMENT	CONCRETE & RAMPS	35%

CONTRACTOR QUESTIONAIRE:

Have you, at any time, failed to complete a contract?

____ Yes __X__ No

Are there any judgements, claims or suits pending by or outstanding against you?

____ Yes __X__ No

If the answer to either question is Yes, submit details on separate sheet.

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 27 day of OCTOBER 2022.

By: HIGHWAY MAINTENANCE & CONSTRUCTION

Signature and Title: PRESIDENT

Written Name: JEFFREY

Address: PO BOX 74411, ROMULUS, MI 48174-0411

STATE OF MICHIGAN)
) SS
County of Wayne)

Subscribed and Sworn to before me, a Notary Public, in and for Wayne County, Michigan,

on this 27 day of October, 2022.

Rebecca L Smith
Notary Public

In and for the County of Wayne, MI.

My commission Expires: July 17, 2023

5K

PROPOSAL
2022 – 2023 CAPE SEAL PROGRAM
CONTRACT #06-22(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, and the following addenda:

Date	Addendum Number
11/10/22	#1

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 **2022 – 2023 Cape Seal Program, Contract #06-22(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 price as here stated and further defined in the specifications. **Bidder must write out in words the unit price of each item on the line provided under each pay item.**

WORK ITEMS HUMPHREY, PENISTONE, TORRY, BRADFORD, TORRY, MELTON, BANBURY, CROFT					
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
1.	Mobilization, Maximum $25,000	1	LS	$5000	$5000
2.	Erosion Control, Inlet Protection, Fabric Drop	43	EA	$400	$17,200
3.	Capeseal Surface	19,214	SY	$11.15	$214,236.10
4.	Supplemental Aggregate, MDOT 23A Limestone, as Required	200	TON	$34.00	$6800
5.	Sidewalk, Remove	2,063	SF	$2.00	$4126
6.	Curb and Gutter, Remove	300	FT	$5.00	$1500

WORK ITEMS HUMPHREY, PENISTONE, TORRY, BRADFORD, TORRY, MELTON, BANBURY, CROFT					
No.	**ITEMS FOR BID**	**QTY**	**UNITS**	**UNIT PRICE**	**AMOUNT**
7.	Curb and Gutter, Concrete, Detail F4	120	FT	$50.00	$6,000
8.	Curb Ramp Opening, Concrete	400	FT	$50.00	$20,000
9.	Curb Ramp, 6 inch	1,553	SF	$15.00	$23,295
10.	Sidewalk, Concrete, 4 inch	510	SF	$12.00	$6120
11.	Detectable Warning Surface, Modified	380	FT	$180.00	$68,400
12.	Subgrade Undercutting, 1 x 3, Special	225	CY	$35.00	$7,875
13.	Subgrade Undercutting, 21AA	80	CY	$35.00	$2800
14.	Cement Stabilization	915	SY	$9.00	$8,235
15.	Additional Cement Added	10	TON	$400.00	$4,000
16.	Structure Cover, Adj, Case 1	36	EA	$500.00	$18,000
17.	Traffic Maintenance & Control	1	LS	$3000.00	$3,000
18.	Turf Establishment, THM Seed Mix	1	LS	$5000.00	$5,000
19.	Inspector Crew Days-	37	DAY	$400.00	$14,800

TOTAL BID $436,387.10

TOTAL BID (WRITE OUT IN WORDS):

Four Hundred : Thirty Six Thousand Three Hundred : Eighty Seven Dollars : Ten Cents

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 HIGHWAY MAINTENANCE & CONSTRUCTION CO.

Street Address P.O. Box 74411 • Romulus, MI 48174-0411 (734) 941-8885

City _____ County WAYNE

State/Zip Code _____

Telephone 734-941-8885 FAX 734-941-8962

Date 12/1/22

Signed by _____

5K

Print Name JEFFREY S. DEMEK

Title PRESIDENT

If a corporation, give state in which incorporated MICHIGAN

Witnessed: [illegible]

Print Name: JAKE DEMEK

Name of Superintendent ROBERT HESTER
Supervision & time sequence according to the General Requirements

Give below at least three references as to ability to do work proposed.

Name CITY OF BIRMINGHAM Address _____

Firm _____ Telephone _____

Name CITY OF AUBURN HILLS Address _____

Firm _____ Telephone _____

Name CITY OF GARDEN CITY Address _____

Firm _____ Telephone _____

Give below the last five projects worked on, including those currently in progress, in chronological order. The names need not all be different from those listed above:

Project #1: Name of Project: ROAD REPAIR & CAPESEAL - 2022

Date Started 6/2022 Finished 10/2022

Name GARDEN CITY Address _____

Firm _____ Telephone _____

Project #2: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #3: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #4: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

Project #5: Name of Project: _____

Date Started _____ Finished _____

Name _____ Address _____

Firm _____ Telephone _____

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 GARY VANHEVEL Address LAPEER, MI

Firm PAVEMENT RECYCLING Telephone (810) 245-5700

Type of Work to be Performed: PULVERIZE & GRADE, CEMENT STABILIZATION

Name BOB WEIST Address 16481 COMMON, ROSEVILLE

Firm LUIGI FERDINANDI & SON CEMENT Telephone (586) 774-1000

Type of Work to be Performed: CEMENT WORK

Name _____ Address _____

Firm _____ Telephone _____

Type of Work to be Performed: _____

Name _____ Address _____

Firm_____ Telephone_____

Type of Work to be Performed: _____

Name_____ Address_____

Firm_____ Telephone_____

Type of Work to be Performed: _____

Name_____ Address_____

Firm_____ Telephone_____

Type of Work to be Performed: _____

Name_____ Address_____

Firm_____ Telephone_____

Type of Work to be Performed: _____

Name_____ Address_____

Firm_____ Telephone_____

Type of Work to be Performed: _____

Name_____ Address_____

Firm_____ Telephone_____

Type of Work to be Performed: _____

END OF SECTION

HRC
HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

MAILING: PO Box 824
Bloomfield Hills, MI 48303-0824
SHIPPING: 555 Hulet Drive
Bloomfield Hills, MI 48302-0360
PHONE: 248-454-6300
WEBSITE: hrcengr.com

ADDENDUM NO. 1
TO SPECIFICATIONS FOR:
2022 – 2023 CAPE SEAL PROGRAM
BIRMINGHAM, MICHIGAN

Issued: November 15, 2022

HRC Job No. 20220234

This Addendum is issued prior to receipt of proposals to provide for certain changes and clarifications to the Specifications and/or the Drawings, as herein specified, and is hereby made a part of the Contract Documents and shall be taken into consideration in preparing the Proposal. All other conditions remain the same. **The Proposer shall acknowledge the receipt of this Addendum by signing below, including this addendum with their proposals, and completing the Addenda section on Page 1 of the Proposal Form (Section 100).** Failure to sign the Addenda Section of the Proposal Form in the submission of the proposal may be justification for the proposal being rejected as non-responsive.

The following lists the extent of this Addendum. Descriptions of the changes or clarifications are given within each heading:

SPECIFICATION CHANGES:

- **Section 763 – Cement Treated Base Course** has been added to the contract documents. This specification covers as-directed cement amendment of soft subsoils concurrent with pulverization operations as an alternative to the conventional undercut-and-backfill methodology and quantities already included in the project.

- **Section 761 – Surface Course Pulverizing** has been modified to refer to Section 763. This specification covers as-directed cement amendment of soft subsoils as an alternative to the conventional undercut-and-backfill methodology and quantities already included in the project.

- **Section 100 – Proposal** has been modified to reflect the inclusion of Cement Stabilization, per SY and Cement Addition, per ton.

- **Section 010 – Index** has been modified to reflect the inclusion of Section 763 to the contract documents

SUMMARY:

This Addendum No. 1 has been issued to clarify, modify, and add additional items to the original Bid Package. A copy of the amended pages of the Contract Documents noted in this addendum have been posted online at http://www.hrcengr.com/bid-info.

The Bidder shall acknowledge receipt of this Addendum No. 1 by signing in the location provided below and incorporating this Addendum No. 1 with the submission of his bid. Failure to include Addendum No. 1 and its attachments may result in rejection of the bid.

If you have any questions or require any additional information, please contact the undersigned.

Respectfully submitted,

HUBBELL, ROTH & CLARK, INC.

William West

William J. West, PE
Senior Project Engineer

Attachment
Enclosure
pc: All Plan holders
City of Birmingham; M. Coatta, S. Zielinski
HRC; J. Surhigh, S. Carver (Front Desk), N. Womack (Repro) File

Received and Acknowledged By:

Company: HIGHWAY MAINTENANCE & CONSTRUCTION

Signature: _____

Printed Name: JEFFREY S. DEMEK

Title: PRESIDENT

Dated: 11/15/22

AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR:
(Name, legal status and address)
Highway Maintenance and Construction Company
12101 Wahrman St
Romulus, MI 48174-0411

SURETY:
(Name, legal status and principal place of business)
Atlantic Specialty Insurance Company
605 Highway 169 North, Suite 800
Plymouth, MN 55441

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:
(Name, legal status and address)
City of Birmingham
151 Martin Street
Birmingham, MI 48012

BOND AMOUNT: Five Percent of Accompanying Bid ---------- (5%)

PROJECT:
(Name, location or address, and Project number, if any)
2022 - 2023 Cape Seal Program - Contract # 06-22(P)

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this **2nd** day of **December, 2022**

Rebecca L Smith
(Witness)

Highway Maintenance and Construction Company
(Principal) *(Seal)*

(Title)

Atlantic Specialty Insurance Company
(Surety) *(Seal)*

(Witness)

(Title) **Susan L Small, Attorney-in-Fact**

Init.

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OneBeacon
INSURANCE GROUP

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Steven K. Brandon, John L. Budde, T. J. Griffin, Susan L. Small, Patrick E. Williams, Terence J. Griffin**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said Instrument by the authority and at the direction of the Company.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 2nd day of December, 2022.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

5K

2022 – 2023 CAPE SEAL PROGRAM
PROJECT - #06-22(P)

CONTRACT

THIS AGREEMENT made the _____ day of _____, 20____, by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and Highway Maintenance & Construction, Inc. of the City of Romulus, County of Wayne, State of Michigan, hereinafter called the "Contractor", relative to Contract No. 06-22(P), otherwise known as: 2022 - 2023 Cape Seal Program _____ in the amount of $ 436,387.10 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. In the event that 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 of the work to be performed by the Contractor shall be completed on or before the Time of Completion, as set forth in the Supplemental Instructions to Bidders. The Contractor shall pay to the City as liquidated damages, the amount per day as set forth under Liquidated Damages in the Supplemental Instructions to Bidders, for each calendar day after the date specified under Time of Completion that the work to be performed by the Contractor is not completed. Liquidated damages are established because of the difficulty in ascertaining actual damages which the City might sustain, and are not intended as a penalty.

4. The City promises and agrees to pay said Contractor for all labor, materials and appliances supplied, and for all work performed under this agreement at the unit prices provided in the attached Proposals and Specifications.

5. For the faithful performances of the terms of this agreement, said parties respectively bind themselves, their successors, heirs, executors, administrators and assigns.

IN WITNESS WHEREOF, the parties execute this agreement as of the day and year first written above.

CITY OF BIRMINGHAM

Attest _____
City Clerk

By: _____
Mayor

Witnessed _____

_____

By: _____
JEFFREY S. DENCK
HIGHWAY MAINTENANCE & CONST
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

PERFORMANCE BOND

BOND #8201362228

KNOW ALL MEN BY THESE PRESENTS that we, the undersigned HIGHWAY MAINTENANCE AND CONSTRUCTION, INC.

as Principal, and Atlantic Specialty Insurance Company as Sureties, are hereby held and firmly bound unto the **CITY OF BIRMINGHAM, MICHIGAN** in the sum of FOUR HUNDRED THIRTY SIX THOUSAND THREE HUNDRED EIGHTY SEVEN AND 10/100 Dollars ($ 436,387.10), in lawful money of the United States, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns this _____ day of _____, 20_____.

WHEREAS, the above bounded Principal has entered into a certain written contract with the above named City of Birmingham, Michigan dated _____ day of _____, 20_____ for the construction of _____

2022 – 2023 CAPE SEAL PROGRAM

CITY CONTRACT #6-22(P)

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:

Rebecca L Smith

JEFFREY S. DEMECK
PRESIDENT

Highway Maintenance and Construction Inc
Principal

Susan L Small, Attorney-in-Fact
Atlantic Specialty Insurance Company

5K

PAYMENT BOND

Bond #[illegible]36228

KNOW ALL MEN BY THESE PRESENTS, that we _____ HIGHWAY MAINTENANCE AND CONSTRUCTION, INC. of the _____ hereinafter called the "Principal" and Atlantic Specialty 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 FOUR HUNDRED THIRTY SIX THOUSAND THREE HUNDRED EIGHTY SEVEN AND 10/100 Dollars ($ 436,387.10), in lawful money of the United States, for the payment whereof, we bid ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally this _____ day of _____, A.D., 20___.

WHEREAS, the above named Principal has entered into a Contract with the CITY OF BIRMINGHAM, MICHIGAN dated the _____ day of _____, A.D., 20____, wherein said principal has covenanted and agreed as follows, to wit:

To furnish all the labor and materials FOR CONSTRUCTION OF THE 2022 – 2023 CAPE SEAL PROGRAM, CITY CONTRACT # 6-22(P) and,

WHEREAS, this Bond is given in compliance with and subject to the provisions of Act No. 123 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.

OneBeacon
INSURANCE GROUP

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Steven K. Brandon, John L. Budde, T. J. Griffin, Susan L. Small, Patrick E. Williams, Terence J. Griffin**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 18th day of January, 2023.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

5K

WITNESSED:

Rebecca L Smith

JEFFREY S. DEMEK
PRESIDENT

Allegheny Maintenance and Construction Inc
Principal

Susan L Small, Attorney-in-Fact
Atlantic Specialty Insurance Company
Surety

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/17/2023

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 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
VTC Insurance Group
37000 Grand River Ave Ste 150
Farmington Hills MI 48335

CONTACT NAME: Janice Ketelhut
PHONE (A/C, No, Ext): (248) 471-0970 FAX (A/C, No): (248) 471-0641
E-MAIL ADDRESS: jketelhut@vtcins.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: Union Insurance Company	
INSURER B: Accident Fund National Ins Comp	12305
INSURER C:	
INSURER D:	
INSURER E:	
INSURER F:	

INSURED
Highway Maintenance & Construction Co
P O Box 74411
Romulus MI 48174-0411

COVERAGES **CERTIFICATE NUMBER:** 22-23 Master Cert **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	X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY [ ] PRO-JECT [ ] LOC OTHER:	X	Y	CPA3275481	4/1/2022	4/1/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Employee Benefits	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $ 1,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS HIRED AUTOS X 19 X SCHEDULED AUTOS X NON-OWNED AUTOS	X	Y	CPA3275481	4/1/2022	4/1/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Underinsured motorist BI split limit	$ 1,000,000 $ $ $ 3,000 $ 1,000,000
A	X UMBRELLA LIAB [ ] OCCUR EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			CPA3275481	4/1/2022	4/1/2023	EACH OCCURRENCE AGGREGATE $	$ 3,000,000 $ 3,000,000
B	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	Y	100018497	4/1/2022	4/1/2023	[ ] 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
A	Equipment Leased or Rented From Others			CPA3275481	4/1/2022	4/1/2023	One Piece of Equipment Deductible	$250,000 $2,500

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Project: #06-22(P)- 22-23 Cape Seal Program. Where required by written contract, City of Birmingham, including all elected and appointed officials, all employees, volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof are additional insured for General Liability as respects ongoing & completed operations on a primary & non-contributory basis and add'l insured with respects to Automobile liability. General Liability, Auto & Workers Comp policies include waiver of subrogation on behalf of add'l insured as required by written contract and where allowed by law. Umbrella/Excess liability coverage follows form over General Liability, Auto & Work Comp.

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

Alan Chandler/MKENNE

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INSURANCE BINDER

DATE (MM/DD/YYYY): 2/9/2023

THIS BINDER IS A TEMPORARY INSURANCE CONTRACT, SUBJECT TO THE CONDITIONS SHOWN ON PAGE 2 OF THIS FORM.

AGENCY
VTC Insurance Group
37000 Grand River Ave Ste 150
Farmington Hills MI 48335
PHONE (A/C, No, Ext): (248)471-0970 FAX (A/C, No): (248)471-0641
CODE: SUB CODE:
AGENCY CUSTOMER ID: 00094229

COMPANY: Continental Western Insurance Co.
BINDER #: B232974958

EFFECTIVE DATE	EFFECTIVE TIME		EXPIRATION DATE	EXPIRATION TIME	
4/1/2023	12:01	X AM / PM	6/1/2023	X 12:01 AM / NOON	

☐ THIS BINDER IS ISSUED TO EXTEND COVERAGE IN THE ABOVE NAMED COMPANY PER EXPIRING POLICY #: OCP3289656-20

INSURED AND MAILING ADDRESS
City of Birmingham
151 Main St
Birmingham MI 48012

DESCRIPTION OF OPERATIONS / VEHICLES / PROPERTY (Including Location)
Project:2022-2023 Cape Seal Program - contract #6-22(P)
Job Cost: $436,387
Contractor: Highway Maintenance & Construction Co
P. O. Box 74411
Romulus, MI 48174-0411

COVERAGES

TYPE OF INSURANCE	COVERAGE / FORMS	LIMITS: DEDUCTIBLE	COINS %	AMOUNT
PROPERTY — CAUSES OF LOSS: ☐ BASIC ☐ BROAD ☐ SPEC				
GENERAL LIABILITY — ☐ COMMERCIAL GENERAL LIABILITY; ☐ CLAIMS MADE ☒ OCCUR; X Owners & Contractors Protective Liability	RETRO DATE FOR CLAIMS MADE:	EACH OCCURRENCE		$ 3,000,000
		DAMAGE TO RENTED PREMISES		$
		MED EXP (Any one person)		$
		PERSONAL & ADV INJURY		$
		GENERAL AGGREGATE		$ 3,000,000
		PRODUCTS - COMP/OP AGG		$
VEHICLE LIABILITY — ☐ ANY AUTO; ☐ ALL OWNED AUTOS; ☐ SCHEDULED AUTOS; ☐ HIRED AUTOS; ☐ NON-OWNED AUTOS		COMBINED SINGLE LIMIT		$
		BODILY INJURY (Per person)		$
		BODILY INJURY (Per accident)		$
		PROPERTY DAMAGE		$
		MEDICAL PAYMENTS		$
		PERSONAL INJURY PROT		$
		UNINSURED MOTORIST		$
				$
VEHICLE PHYSICAL DAMAGE — DED — COLLISION: ; OTHER THAN COL:	☐ ALL VEHICLES ☐ SCHEDULED VEHICLES	ACTUAL CASH VALUE / STATED AMOUNT		$
GARAGE LIABILITY — ☐ ANY AUTO		AUTO ONLY - EA ACCIDENT		$
		OTHER THAN AUTO ONLY: EACH ACCIDENT		$
		AGGREGATE		$
EXCESS LIABILITY — ☐ UMBRELLA FORM; ☐ OTHER THAN UMBRELLA FORM	RETRO DATE FOR CLAIMS MADE:	EACH OCCURRENCE		$
		AGGREGATE		$
		SELF-INSURED RETENTION		$
WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY		PER STATUTE		
		E.L. EACH ACCIDENT		$
		E.L. DISEASE - EA EMPLOYEE		$
		E.L. DISEASE - POLICY LIMIT		$
SPECIAL CONDITIONS / OTHER COVERAGES		FEES		$
		TAXES		$
		ESTIMATED TOTAL PREMIUM		$

NAME & ADDRESS

☐ MORTGAGEE ☐ LOSS PAYEE ☐ ADDITIONAL INSURED

LOAN #:

AUTHORIZED REPRESENTATIVE
Terry Griffin/V45

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ACORD 75 (2013/09)
INS075 (201309)

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CONDITIONS

This Company binds the kind(s) of insurance stipulated on page 1 of this form. The Insurance is subject to the terms, conditions and limitations of the policy(ies) in current use by the Company.

This binder may be cancelled by the Insured by surrender of this binder or by written notice to the Company stating when cancellation will be effective. This binder may be cancelled by the Company by notice to the Insured in accordance with the policy conditions. This binder is cancelled when replaced by a policy. If this binder is not replaced by a policy, the Company is entitled to charge a premium for the binder according to the Rules and Rates in use by the Company.

Applicable in Arizona

Binders are effective for no more than ninety (90) days.

Applicable in California

When this form is used to provide insurance in the amount of one million dollars ($1,000,000) or more, the title of the form is changed from "Insurance Binder" to "Cover Note".

Applicable in Colorado

With respect to binders issued to renters of residential premises, home owners, condo unit owners and mobile home owners, the insurer has thirty (30) business days, commencing from the effective date of coverage, to evaluate the issuance of the insurance policy.

Applicable in Delaware

The mortgagee or Obligee of any mortgage or other instrument given for the purpose of creating a lien on real property shall accept as evidence of insurance a written binder issued by an authorized insurer or its agent if the binder includes or is accompanied by: the name and address of the borrower; the name and address of the lender as loss payee; a description of the insured real property; a provision that the binder may not be canceled within the term of the binder unless the lender and the insured borrower receive written notice of the cancellation at least ten (10) days prior to the cancellation; except in the case of a renewal of a policy subsequent to the closing of the loan, a paid receipt of the full amount of the applicable premium, and the amount of insurance coverage.

Chapter 21 Title 25 Paragraph 2119

Applicable in Florida

Except for Auto Insurance coverage, no notice of cancellation or nonrenewal of a binder is required unless the duration of the binder exceeds 60 days. For auto insurance, the insurer must give 5 days prior notice, unless the binder is replaced by a policy or another binder in the same company.

Applicable in Maryland

The insurer has 45 business days, commencing from the effective date of coverage to confirm eligibility for coverage under the insurance policy.

Applicable in Michigan

The policy may be cancelled at any time at the request of the insured.

Applicable in Nevada

Any person who refuses to accept a binder which provides coverage of less than $1,000,000.00 when proof is required: (A) Shall be fined not more than $500.00, and (B) is liable to the party presenting the binder as proof of insurance for actual damages sustained therefrom.

Applicable in Oklahoma

All policies shall expire at 12:01 a.m. standard time on the expiration date stated in the policy.

Applicable in Oregon

Binders are effective for no more than ninety (90) days. A binder extension or renewal beyond such 90 days would require the written approval by the Director of the Department of Consumer and Business Services.

Applicable in the Virgin Islands

This binder is effective for only ninety (90) days. Within thirty (30) days of receipt of this binder, you should request an insurance policy or certificate (if applicable) from your agent and/or insurance company.

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 **2022 – 2023 CAPE SEAL PROGRAM #06-22(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 _____, in accordance with the terms and conditions of **CONTRACT #06-22(P), 2022 – 2023 CAPE SEAL PROGRAM**; 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 _____, 20__.

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 _____, 20__.

_____, 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 _____

20____

_____

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: **2022 -2023 CAPE SEAL PROGRAM #06-22(P)**

The following changed conditions 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
2022 – 2023 CAPE SEAL PROGRAM
CONTRACT #06-22(P)

Sealed proposals endorsed "**2022 – 2023 CAPE SEAL PROGRAM - CONTRACT #06-22(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 Friday December 2, 2022**. 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.

This project will include various capital preventative maintenance measures installed over existing unimproved roadways to extend the pavement service life, along with localized subsurface repairs. Approximate quantities are as follows: 19,214 square yards of cape seal surfacing, localized subgrade improvement, with curb & gutter, ADA ramp and sidewalk improvements.

Bidders shall review and comply with all Contract Documents, and supplemental information, as defined in the Information For Bidders.

Bidding documents may be obtained after **2:00 PM on Monday, November 14, 2022** through the City of Birmingham Engineering Department, located at 151 Martin Street, Birmingham, MI 48102 (248-530-1840). Complete sets of bidding documents may be obtained for a nonrefundable fee of $50.00 each if picked up from the above location, $65 if mailed. Bidding documents may also be sent in PDF format on disc for $15.00. Payment shall be in the form of a check made payable to the City of Birmingham, which must be received prior to mailing of plans and specifications. Bidding documents may also be shipped by Federal Express, upon receipt of the $30.00 payment noted above, and a Federal Express number to charge shipping costs to.

Bidding documents for the project may be also obtained through the Michigan Inter-Governmental Trade Network (MITN), which may be accessed online at http://www.govbids.com/scripts/mitn/public/home1.asp Vendors wishing to obtain copies of the bidding documents will need to register through the MITN website.

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:
Birmingham Observer & Eccentric Newspaper
MITN

SECTION 301
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

1.01 TIME OF COMPLETION

A. No cape seal construction work on any of the streets shall be performed between December 3, 2022 and April 1, 2023. The Contractor shall have all of the work on the project substantially completed by June 30, 2023. Substantial completion shall be defined as all subgrade improvements, sidewalk, ramps and curb & gutter, and cape seal resurfacing completed.

B. No cape seal or concrete construction work on any of the streets shall be performed between August 13, 2023 and August 20, 2023.

C. All vegetation establishment in restored areas must be completed by October 30, 2023.

D. If it becomes necessary for the Contractor's personnel to work overtime in order to complete said work within the above noted time limitations, the Contractor shall perform such overtime work at no additional cost to the Owner.

1.02 LIQUIDATED DAMAGES

A. The contractor shall pay to the City of Birmingham as liquidated damages, the sum of six hundred dollars ($600) per day for each calendar day after the time period specified under "Time of Completion" that the work to be performed by the contractor is not completed. Liquidated damages in this amount shall also apply for each day that the project is not substantially complete beyond the date 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 above, the Contractor shall be required to complete all cape seal work within 45 calendar days after mobilization, subject to the exceptions of approval by the Engineer.

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 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.

1.03 BUDGET CONSIDERATIONS

A. If the total bid of the lowest qualified contractor is over the budget that the City has prepared for this project, the City may consider removing one or more streets from the work of this project prior to awarding the Contract. The work items on this project may be deleted or reduced in quantity by

the City without penalty. By submitting a bid on this project, the Contractor acknowledges that the City may delete, or reduce the quantity of the work items listed in the proposal, without penalty.

1.04 SCHEDULE SUBMITTAL

A. The Contractor shall submit their preliminary construction schedule within 21 days of the award of this Contract, along with the signed contract, and required bonds and insurance certificates.

1.05 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:

William J. West, PE
Hubbell, Roth and Clark, Inc.
555 Hulet Dr.
Bloomfield Twp., MI 48302

Phone: 248-454-6565
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B. Replies will be issued by Addenda mailed or delivered to all parties recorded by as having received Contract Documents for Bidding. Questions received less than 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 Bid, shall become part of Contract Documents, and shall be acknowledged on Bid Form.

1.06 HOURS OF WORK

A. Typically, work of this nature is allowed six days a week, from 7 AM to 7 PM, Monday through Saturday, excluding major holidays, such as Labor Day.

1.07 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.

1.08 WORK AREA

A. The Contractor shall be alert to the fact that the work areas on this project 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 reduce the amount of work days on each street to a minimum. Also, the contractor shall keep his work area as clean and dust-free as practical at all times.

1.09 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.

1.10 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. All coordination efforts, including modifying the Contractor's work schedule, performing work out of sequence, or other effects on the Contractor's work are incidental to the work of this project, and shall not be paid for separately.

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. 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.

1.11 SCOPE OF WORK

A. The plans provided for this Contract consist of the following:

a. Road Rehabilitation including cape seal resurfacing, as-directed base repairs, curb replacement, ADA ramp replacement and sidewalk replacement for Bradford Rd., Humphrey Ave., Penistone St., Torry St., W. Melton Rd., Banbury St., Taunton Rd., and Croft Rd.

B. The following table summarizes the cross-sections and basic elements of the work that are proposed for this Contract. A breakdown of the quantities by pay item follows the Scope of Work table below.

SCOPE OF WORK TABLE
ROADS

Work Item	**Bradford**	**Humphery**	**Penistone**	**Torry**	**W. Melton**	**Banbury**	**Taunton**	**Croft**
Subgrade Improvement	Notes 1, 2	Notes 1, 2	Notes 1, 2	Notes 1, 2	Notes 1, 2	Notes 1, 2	Notes 1, 2	Notes 1, 2
ADA Ramps	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3
Curb Repairs	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3
Sidewalk Repairs	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3

Notes:

(1) A fixed quantity of as-directed subgrade improvement via undercutting and backfilling with 21AA or 1 in. x 3 in. crushed aggregate will be conducted on Banbury St.

(2) A limited quantity of As-Directed subgrade improvement via undercutting with 21AA crushed aggregate on each of the routes.

(3) Curb and gutter replacement, new ADA ramps and/or sidewalk at the intersections of Humphery Ave. & Taunton Rd., Penistone St. & Sheffield Rd., Penistone St. & Bradford Rd., Penistone St. & Taunton Rd., Torry St. & Taunton Rd., Croft Rd. & Bradford Rd., W. Melton Rd. & Taunton Rd., Banbury St. & Taunton Rd., Banbury St. & Torry St., and Torry St. & Sheffield Rd. No plans have been provided beyond the MDOT Standard Plan R-28-J, as these areas tend to be rather flat. The Contractor will be expected to replace all ramps with 5 ft. wide concrete sidewalks up through the key flag, and then transitioning back to 4 ft. wide, where applicable, in no more than two additional flags. All replaced concrete shall be in accordance with ADA standards. (Up to 15 ft. beyond the key flag may be removed and replaced as needed to meet slope requirements.)

(4) Utility structures are present within the existing roadways included with this project. As-needed adjustments will be performed.

(5) Cape seal work shall be performed on only one street at any given time.

(6) While the project is being constructed, construction traffic is not permitted to traverse other streets in the neighborhood other than the one being worked on. No construction traffic shall be directed toward unimproved roads in the City. The included Figure 2 depicts the streets that may be utilized for construction traffic or delivery traffic while the project is underway. Construction and delivery traffic is only allowed on S. Eton St., E. Lincoln St., and Torry St. (north of Emmons Ave.).

END OF SECTION

SECTION 310
GENERAL INSTRUCTIONS TO BIDDERS

1.01 CONTRACT PRICE

A. Proposals are solicited on the basis of unit prices and/or lump sum prices which are to be clearly set forth in the Proposal Form. The final contract price on the accepted proposal will be determined by multiplying the number, or fraction thereof, units of work actually performed, or labor, material, or appliances actually supplied by the price designated for such items in the proposal. The total bid figure on the proposal form is merely for purposes of estimating and comparing costs, and under no circumstances on unit price contracts does it constitute or imply the total contract price.

1.02 FORM OF PROPOSAL

A. All proposals must be made in the form attached hereto. Additional copies of this proposal form for the bidder's files may be obtained on request at the City Engineering Department.

B. All prices stated in the proposals must be plainly written in figures.

C. All information called for on the proposal must be furnished to enable a fair comparison of the bids.

D. The place of residence of each bidder, or the official address in the case of a firm or company, with county and state, must be given with the signature.

E. Each proposal must be enclosed in a sealed envelope addressed to the City Clerk of the City of Birmingham, and endorsed upon the outside with the name of the project, as it appears in the advertisement for bids.

1.03 CONFORMITY TO PLANS AND SPECIFICATIONS

A. Proposals must be made in full conformity to all the conditions, as set forth in the plans and specifications for the work now on file in the office of the City Engineer.

1.04 AGENCY

A. Anyone signing a proposal as agent of another or others, must submit with the proposal, legal evidence of his 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 his refusal or failure to do so, he shall be considered to have abandoned all his rights and interest in the award, and his 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 he has obtained the insurance required under this paragraph. All coverages shall be with insurance companies licensed and admitted to do business in the State of Michigan. All coverages shall be with insurance carriers acceptable to the City of Birmingham. The cost of all insurance premiums is incidental to the other work on this project and shall be included in the Contractor's bid price(s) for the work. No additional or separate payment shall be made to the Contractor for providing the required insurance coverage.

1. **Workers' Compensation Insurance:** The Contractor shall procure and maintain during the life of this contract, Workers' Compensation Insurance, including Employers Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

2. **Commercial General Liability Insurance:** The Contractor shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than $3,000,000 per occurrence combined single limit, Personal Injury, Bodily Injury and Property Damage. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent

Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.

3. **Motor Vehicle Liability:** The Contractor shall procure and maintain during the life of this contract Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than $3,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

4. **Additional Insured:** Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement starting the following shall be Additional Insureds. The City of Birmingham, including all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. This coverage shall be primary to any coverage that may be available to the additional insured, whether any other available coverage be primary, contributing or excess.

5. **Pollution Liability Insurance:** CONTRACTOR shall procure and maintain during the life of this Agreement Pollution Liability Insurance, with limits of liability of not less than $1,000,000, per occurrence preferred, but claims made accepted.

6. **Cancellation Notice:** Workers' Compensation Insurance, Commercial General Liability Insurance and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the following: "Thirty (30) days Advance Written Notice of Cancellation or Non-Renewal shall be sent to the Finance Department, City of Birmingham, P.O. Box 3001, 151 Martin Street, Birmingham, Michigan 48012.

7. **Owners Contractors Protective Liability:** The Contractor shall procure and maintain during the life of this contract, an Owners Contractors Protective Liability Policy with limits of liability not less than $3,000,000 per occurrence, combined single limit, Personal Injury, Bodily Injury and Property Damage. The City of Birmingham shall be "Name Insured" on said coverage. Thirty (30) days' Notice of Cancellation shall apply to this policy.

B. Proof of Insurance Coverage: The Contractor shall provide the City of Birmingham at the time the contracts are returned for execution, Certificates of Insurance and/or policies, acceptable to the City of Birmingham, as listed below:

1. Two (2) copies of Certificate of Insurance for Workers' Compensation;
2. Two (2) copies of Certificate of Insurance for Commercial General Liability;
3. Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
4. Original policy, or original binder pending issuance of policy, for Owners Contractors Protective Liability Insurance;
5. If so requested, Certified Copies of all policies mentioned above will be furnished.

C. Coverage Expiration: If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to the City of Birmingham at least ten (10) days prior to the expiration date.

D. Maintaining Insurance: The CONTRACTOR also agrees to provide all insurance coverage as specified. Upon failure of the CONTRACTOR to obtain or maintain such insurance coverage for the term of the agreement, the City of Birmingham may, at its option, purchase such coverage from

the contract amount. In obtaining such coverage, the City of Birmingham shall have no obligation to procure the most cost-effective coverage but may contract with any insurer for such coverage.

1.11 EXAMINATION OF SITE

A. It is expected that each bidder will make a personal examination of the entire site of the proposed work, and of its surroundings. It will be assumed that each bidder, before offering his proposal, has obtained first hand information concerning any probable interference and the available facilities for transporting, handling and storing of construction equipment and materials, and concerning other conditions which may affect his work.

1.12 LEGAL CONDITIONS

A. Bidders are notified that they should acquaint themselves with the various provisions in the laws of the State of Michigan, and in the ordinances and regulations of the City of Birmingham and Oakland County, with respect to the carrying on of public improvements.

1.13 BIDDER'S ABILITY

A. It is the intention of the City to award the contract for this job to a contractor whose construction skill and financial resources are fully equal to the task of prosecuting the work in a satisfactory manner, and of bringing it to completion within the time limit specified. With this end in view, the Form of Proposal calls for at least three (3) references concerning his ability to do this particular class of work, and a reference list of the last five (5) projects, including those not completed or currently being performed. The mere ability to offer bonds will not be taken as sufficient evidence of responsibility on the part of the bidder. If the contract is awarded to a foreign company, a certificate of authority to do business in this state must accompany executed contract.

1.14 PAYMENTS

A. Partial payments will be made monthly to the Contractor during the satisfactory progress of the working accordance with the Payments section of the General Requirements.

1.15 RIGHT TO ACCEPT, REJECT AND TO WAIVE DEFECTS

A. The City reserves the right to accept any proposal, to reject any or all proposals, and to waive any defect or irregularity in any proposal, if it appears advantageous to the City to do so.

B. In particular, any alterations, erasure or interlineation in the Specifications which are made a part, specifically, of these instruments, or of the Form of Proposal, shall render the accompanying proposal irregular and subject to rejection by the City. In case any explanation, additions or alterations are to be offered, they shall be indicated on separate sheets attached to the proposal form and referred to therein.

C. Proposals which are clearly unbalanced, will also be considered as irregular, and will be subject to instant rejection by the City.

END OF SECTION

SECTION 400
GENERAL REQUIREMENTS

1.01 DEFINITION OF TERMS

A. The intent and meaning of words and expressions, or pronouns used in their stead, occurring in these specifications or in other contract documents, shall be interpreted as described under Section 101.03 Definitions of Terms of the Current Standard Specifications for Construction adopted by the Michigan Department of and Transportation, with the following additions or exceptions:

1. City - The corporation of the City of Birmingham, Michigan
2. Commission - The Commission of the City of Birmingham, Michigan, and any other board, body, official or officials to which or to whom the powers belonging to the said Commission shall, by virtue of any act or acts, hereafter passed or be held to appertain.
3. Engineer - The person holding the position or acting in the capacity of City Engineer of the City of Birmingham, Michigan, acting either directly or through his properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.
4. Directed, required, permitted, etc. - Whenever in the specifications the words “as directed”, “as required”, “as permitted”, or words of like effect are used, it shall be understood that the direction, requirements or permission of the Engineer is intended; similarly the words “approved”, “acceptable”, “satisfactory”, or words of like import shall mean approved by, or acceptable, or satisfactory to the Engineer.

1.02 INTENT OF THE PLANS, SPECIFICATIONS AND CONTRACT

A. The intent of the plans, specifications and contract is to provide for the completion of the work in substantial compliance with the details as shown thereon, and as described herein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies, and shall perform all operations required to complete the work in accordance with the specifications, and the lines, grades and cross sections provided for on the plans, or by authorization.

1.03 EXTRA WORK

A. No extra work shall be started, or extra material furnished, until such extra work or furnishing of extra material is authorized in writing by the Engineer.

B. The price for such extra work or material must be approved by the Engineer. Said price may be a unit price, a lump sum price, or if the Engineer so elects, the work shall be done on a force account basis, which will be paid for in the following manner:

1. For all labor, teams and foremen in direct charge of the specific work, the Contractor shall receive the actual rate of wage paid for each and every hour that said labor, teams and foremen are actually engaged in such work, plus 20% of the sum thereof.
2. For materials and supplies, the Contractor will receive the actual cost of such materials delivered on the work, including freight charges, as shown by original receipted bills, plus 15% of the sum thereof.
3. For any machinery and equipment owned or rented by the Contractor, which it may be deemed necessary or desirable to use on extra work, the Contractor will be paid at the actual charge-out rate, if reasonable, for his own equipment, or at the actual rental price paid, if reasonable, for rented equipment for each and every hour that such equipment is used on the work, to which sum 15% will be added.

4. Bond premium, workmen's compensation insurance, personal injury public liability and property damage public liability insurance, unemployment compensation, and Federal Social Security will be paid for at actual cost, to which sum 15% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance.

5. The compensation as herein provided shall be accepted by the Contractor as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, and the use of small tools and equipment for which no rental is allowed.

1.04 ALTERATION IN CHARACTER OF WORK

A. Should the Contractor encounter, or the Engineer encounter, during the progress of the work, sub-surface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, the Engineer's attention shall be called immediately to such conditions before they are disturbed. The Engineer shall thereupon investigate the conditions, and if he finds that they materially differ from those shown on the plans and indicated in the specifications, he shall at once make such changes in the plans and/or specifications, as he may find necessary.

1.05 COORDINATION OF SPECIFICATIONS AND PLANS

A. In case of discrepancy, written figures shall govern over numerals, figured dimensions shall govern over scaled dimensions, plans shall govern over standards specifications, supplemental specifications shall govern over standard specifications and plans, and special provisions shall govern over supplemental specifications.

B. The Contractor shall not take advantage of any apparent error or omission in the plans or specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

1.06 AUTHORITY OF ENGINEER

A. The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the satisfactory and acceptable fulfillment of the terms of the contract by the Contractor.

1.07 INSPECTION

A. Inspectors may be appointed and directed to inspect all materials used, and all work done. The inspection may extend to all parts of the work, and to the preparation or manufacture of the materials for use in the work. The Inspectors will not be authorized to revoke, alter, enlarge or relax any of the provisions of these specifications, nor to change the plans in particular. The Inspector on the work will inform the Engineer as to the progress of the work, the manner in which it is being done, and the quality of the materials being used. He will also call to the attention of the Contractor any failure to follow the plans and specifications that he may observe. In case of any dispute arising between the Contractor and the Inspector as to the materials furnished, or the manner of performing the work, the Inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and be decided by the Engineer. In no instance shall any action or omission on the part of the Inspector relieve the Contractor of the responsibility of completing the work in accordance with the plans and specifications.

B. The Engineer and his duly authorized Inspector, shall at all times have the right to enter the premises upon which the work under this contract is being done, and to inspect said work and to ascertain whether or not the construction is carried out in accordance with the terms of the contract or specifications; and the Contractor shall render all necessary assistance and provide all reasonable facilities and give ample time for such inspection.

1.08 SUPERVISION

A. The Contractor shall give his personal supervision to the faithful prosecution of the work. In case of his absence, he shall have a competent superintendent or foreman on the work site who shall follow, without delay, all instructions of the Engineer or his assistants in the prosecution and completion of the work, and every part thereof in conformity with this contract. He shall also have full authority to supply material and labor immediately.

B. The Contractor's supervisor shall be responsible to act on behalf of the Contractor. This includes being present or available at all times, making decisions on behalf of the Contractor and Subcontractor, scheduling, monitoring work progress on a continued basis, communicating with City representatives, etc. His name shall be submitted prior to the start of work, with all appropriate ways of contacting him. He shall remain the responsible Contractor's representative throughout completion of the project, including any subcontract work associated with this contract. If it is necessary to replace this person, it shall have the approval of the Engineer.

1.09 TIME AND SEQUENCE OF WORK

A. The Contractor shall have control over the sequence of order of execution of the several parts of the work to be done under this contract, and over the methods of accomplishing the required results, except as some particular sequence or method may be distinctly demanded by these specifications and plans, or by the express provisions of the contract.

B. The Engineer may, however, make such reasonable requirements as may in his judgment be necessary for the proper and effective protection of work partially or wholly completed, and to these requirements the Contractor shall strictly conform.

C. The Contractor shall submit a written work plan prior to starting construction. This shall include a written schedule, critical path or equal, to focus in on the date required for completion. This schedule must be updated periodically (not to exceed two (2) weeks) if it becomes necessary to modify the plan. This does not relieve the Contractor of the responsibility to complete the contract according to contractual stipulations. Any modification to the time schedule must obtain prior written approval from the Engineer.

D. Once the Contractor has mobilized, the Contractor must execute the contract in a continuous, expeditious manner, and may not suspend prosecution of work without written permission of the Engineer.

1.10 RELATION TO OTHER CONTRACTORS

A. The Contractor shall so conduct his operations as not to interfere with or injure the work of other Contractors employed by the City on adjoining or related work, and he shall promptly make good any injury or damage which may be done to such work by him.

B. Should a contract for adjoining work be awarded to another Contractor, and should the work on one of these contracts interfere with that of the other, the Engineer shall decide which Contractor shall cease work for the time being, and which shall continue, or whether the work of both contracts shall continue at the same time and in what manner. In case territory of one contract should be the necessary means of access to another contract, the Engineer shall have power to grant reasonable

privileges with respect to the transportation or movement of men, equipment or materials, as he may adjudge to be necessary or expedient, and in the best interest of the City. Any decision which the Engineer may make as to method and time of conducting work or the use of the territory shall not be made the basis of any claim for damage, but an extension of time may be claimed if justified by the circumstances, the same as in the case of other delays caused by the acts of the City. Any difference of opinion or conflict of interest which may arise between the Contractor and other Contractors or workmen of the City in regard to adjoining work, shall be determined and adjusted by the Engineer.

1.11 CONSTRUCTION STAKES

A. The location, alignment, elevation and grade of the work will be determined by the Engineer, who will set such stakes as are necessary to properly mark these elements. The Contractor shall assume full responsibility for detail dimensions and elevations measured from the lines, grades and elevations so established.

B. The Engineer may require the Contractor, at the Contractor's expense, to provide such masts, scaffolds, batterboards, straightedges, templates or other devices as may be necessary to facilitate laying out, inspecting and constructing the work.

C. The Contractor shall exercise proper care in the preservation of all stakes set for his use, or for the use of the Engineer, and if such stakes are injured, lost or removed by the Contractor's operations, the cost of resetting may be charged to the Contractor. The Department will be responsible for the accuracy of lines, slopes and grades established by the City, except that the Contractor shall not take advantage of any obvious errors or omissions.

1.12 SOIL CONDITIONS

A. The Contractor shall make his own determination of the soil conditions and he shall complete the work in whatever materials, and under whatever conditions he may encounter or create, without extra cost of the City.

1.13 MATERIALS FURNISHED BY THE CITY

A. When specified, the City of Birmingham may furnish materials at no cost to the Contractor. All other materials necessary to complete the project shall be furnished by the Contractor.

B. Materials to be furnished by the City will be at the Department of Public Works Yard at Eton Road and Holland Avenue. The Department of Public Works will require the Contractor to provide a written authorization from the Engineer before releasing any materials. The Contractor shall load and transport all such materials from the Department of Public Works Yard to the construction site, at his own expense.

C. The City may, at its discretion, furnish to the Contractor, any materials, supplies or transportation required for extra work, and the Contractor shall not be entitled to any allowance or percentage on account of materials, supplies or transportation so furnished.

1.14 STORED MATERIAL

A. Materials and equipment distributed, stored or placed upon or near the site of the work shall be at all times so disposed as not to interfere with work being prosecuted by the City, or by other Contractors in the City employ, or with street drainage, fire hydrants, or with access thereto, and not to hinder any more than may be necessary the ordinary pedestrian or vehicular traffic of the streets. Such material shall be stored in such a manner as to facilitate inspection.

1.15 REJECTED MATERIAL

A. If any materials used in the work, brought upon the ground, or selected for use in the work shall be condemned by the Engineer on account of bad or improper workmanship, or as being unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove from the work or its vicinity, without delay, all such rejected or condemned material of whatever kind. Upon failure to do so within forty-eight (48) hours after having been so directed by the Engineer, the condemned material may be removed by the City and the cost of said removal deducted from any money that is then due, or that may thereafter become due to the Contractor. No payment shall be made until such materials, work or workmanship has been removed and proper materials and workmanship substituted therefor.

1.16 WATER SUPPLY

A. Water for construction purposes may be taken from the City mains, at no charge, subject to the rules of the City Water Department. Special approval of the Engineer must be obtained prior to the opening of any fire hydrant.

B. The Contractor shall provide for his employees an adequate supply of drinking water taken from the City mains.

1.17 SANITARY REGULATIONS

A. Necessary convenience, properly secluded from public observation, shall be constructed where needed for the use of laborers on the work. Such conveniences shall be located, constructed and maintained, subject to the approval of the Engineer and the collections therein shall be removed at such times, and to such places as he shall direct. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the County Health Department.

1.18 PERMITS AND LICENSES

A. The Contractor shall procure all permits and licenses and pay all charges and fees necessary and incident to the due and lawful prosecution of the work. Unless otherwise stated in these contract documents, there will be no charge for any permits required by the City of Birmingham.

1.19 LAWS AND ORDINANCES

A. The Contractor shall keep himself fully informed of all local ordinances and regulations, state and national laws in any manner affecting the work herein specified. He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with, said ordinances, laws and regulations, and shall protect and indemnify the City and its duly authorized officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, etc.

B. The Contractor shall obey and abide by all the laws of the State of Michigan and of the Federal Government relating to the employment of labor on public work and all Charter provisions and ordinances of the City of Birmingham regulating or in respect to public improvements.

C. The Contractor and his Subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to hire, tenure, terms, conditions or privileges of employment, because of sex, race, color, religion, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

1.20 PROPERTY AND SURVEY MONUMENTS

A. Before any monuments or stakes marking the boundaries of property along or near the work are removed or disturbed, the Contractor shall notify the Engineer in sufficient time so that they can be properly located and reset.

B. All precautions shall be taken to avoid disturbance of permanent survey monuments of any City, County or State authority, and when any of these are disturbed or destroyed, the Contractor shall restore them to the satisfaction of such authority and shall pay all costs incurred by such authority in connection therewith.

1.21 BUILDING AND OTHER STRUCTURES ENCOUNTERED

A. Full responsibility shall be assumed by the Contractor for the protection of all buildings and other structures, public or private, including tracks, pavements, driveways, curbs, poles, signs, hydrants, underground pipes and conduits and other structures of every sort that may be encountered in or adjacent to the work.

B. Wherever settlement or lateral movement of structures might occur, adequate underpinning or other means of support shall be installed. Where necessary, such support shall be installed in advance of construction.

1.22 PROTECTION TO TREES AND SHRUBBERY

A. The Contractor shall take all prudent and feasible measures that will reduce or eliminate the impacts of development and construction on City owned trees. Trees or shrubbery shall be surrounded by protective cushioning, posts or fencing before construction work begins, if, in the judgment of the Staff Arborist, such precautions are necessary. Further detailed information is included in the supplemental specifications section of the contract if applicable.

1.23 DUST CONTROL

A. All Contractors working on projects that require removal of the paved surface during construction shall provide dust control as directed by the Engineer, at no additional cost to the City. When weather conditions are such that dusty conditions can be created, the Contractor shall be prepared to take action. When dry conditions are declared by the Engineer, the Contractor shall have a water truck and calcium chloride on site at all times, to be applied as needed. The Contractor shall be pro-active with respect to applying dust control measures as needed.

1.24 PROTECTION AND RESTORATION OF PROPERTY

A. The Contractor shall restore, at his own expense, any and all public or private property damaged or injured in consequences of any act or omission on his part, or on the part of his employees or agents, to a condition similar and equal to that existing before such damage or injury was done. If the Contractor neglects to repair or make restoration, the Engineer may, after forty-eight (48) hours written notice to the Contractor, proceed to make such repairs or restoration, and will deduct the cost thereof from any monies that are or may become due the Contractor.

1.25 RESPONSIBILITY FOR DAMAGE TO WORK

A. The Contractor shall protect his work and materials from damage, due to the nature of the work, the action of the elements, the carelessness of other contractors, or from any cause whatever, until the completion and acceptance of the work. Should any damage occur, he shall repair or replace it at his own expense, and complete the work to the satisfaction of the Engineer.

1.26 INDEMNITY

A. To the fullest extent permitted by law, the CONTRACTOR and any entity or person for whom the CONTRACTOR is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the CITY OF BIRMINGHAM, its elected and appointed officials, employees and volunteers and any others working on behalf of the CITY OF BIRMINGHAM against, any and all claims demands, suites, or loss, including all costs and reasonable attorney fees connected therewith, and for any damages which may be asserted, claimed or recovered against or from and the CITY OF BIRMINGHAM, its elected and appointed officials, employees, volunteers or others working on behalf of the CITY OF BIRMINGHAM, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with this Agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the sole act or omission of its elected or appointed officials, employees, volunteers or other working on behalf of the CITY OF BIRMINGHAM.

1.27 INSURANCE

A. The Contractor shall comply with the INSURANCE requirements set forth in the General Instructions to Bidders.

1.28 PUBLIC TRAVEL

A. The Contractor shall at no additional compensation make suitable and adequate provisions, unless otherwise authorized by the Engineer, for the safe and free passage of persons and vehicles by, over or under the work while it is in progress.

B. The Contractor shall obtain permission from the Engineering Department to close or block any street. The Contractor shall notify the Engineering Department at least four (4) hours before closing or blocking any street.

1.29 PUBLIC SAFETY

A. The Contractor shall furnish, erect and maintain a good and sufficient fence, railing or barrier around all exposed portions of his work, to effectively prevent any accident in consequences of his operations and to protect the work. Such fences, railings and barriers shall be illuminated from sunset to sunrise by suitable and sufficient lights, flares or torches, in such a manner as to make them clearly visible to approaching pedestrians and/or traffic.

B. When equipment and materials are located within the construction site, or within any public right-of-way, the public shall be safe-guarded by suitable and sufficient signs, lights, barricades or other means furnished and maintained by the Contractor.

C. If any portion of the work is not properly barricaded, signed or lighted by one-half (1/2) hour after sunset, the necessary barricades, signs and lights may be placed by the City and all costs to the City for such work will be charged to the Contractor. The furnishing, erection and maintenance of barricades, signs and lights by the City will not relieve the Contractor of his responsibility for the protection of traffic and the work.

D. The Contractor shall provide such traffic regulators and watchmen as are necessary to insure safe and convenient travel by the public and to protect the work.

E. Barricades, signs and lights shall be erected in accordance with the provisions of the Michigan Manual of Uniform Traffic Control Devices.

1.30 MAINTAINING SERVICE TO DRAIN, WATER MAINS, ETC.

A. The Contractor shall maintain in continuous and effective service all drains, sewers, watercourses and water mains touched during the progress of the work. If it should become necessary to temporarily divert or obstruct the flow of any watercourse or drain, written consent must first be obtained from the Engineer, and then the Contractor shall assume full responsibility for the consequences.

1.31 NOTIFICATION OF UTILITIES

A. The Contractor shall notify all utilities of his intention to excavate or otherwise cause any underground disturbance, by calling MISS DIG at least three (3) full working days before commencing such excavating or disturbances.

B. The rights are reserved to both the City and to the owners of public utilities or franchises to enter upon the work for the purpose of making repairs to their installations and making changes in their installations necessitated by the work.

1.32 SUBLETTING OR ASSIGNING

A. The Contractor shall perform without subletting, at least twenty-five (25) percent of the work provided for in this contract, computed on the basis of cost.

B. The subletting of any portion of the contract work shall be subject to approval by the Engineer, but such approval shall not relieve the Contractor of responsibility for the work of such Subcontractors who likewise shall be bound by all pertinent provisions of these specifications. Before any work is sublet, the Contractor shall satisfy the Engineer that the proposed Subcontractor is suitably equipped and experienced in that kind of work, and that he has proper financial resources to enable him to carry it out.

C. No assignment by the Contractor of any principal construction contract or any part thereof, or of the funds to be received thereunder by the Contractor will be recognized unless such assignment has had the approval of the Engineer, and the Surety has been given due notice of such assignment in writing.

D. No assignment will receive approval unless the instrument of assignment contains a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

1.33 DISCHARGE OF EMPLOYEES

A. The Contractor shall employ only competent, skillful persons to do the work. Whenever the Engineer shall notify the Contractor in writing that, in his opinion, any employee on the work is incompetent, impertinent, disobedient, unfaithful, disorderly or otherwise unsatisfactory, that employee shall be discharged from the work and shall not again be employed on it except with the written consent of the Engineer.

1.34 PROSECUTION OF WORK

A. The Contractor shall begin work in accordance with the detailed progress schedule after execution of the Contract by the City. He shall prosecute the work in the order given in the progress schedule, with force and equipment adequate to complete the major items, portions, or sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the progress schedule, or if it appears at any time that such work is not being prosecuted

in such manner as to insure its completion within the time specified, the Engineer shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to the progress schedule; with or without notice to the Surety, place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plant and equipment as in his judgment is reasonable, and for such time as the plant and equipment are in service.

1.35 EXTENSION OF TIME

A. If the Contractor is obstructed or delayed in the prosecution or completion of the work by reason of the neglect, delay or default of any other Contractor having a contract with the City for adjoining or contiguous work; by reason of any damage that may happen thereto by the unusual action of the elements; by reason of the abandonment of the work by the employees in a general strike; the part of the City in doing work or furnishing material, the

B. Contractor shall have no claim of damages for any such cause or delay. He shall, however, be entitled to such extension of the time specified for the completion of the work as the Engineer shall determine to be just and proper, provided however, that such claim for such extension of time is made by the Contractor in writing to the Engineer within one (1) week from the time when any such cause for delay occurs.

1.36 SUNDAY AND HOLIDAY WORK

A. No work shall be done on Sundays, or upon any days celebrated as holidays by the City of Birmingham, except in case of emergency, or to protect work from damage or injury. All Sunday or holiday work must have prior written approval of the Engineer.

1.37 NIGHT WORK

A. No work shall be carried on from 7:00 p.m. to 7:00 a.m., except in case of emergency, or to protect from damage or injury work that has already been done. All night work must have the prior written approval of the Engineer. This provision does not apply to work covered under the provision entitled “shutting off water”.

1.38 MEASUREMENT OF QUANTITIES

A. Quantities of work completed under the contract will be measured by the Engineer according to United States standard measures. When material is measured by weight in tons, the unit shall be the ton of two thousand (2000) pounds.

B. All longitudinal measurements for area of base courses, surface courses and pavements will be made along the actual surface of the roadway. For all transverse measurements for area of base courses, surface courses and pavement, the dimensions used in calculating the pay area shall be the neat dimensions provided in the plans or by authorization.

C. Structures will be measured according to neat lines provided on the plans or by authorization.

D. All materials which are specified for measurement by the cubic yard “Loose Measure” will be measured at the location where used on the project under construction, unless otherwise provided.

1.39 CLEANING UP

A. Upon completion of the actual work of construction, the Contractor shall clean up and leave in a neat condition all the premises which he has occupied during the construction period.

B. Before the time of the final estimate, the Contractor shall remove from the premises, debris, rubbish and all unused materials, together with all tools and equipment, or shall deposit them at such points and in such a manner as the Engineer may require.

C. Before leaving the grounds, the Contractor shall replace and put in good repair all fences, telephone poles and lines, roadways and other property that may have been damaged by him in the progress of the work.

1.40 ENVIRONMENTAL PROTECTION

A. Contractor shall at all times be responsible to insure that no chemicals, pollutants or other harmful or hazardous materials are spilled, discharged or otherwise released into the environment or onto City property, rights-of-way or into the storm or sanitary systems . Should such a release occur, Contractor shall immediately take action to extract the contaminants and prevent further exposure and damage. Contractor shall immediately contact the City and all other required governmental agencies to assess and determine the necessary and appropriate remediation activities. Contractor shall be responsible for all costs and damages stemming from the release including, but not limited to, the cost to remove and dispose of the contaminant, repair/replace/restore the affected areas, and all costs incurred by the City or governmental agency in response.

1.41 UNNOTICED DEFECTS

A. Any defective work or material that may be discovered by the Engineer before the final acceptance of the work, or before final payment has been made, shall be removed and replaced by work and material 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 particular defects to be remedied before final acceptance.

B. If within a period of ten (10) days after such notification the Contractor has not take steps to speedily complete the work as outlined by the Engineer, the Engineer may, without further notice to the Contractor and without in any way impairing the Contractor, make such arrangements as he may deem necessary to have the work completed in a satisfactory manner. The cost of so completing the work may be deducted from any monies due, or which may become due the Contractor.

C. Use by the City or public of all or any part of the work before acceptance shall not be construed as acceptance of the part used.

1.43 PAYMENTS

A. Partial payments will be made monthly on the basis of the value of work completed during the estimated period, less the percentages retained as specified herein, provided the work is progressing in accordance with the progress schedule, provided the contract provisions are being fulfilled, and provided the time of completion has not elapsed.

B. The Contractor shall be responsible to submit requests for partial payments in writing by completing the Request for Partial Payment form supplied in the contract and/or by the City with

the attached appropriate quantities as measured or estimated by the Superintendent. Final payment shall be made by an officer of the company submitting

C. final quantities to the Engineer based upon the value of the work performed and materials completed in accordance with the contract. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, "Contractor's Affidavit", stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

D. If the Contractor fails to submit a request for a payment, as specified, the Engineer may at his (her) discretion prepare a Contractor's Estimate for such payment.

E. When submitting a request for partial or final payment, the Contractor shall complete the appropriate forms as included in Section 140 of the Contract. When requesting a partial payment, the Contractor shall submit the "Request for Partial Payment" form and the "Sworn Statement" form. When requesting final payment, the Contractor shall complete the "Request for Final Payment" form and the "Sworn Statement" form.

F. When the Contractor determines that work will need to be completed outside of the specified pay items, the "Work Directive" form shall be submitted to the Engineer and approved prior to said work commencing.

G. Except as hereinafter provided, the City will retain ten (10) percent from the partial payments of the amount earned up to fifty (50) percent of the Contract price. After fifty (50) percent of the Contract work is in place, the City will not hold additional retainage, unless the Engineer determines that the Contractor is not making satisfactory progress. If the Engineer determines the Contractor is not making satisfactory progress, the City may retain up to ten (10) percent of the value of the work over fifty (50) percent of the Contract price.

H. After final acceptance of the Contract work by the Engineer, he shall process a final estimate for the total amount due the Contractor, less the total amount of all previous payments. Except as hereinafter provided, the total amount due the Contractor shall include interest earned on retained amounts from partial payments.

I. Prior to final payment, and as a condition thereto, the Contractor shall furnish the City with a duly executed, notarized, affidavit or certificate, stating that all bills and claims have been satisfied, except as stated therein, and a release of all claims against the City arising under and by virtue of this Contract.

J. In case evidence exists that all bills with respect to the work have not been paid in full, the Engineer may retain out of any amounts due the Contractor, sufficient sums to cover all such unpaid bills.

K. Except as hereinafter provided, and at the City's option, a dispute regarding the percent retained from partial payments or regarding payment of interest on retained amounts, shall be settled in accordance with the provisions of Act 524 of the Public Acts of Michigan for 1980.

L. For a Contract having a dollar value of less than $30,000.00, or a Contract having three (3) months or less between the date of the Contractor and the Contract Time of Completion:

1. The City will retain ten (10) percent of the amount earned from partial payments.
2. The City will not pay interest on amounts retained from partial payments.
3. The provision to settle disputes in accordance with Act 524 will not apply.

1.44 SETTLEMENT OF DISPUTES

A. Any controversy of claim arising out of or relating to this Agreement, or the breach thereof, shall be settled either by commencement of a suite in Oakland County Circuit Court, the 48th District Court or by arbitration. If both parties elect to have the dispute resolved by arbitration, it shall be settled pursuant to Chapter 50 of the Revised Judicature Act for the State of Michigan and administered by the American Arbitration Association with one arbitrator being used, or three arbitrators in the event any party's claim exceeds $1,000,000. Each party shall bear its own costs and expenses and an equal share of the arbitrator's and administrative fees of arbitration. Such arbitration shall qualify as statutory arbitration pursuant to MCL§600.5001 et. seq., and the Oakland County Circuit Court or any court having jurisdiction shall render judgment upon the award of the arbitrator made pursuant to this Agreement. The laws of the State of Michigan shall govern this Agreement, and the arbitration shall take place in Oakland County, Michigan. In the event that the parties elect not to have the matter in dispute arbitrated, any dispute between the parties may be resolved by the filing of a suite in the Oakland County Circuit Court or the 48th District Court.

1.45 MAINTENANCE AND GUARANTY

A. The Contractor shall guarantee all the work furnished under this Contract against all defects in workmanship and materials, and incidental damage to other property, for a period of one (1) year following the date of the final acceptance of the work by the City. The Performance Bond shall fully cover all guarantees contained in this article.

1.46 CONFLICT OF INTEREST

A. The Contractor shall not directly or indirectly employ or otherwise use a City official of the City of Birmingham in conjunction with this contract. If subsequent to entering into the Contract a City official, a spouse, child or parent shall become directly or indirectly interested in the contract, the City shall have the right to terminate the contract without further liability if the disqualification has not been removed within thirty (30) days after the City has given notification of the disqualifying interest.

1.47 INSPECTOR CREW DAYS

A. It shall be the responsibility of the bidder to extend as a bid item in his proposal, when called for, the number of inspection crew days he requires for the completion of the project, times the unit price for inspection. The basis of computing crew days shall be as follows:

Total Hours Worked	Crew Days Charged
When an Inspector reports to the project and the Contractor decides not to work, or does not appear to work, weather permitting.	-One-half (1/2) crew day
Under four (4) hours	-One-half (1/2) crew day
Four (4) hours or more	-One (1) crew day

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 three hundred sixty ($360) 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 Resteel.

d. Placing of Concrete.

e. Backfilling Around Structures.

f. Checking Installation of Equipment.

7. Asphalt Paving and Pavement Resurfacing

a. Excavation.

b. Preparation of Subgrade.

c. Construction of Base.

d. Preparation of Existing Pavement.

e. Priming Base Course.

f. Construction of Bituminous Concrete Pavement or Surface.

g. Checking of Material.

h. Checking of Asphalt Plants.

i. Checking of Final Pavement for Conformance to Specifications.

j. Restoration.

k. Site Clean-Up.

M. Inspection rates for crew days will be charged as described in 1.47 of this specification.:

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 410
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.#

SECTION 00500

AGREEMENT

THIS AGREEMENT made the _____ day of _____, 20___ by and between the CITY OF BIRMINGHAM, Oakland County, Michigan, hereinafter called the "City", and _____ of the City of _____, County of _____, State of _Michigan_, hereinafter called the "Contractor", otherwise known as: **2022 - 2023 CAPE SEAL PROGRAM** in the amount of $ _____ 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. In the event that 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 of 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: _____

_____
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

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 mortar bars 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 be used 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 ensure 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 yards; 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 be meet the requirement of MDOT Grade 3500, with 6AA coarse aggregate and Type 1L 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 collect samples and perform fresh and/or hardened concrete testing 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 after initial mixing 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-molded non-extruding bituminous fiber filler type.

E. In new sidewalk, one-half (1/2) inch thick expansion joints shall be placed at intervals of not more than fifty (50) feet. 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 of 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 excavating; removal of existing sidewalk; granular fill (not more than four (4) inches thick); preparation of the base; forming, furnishing, placing and finishing of concrete; placing of jointing material; curing; 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 715
DENSE GRADED AGGREGATE

PART 1. GENERAL

1.01 SUMMARY

A. This work The aggregate base to be used under the proposed pavement shall be manufactured from crushed limestone as described in this special provision on a suitable subgrade as determined by the Engineer.

PART 2. PRODUCTS

2.01 MATERIALS

A. The crushed limestone aggregate used for as-directed subgrade improvement shall be graded to meet MDOT Specification 21AA per Section 302 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.

B. The crushed limestone aggregate used for as-needed supplemental aggregate for cape seal surface shall be graded to meet MDOT Specification 23A per Section 302 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.

C. The crushed aggregate base shall be compacted to a minimum of 95% under concrete pavement or 98% under HMA pavement of its Maximum Unit Weight, as determined by the One-Point Michigan Cone Test - described in the MDOT Density Testing and Inspection Manual, and to the cross-section indicated in the Proposal and on the Plans.

D. Crushed concrete will not be allowed.

PART 3. EXECUTION

3.01 CONSTRUCTION

A. Do not use Sodium Chloride to aid in placing and compacting of aggregate base.

3.02 MEASUREMENT AND PAYMENT.

A. The dense graded crushed aggregate for subgrade improvement or cape seal will be paid for at the Contract unit price per cubic yard for the thickness specified or tonnage which includes all work indicated in this Special Provision and related Contract References.

B. Construction shall be completed in accordance with Section 302 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.

C. Payment for Dense Graded Aggregate shall include all labor, equipment, and materials required to complete the work described, to a final compacted total depth as specified on the plans or as directed by the Engineer.

END OF SECTION

SECTION 720
SUBGRADE IMPROVEMENT

PART 1. GENERAL

1.01 SUMMARY

A. This This work shall be done in accordance with Section 205 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as provided herein.

B. This work shall consist of excavating existing subgrade in unsound areas at locations determined by the Engineer in the field, installing a layer of geogrid, if determined necessary (and directed by the Engineer), and furnishing, installing, and compacting crushed concrete for the purpose of improving the bearing capacity of the underlying, soils.

PART 2. MATERIALS

The following materials shall be used as directed:

A. Coarse Aggregate, 1 in. x 3 in. crushed concrete.

B. Dense Graded Aggregate, MDOT 21AA limestone as described in Section 715 – Dense Graded Aggregate.

PART 3. EXECUTION

3.01 CONSTRUCTION

C. The following materials shall be used when indicated:

1. Coarse Aggregate, 1 in. x 3 in.

2. Dense Graded Aggregate, MDOT 21AA crushed limestone as described in Section 715 – Dense Graded Aggregate.

1. MEASUREMENT AND PAYMENT. The completed work as measured will be paid for at the contract unit price per cubic yard.

   1. Payment for Subgrade Undercutting, 1 x 3, Special shall include all labor, equipment, and materials required to complete the work described and will only be paid when directed and approved by the Engineer. It shall include the removal and disposal of the unsuitable materials as well as the cost and installation of the Coarse Aggregate, 1 x 3 fill material.

   2. Payment for Subgrade Undercutting, 21AA, Special shall include all labor, equipment, and materials required to complete the work described and will only be paid when directed and approved by the Engineer. It shall include the removal and disposal of the unsuitable materials as well as the cost and installation of the Dense Graded 21AA fill material.

END OF SECTION

SECTION 730
DPW STRUCTURE ADJUSTMENT

PART 1. GENERAL

1.01 SUMMARY

This work shall be done in accordance with Section 403 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as herein provided:

3.01 SCOPE

This work shall consist of adjusting, reconstructing and/or installing new waterproof covers on sanitary sewer structures and Watergate manhole structures that are either under the jurisdiction of the City of Birmingham

3.02 PURPOSE

The intent of this specification is to maintain the integrity of these structures and to keep infiltration to an absolute minimum in accordance with the requirements of the City of Birmingham.

PART 2. MATERIALS

Materials shall be as specified under subsection 403.02 of the MDOT standard specifications except that DPW Structure Covers, if called for, shall be as specified on the DPW Governing Agency's details in the plans with the DPW governing agency's name cast in the lid as shown. Materials used in the "adjustment" or "reconstruction" of manholes shall be the same as those used in the initial construction unless otherwise approved by the City of Birmingham

PART 3. CONSTRUCTION

3.01 Requirements for Changing the Elevation of Manhole Covers

A. Adjusting Drainage Structure - "Adjustment"

Adjusting a manhole cover applies when the elevation is changed up or down 6 inches or less while within the limits as follows.

(1) To increase the rim elevation of a manhole cover between the limits of 0" and 18", measured from the top of the cone or corbel section to the bottom of the cover frame, shall be done with concrete adjustment rings, or in the case of older brick-type manholes, with brickwork. In no case shall the adjusting rings or total brickwork (including existing brick) exceed 18".

(2) To decrease the rim elevation of a manhole cover within the limits of existing adjusting rings or brickwork, remove the adjusting ring(s) or brick.

B. Additional Depth of Adjusting Structure - "Reconstruction"

Reconstruction of a manhole cover applies when the elevation is changed up or down more than 6 inches or any change that is outside of the limits of "adjustment"

To decrease the rim elevation of a manhole cover beyond the limits of existing brick or adjusting rings, or increase the rim elevation of a manhole cover beyond the limits of an "adjustment", change the elevation of the cone or tapered section.

(1) Pre-cast manholes are reconstructed by removing cone and/or straight section(s) and replacing with a section(s) of such length that the manhole cover will be at the correct elevation, or can be raised to the correct elevation by the addition of adjusting rings. In the case of older brick-type top sections, replace with brickwork. The maximum height of the chimney shall be 18 inches as measured between the top of the corbel section to the underside of the frame.

(2) Brick manholes are reconstructed by removing all the brick courses that make up the cone or tapered section. By increasing or decreasing the height of the brickwork in the straight section of the manhole, the rebuilt brick cone section will position the manhole cover at the correct elevation, or it can be raised to a maximum height of 18" by adjusting brickwork placed on the cone.

Plaster all reconstructed exterior masonry surfaces with MDOT Type R2 cement mortar, 0.5 inch thick to assure complete water tightness. When reconstructing manhole maintain 16 inch step spacing.

3.02 CRITERIA FOR DETERMINING THE ELEVATION OF A MANHOLE COVER

A. Covers of manholes located in the pavement shall be placed at the proposed pavement grade.

B. Covers of manholes located in the gravel shoulder of a roadway shall be placed at an elevation of at least 6 inches below the top of the edge of the shoulder. Place shoulder material over structure cover.

C. Covers of manholes located in shoulders that are to be sodded or grassed, shall be placed at the finished earth grade of the grassed shoulder.

D. Covers of manholes located outside of the road and ditch area shall be at the existing earth grade and readily visible at all times. The City of Birmingham or the Engineer shall approve the final elevation in the field.

E. Covers in flood-prone areas shall be at an elevation 12" above the highest known level of standing water.

F. Final adjustment of DPW structures shall be made prior to placing the top course of pavement.

3.03 BACKFILL OF STRUCTURES

All structures within the roadway shall be backfilled with granular material Class II up to the subgrade elevation, or to an elevation determined by the Engineer.

3.04 INSPECTION AND WORKMANSHIP

The contractor must inform the City of Birmingham a minimum of 48 hours in advance of the proposed work. Representatives of the City of Birmingham, the Engineer and the contractor shall meet and collectively inspect each structure prior to beginning work and make a determination as to the type of treatment that is necessary.

3.05 PAYMENT

The adjustment of DPW Structure covers will be measured by the each and paid for as DPW Structure Cover, Adj, Case 1 or Case 2. Elevation adjustment up to 18 inches between the top of the existing brickwork/casting to the underside of the casting is included with these items.

Adjustment of DPW structure covers greater than 18 inches will be paid for as DPW Structure Cover, Adj, Add Depth.

For structures within the pavement surface area, the contractor will be required to remove the frame and cover and temporarily plate the top of structures when the structure frame will conflict with the proposed surface crown of gravel base. The placing and removing of the plates will not be paid for separately, but shall be included in the unit price.

New frames and covers, if required, shall be supplied and installed by the Contractor and shall meet the requirements of the City of Birmingham. Elastomeric Seal Easy Stik all-weather trowelable butyl or approved equal shall be used around the inside and outside of the proposed structure adjustment.

Existing structure covers that have been replaced are to be disposed of in a legal manner off the project by the Contractor included in the DPW Structure adjustment pay items.

When a new cover is required on an existing structure that does not require adjustment or reconstruction, Adjusting Structure Cover, Case 1 or 2, will also be paid for separately.

Payment for the replacement of curb and gutter or pavement adjacent to drainage structures which are reconstructed or adjusted, will be paid for separately.

DPW Structure Cover, Adj, Case 2 will only apply to an existing structure located outside the existing pavement curb, or curb and gutter or where the pavement, curb, or curb and gutter are to be removed as part of the project. Measurement and payment will be the same as for DPW Structure Cover, Adj, Case 1 (Each), except replacement of pavement, curb or curb and gutter is not needed.

Payment for DPW Structure Cover, Adj, Case 1 and Case 2 and DPW Structure Cover, Adj, Add Depth includes equipment, labor and materials to complete this item.

END OF SECTION

SECTION 735
OVERLAY STRUCTURE ADJUST

PART 1. GENERAL

1.01 SUMMARY

A. This work shall include increasing the rim elevation of a manhole cover between the limits of 0" and 12" measured from the top of the cone or corbel section to the bottom of the cover frame or decreasing the rim elevation of a manhole cover within the limits of existing adjusting rings or brickwork. An existing survey monument box is also included in this scope of work.

B. Two items for structure adjustments are included in this contract. Adjustments using EJ adjustment Rings (1020H or as required) for changes less than 2" will be paid for separately from structures requiring the entire frame and cover to be reset.

PART 2. PRODUCTS

2.01 MATERIALS

A. Concrete adjustment rings shall be used to increase the height of a manhole cover except in the case of older brick-type manholes, when brickwork may be used.

B. All exposed masonry surfaces shall be pointed and recoated with a 1:3 cement mortar, ½" thick and covered with an elastomeric seal and geo-membrane to assure complete water tightness.

C. EJ Adjustment Rings shall be EJ 1020H or the particular model as required to adjust existing structures to meet the new roadway grade. The Contractor shall field verify existing structures prior to ordering materials and all models shall be paid for with this adjustment ring item.

PART 3. EXECUTION

3.01 CONSTRUCTION

A. Excavate as necessary to expose entire depth of adjustment material. If existing adjustment material exceeds 12" and the manhole cover is intended to be raised, additional depth of structure adjustment will be paid per vertical foot in accordance with Section 403 of the MDOT 2020 Standard Specifications for Construction.

B. To increase the manhole cover elevation between the limits of 0" and 12" measured from the top of the cone or corbel section to the bottom of the cover frame, concrete adjustment rings shall be used except when then the manhole is an older brick-type manhole. In no case shall the adjusting rings or total brick work (including existing brick) exceed 18".

C. To decrease the rim elevation of a manhole cover within the limits of the existing adjusting ring(s) or brickwork, remove the adjusting ring(s) or brickwork.

D. New mortar shall be provided for each course or adjustment ring or brick and troweled along the interior and exterior of the adjustment material to a smooth finish.

E. Structures shall be backfilled in accordance with Section 403 of the MDOT 2020 Standard Specifications for Construction.

F. Contractor shall notify the Engineer 72 hours prior to working near the existing survey monument near Elm Street to ensure Monument Preservation has been completed prior to disruption. Preservation shall be the responsibility of the Owner.

3.02 MEASUREMENT AND PAYMENT.

A. Structure Adjustment, Case 1 and Structure Adjustment, EJ 1020H, 1 ½" will be measured and paid for by each and includes equipment, labor and materials to complete the work described.

B. Structure Adjustment, Additional Depth will be measured and paid for by the vertical foot for adjustments beyond the 12" specified for the Structure Adjustment, Case 1 pay item and shall include all equipment, labor and materials to complete the work described herein and as specified in Section 403 of the MDOT 2020 Standard Specifications for Construction.

C. The Structure Adjustment pay items cover all types of utility structures, valve boxes, and survey monument boxes needing adjustment.

D. The reconnection of any pipes disturbed by this work shall be included in the contract unit prices described. Payment for any replacement frame and covers, if necessary, will be paid for as part of the Structure Adjustment pay item.

END OF SECTION

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SECTION 761
SURFACE COURSE PULVERIZING

PART 1 – GENERAL

1.1 DESCRIPTION

This work shall consist of pulverizing an existing aggregate surface, shaping to the proper elevation and slope, and compacting.

1.2 RELATED SECTIONS

A. Section 100 – Proposal
B. Section 301 – Supplemental Instructions to Bidders
C. Section 310 – General Instructions to Bidders
D. Section 720 – Subgrade Improvement
E. Section 762 – Cape Seal Surface

PART 2 – MATERIALS AND EQUIPMENT

2.1 MATERIALS

Water shall be required to provide necessary dust control during construction, and to provide a moisture content in the aggregate surface necessary for proper compaction.

2.2 EQUIPMENT

A. PULVERIZATION EQUIPMENT. The machine shall be of a type designed by the manufacturer specifically for reclaiming of asphalt pavements in place, and be capable of reducing the pavement material to a specified size. It shall be a bi-directional rotary reduction machine capable of operating in either an upcut or downcut mode to insure reduction of the existing asphalt to the specified size and gradation. Both the forward speed and depth of cut shall be controlled automatically as well as manually in order to produce a designed gradation. Both front and rear material control gate will be installed and hydraulically adjustable from the operator platform in increments of one eighth (1/8) inch to control the amount of material being processed to insure proper sizing.

B. COMPACTION EQUIPMENT. Rollers. A minimum of (3) rollers in operating condition will be required on the project and shall be of the following types:

Minimum of (2) shall be steel drum vibratory type
Minimum of (1) shall be 18 ton pneumatic-tire type

C. GRADING EQUIPMENT. Grading equipment shall include automatic cross slope (crown) control and be capable of operating from a string line.

PART 3 – CONSTRUCTION

3.1 PULVERIZING IN PLACE

When called for in the proposal, the existing treated gravel surface shall be pulverized to a maximum size of two (2) inches, except that five (5) percent of the material may be oversized, provided that the oversized material is not so large as to adversely affect the stability and structural integrity of the

mixture nor hamper the shaping operations. The existing treated gravel surface shall be blended with a minimum of (2) inches of the existing aggregate base.

3.2 SHAPING, ROLLING, AND COMPACTING

The reclaimed material shall be shaped to the established grade and cross-section within a tolerance of plus or minus ¾ inch, and compacted with a rubber tire and vibratory steel drum roller.

A. STREET WIDTHS. All pulverizing, grading, compacting, and chip sealing work shall be to existing street limits. Existing street widths vary.

B. AGGREGATE SURFACE CROSS-SECTION. All streets shall be graded to provide a 2% crown about the street centerline. Any deviation must be reviewed and approved by the Owner prior to proceeding with the work.

C. SUPPLEMENTAL AGGREGATE. If supplemental aggregate is required to achieve the desired grades and cross slopes, MDOT 23A limestone shall be added to the pulverized material prior to final grading, compaction and cape sealing.

PART 4 – MEASUREMENT AND PAYMENT

All labor, material, and equipment costs associated with completing the work described in this special provision shall be considered incidental to the unit price bid for the contract item **Cape Seal Surface – Syd**.

Supplemental MDOT 23A dense graded aggregate, if necessary, will be paid for at the unit price bid for the contract item **Supplemental Aggregate, MDOT 23A Limestone, As Required – Ton.**

END OF SECTION

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SECTION 762
CAPE SEAL SURFACE

PART 1. GENERAL

1.01 SUMMARY

This work shall consist of a single chipseal followed by one application of a type II asphalt slurry applied after chipseal application. The application of the materials shall comply with the following specifications.

A. BITUMINOUS SURFACE TREATMENT

1. This work consists of one application of bituminous material applied to the prepared surface and being covered with a course of aggregate. The work shall be done in accordance with this specification or in accordance with applicable drawings to plans of this contract.

B. SLURRY SEAL APPLICATION

1. The work covered by this specification consists of furnishing all labor, equipment, and materials to apply the second course of the capeseal, an emulsified asphalt slurry seal, in complete accordance with the specification.

1.02 REFERENCES

Unless otherwise specified, all materials shall conform to the latest edition of STANDARD SPECIFICATIONS FOR CONSTRUCTION, adopted by the Michigan Department of Transportation.

1.03 QUALITY ASSURANCE

A. APPLICABLE SPECIFICATIONS

ASTM – American Society for Testing and Materials
ISSA – International Slurry Surfacing Association

1. AGGREGATE AND MINERAL FILLER

a. ASTM D75: Sampling Stone, Slag Gravel, Sand and Stone Block for use as Highways Materials.
b. ASTM C136: Sieve Analysis of Fine or Coarse Aggregate.
c. ASTM C117: Amount of Material Finer than No. 200 Sieve in Aggregate.
d. ASTM D2419: Plastic Fines in Graded Aggregate and Soils by use of the Sand Equivalent Test.
e. ASTM C128: Specific Gravity and Absorption of Fine Aggregate.
f. ASTM C29: Unit Weight of Aggregate.
g. ASTM C131: Abrasion of Coarse Aggregate by use of the Los Angeles Machine.
h. ASTM C183: Sampling Hydraulic Cement
i. ASTM D546: Sieve Analysis of Mineral Filler
j. ASTM D242: Mineral Filler for Bituminous Paving Mixtures

2. EMULSIFIED ASPHALT

a. ASTM D140: Sampling Bituminous Materials.
b. ASTM D244: Testing Emulsified Asphalt.
c. ASTM D977: Specifications for Anionic Emulsified Asphalt.

d. ASTM D2397: Specifications for Cationic Emulsified Asphalt.
e. ASTM D2172: Bitumen Content of Paving Mixture by Centrifuge.
f. ISSA T100: Measurement of Wear of Slurry Seal Mixtures by Wet Tract Abrasion.

1.04 DELIVERY, STORAGE AND HANDLING

A. SLURRY SEAL APPLICATION

1. STOCKPILING OF AGGREGATES. Precautions shall be taken to ensure that stockpiles do not become contaminated with over-sized rock, clay, silt, or excessive amounts of moisture. The stockpile shall be kept in areas that drain readily. Segregation of the aggregate will not be permitted. Owner will provide yard site for stockpiling aggregates and keeping emulsion storage tanks within one mile of the projects, or closer when possible.

2. STORAGE. The contractor shall provide suitable storage facilities for the asphalt emulsion. The container shall be equipped to prevent water from entering the emulsion. Suitable heat shall be provided if necessary to prevent freezing.

1.05 PROJECT/SITE CONDITIONS

A. TRAFFIC CONTROL

1. Suitable methods such as barricades, traffic regulators, pilot cars, etc., shall be used to protect the uncured slurry surface from all type of traffic. Contractor shall perform all necessary barricading and/or flagging of traffic. Any damage to the uncured slurry will be the responsibility of the Contractor. The Engineer shall give final approval as to the method used. The Contractor shall co-ordinate the scheduling of street to be surfaced with the City Engineering Department.

1.06 PAYMENTS

A. Seal coat will be paid for at the contract price per square yard, (as described above) which price shall be payment in full for furnishing, heating, hauling and applying the bituminous material, furnishing, hauling and placing the cover material, dragging, rolling, replacing disturbed material, maintaining traffic and constructing the surface complete.

PART 2. PRODUCTS

1.01 MATERIALS

A. BITUMINOUS SURFACE TREATMENT

1. BITUMINOUS MATERIAL - Shall be CM-90
   a. MATERIALS - The materials will meet the following requirements as specified. All chip seal multi grade asphalt will conform to the following table:

CHIP SEAL MULTI GRADE ASPHALT

	CM-90	**METHOD OF TEST**
Viscosity @ 25°C, 1. Sec.-1, P.	2000-20,000	ASTM D-4957
Flash Point, °C	66+	ASTM D-93
Distillate Test		

Volume % of Total Distillate to 360° C		ASTM D-402
To 225° C	0-2	
To 260° C	0-5	
To 316°	15.75	
Residue from Distillate to 360° C %		
Volume by Difference		
Water %	1.0-	ASTM D-95
Test on Residue from Distillation		
Penetration @ 25° C, 100g, 5 sec, dmm.	100-250	ASTM D-5
Float Test @ 60° C, sec.	1200+	ASTM D-139
Solubility %	99.0+	ASTM D-2042

The successful Contractor will be responsible to provide above material delivered to the project location on a schedule determined by the Contractor. The contractor shall be responsible for proper heating of asphalt, needed storage facilities and for all truck demurrage charges that are incurred.

b. APPLICATION - The Contractor shall apply the multi grade asphalt at a temperature between 260° F and 300° F, followed by a uniform application of coarse aggregate.

c. MULTI GRADE ASPHALT - Application Rates:

CM-90 shall be within the range of 0.26-0.28 gal/SY. The JMF target rate for the asphalt shall be 0.27 gal/SY.

If the target rate of 0.27 gal/SY is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the Contractor shall notify the Project Engineer, immediately. The Contractor shall then document the new JMF rate(s) by stationing.

2. COARSE AGGREGATE - Coarse aggregates for all chip seals will be tested materials or provided by a prequalified aggregate supplier. All aggregate must meet the gradation requirements in the following table:

a. A CS-2 coarse aggregate of limestone, natural, or slag shall be used.

GRADATION FOR CHIP SEAL AGGREGATES
Sieve Analysis (MTM 109), Total Percent Passing (a)

Sieve Size		**CS-2**
3/4"		100
½"		100
3/8"		90-100
No. 4		0-10
N0. 8		0-5
N0. 200 (loss by wash)	2.0 maximum	2.0 maximum

PHYSICAL REQUIREMENTS

TEST	DESCRIPTION	SPECIFICATION
MTM - 102	L.A. Abrasion Resistance	45% Max.
MTM - 117	Percentage of Crushed Particles	95% Min.
*MTM - 110	Deleterious Particles in Aggregate	3.5% max.

*Includes the sum of shale, siltstone, structurally weak and clay-ironstone particles

B. SLURRY SEAL APPLICATION

The slurry seal surface shall consist of a mixture of emulsified asphalt, mineral aggregate, and water, properly proportioned, mixed and spread evenly over the single chipseal surface as specified herein and as directed by the engineer. The cured slurry shall have a homogeneous appearance, fill all cracks, adhere firmly to the surface and have skid resistant texture.

1. ASPHALT EMULSION. The emulsified asphalt shall conform to the requirement of International Slurry Seal Association Specification, for type CSS-1H.

2. AGGREGATE. The mineral aggregate shall consist of natural or manufactured sand, slag, crusher fines, and others, or a combination thereof. Smooth-textured sand of less than 1.25 percent water absorption shall not exceed 50 percent of the total combined aggregate. The aggregate shall be clean and free from vegetable matter and other deleterious substances. When tested by ASTM D2419, the aggregate blend shall have a sand equivalent of not less than 45. When tested according to ASTM C88 the aggregate shall show a loss of not more that 15%. When tested according to ASTM C131 the aggregate shall show a loss of not more that 30%.

Mineral fillers such as Portland cement, limestone dust, fly ash, and others shall be considered as part of the blended aggregate and shall be used if required by the mix design. They shall meet the gradation requirements of ASTM D242.

The combined mineral aggregate shall conform to the following gradation when tested by the previously mentioned test.

	TYPE II
SIEVE SIZE	PERCENT PASSING
3/8	100
No. 4	90-100
No. 8	65-90
No. 16	45-70
No. 30	30-50
No. 50	18-30
No. 100	10-21
No. 200	5-15

Theoretical Asphalt Content

% Dry Aggregate 7.5-13.5

TYPE II. This aggregate blend is used when it is desired to fill surface voids, correct severe surface conditions, and provide sealing and a minimum wearing surface. An application rate of 18 (plus or minus) 2 pounds per square yard based on dry aggregate weight is used when standard aggregates are utilized.

3. WATER
   a. All water used with the slurry mixture shall be potable and free from harmful soluble salts.

1.02 EQUIPMENT

A. BITUMINOUS SURFACE TREATMENT

All equipment used shall be sufficient size and in such mechanical condition as to produce a satisfactory job.

1. PRESSURE DISTRIBUTORS - The pressure distributor shall have a computerized application rate and speed control. This control shall have a radar ground sensing device that controls the application rate regardless of ground speed or spray bar width. The pressure distributor shall be capable of maintaining the asphalt emulsion at the specified temperature. The spray bar nozzles shall produce a uniform fan spray, and the shutoff shall be instantaneous, with no dripping. Each pressure distributor shall be capable of maintaining the specified application rate within ±0.015 gal/SY for each load.

2. AGGREGATE CHIP SPREADER - The aggregate chip spreader shall be self-propelled and have a computerized spread control capable of spreading the cover material uniformly for widths of 1 to 20 feet and have a screen to remove oversized material.

3. COMPACTION EQUIPMENT - Shall be self-propelled, vibratory, rubber tired, three wheel or tandem rollers. Rollers shall weigh not less than 6 ton or more than 9 ton.

4. MISCELLANEOUS EQUIPMENT - Sufficient equipment for hauling of cover material shall be provided to ensure continuance covering of bituminous material, hand tools, thermometers, etc. Chain link fence drag shall be available for use when required by engineer.

B. SLURRY SEAL APPLICATION

All equipment used in the performance of this work shall be maintained in satisfactorily working order at all times.

1. SLURRY MIXING EQUIPMENT. A minimum of two (2) continuous flow slurry machines, minimum capacity of eight (8) tons shall be provided. They shall be capable of delivering accurately a predetermined proportion of aggregate, water and asphalt emulsion to the mixing chamber and to discharge the thoroughly mixed product on a continuous basis. The aggregate shall be pre-wetted immediately prior to mixing with the emulsion. The mixing unit of the mixing chamber shall be capable of thoroughly blending all ingredients together. No violent mixing shall be permitted. The mixing machine shall be equipped with an approved fines feeder that provides an accurate metering device or method to introduce a predetermined proportion of mineral filler into the mixer at the same time and location that the aggregate is fed. The feeder shall be used whenever added mineral filler is a part of the aggregate blend. The mixing

machine shall be equipped with a water pressure system and fog type spray bar adequate for complete fogging the surface preceding spreading equipment with a maximum application of 0.05 gallons per square yard.

2. CALIBRATION- Each material delivery function (a) fines feed, (b) aggregate feed, and (c) emulsion feed, shall be independently operated and monitored with digital counters capable of giving accumulated readings of the material usage on a daily basis.

All instruments, gauges and meters shall be accurate within +5% of the operating range required. All instruments and controls shall be centrally mounted in a protected console and shall be readily accessible during operation to the Engineer or his designated representative.

The bidder will submit calibration sheets for each machine to substantiate meter reading and aggregate openings (gal/count, #/count). Daily counter readings will be supplied to the inspector with yardage applied to verify application rates. If readings do not confirm correct application rates, recalibration on site will be required before additional work is applied.

3. SLURRY SPREADING EQUIPMENT. Attached to the mixer machine shall be a mechanical type squeegee box equipped with flexible material in contact with the surface to prevent loss of slurry from the box. It shall be maintained so as to prevent loss of slurry on varying grades and crown by rotating at center of box. There shall be a steering device and a flexible strike-off. The spreader box shall have an adjustable width from 8 to 12 feet. The box shall be kept clean, and build-up of asphalt and aggregate on the box shall not be permitted. The use of burlap drags or other drags shall be approved by the Engineer.

4. CLEANING EQUIPMENT. Power brooms, power blowers, air compressors, water flushing equipment, and hand brooms shall be suitable for cleaning the surface and cracks of the old surfaces.

5. AUXILIARY EQUIPMENT. Hand squeegees, shovels and other equipment shall be provided as necessary to perform work.

PART 3. EXECUTION

1.03 PREPARATION

A. BITUMINOUS SURFACE TREATMENT

1. Work required on existing surface such as base repair, patching, sweeping shall be done by the contractor.

B. SLURRY SEAL APPLICATION

1. Immediately prior to applying the slurry, the surface shall be cleaned of all loose material, silt pots, vegetation, and other objectionable material, which shall be done by owner. Any standard cleaning method used to clean pavements will be acceptable, except water flushing will not be permitted in areas where considerable cracks are present in the pavement surface. The Engineer shall give final approval of the surface.

1.04 CONSTRUCTION

A. BITUMINOUS SURFACE TREATMENT

1. EXISTING SURFACE
   a. The bituminous material shall be applied at the rate specified immediately followed by the self-propelled chipper covering the bituminous material with aggregate. In no instance shall the chipper by more than 400 ft. behind the distributor. The aggregate should be compacted into the bituminous material by a self-propelled roller directly behind the chipper. At no time shall the aggregate cover material be left unrolled for more than 10 minutes.

2. WEATHER LIMITATIONS
   a. No bituminous material shall be applied during rainy weather or when the air temperature in the shade is less than 50 F. and rising except by the approval of the contracting officer

B. SLURRY SEAL APPLICATION

1. GENERAL
   a. The surface shall be fogged with water directly preceding the spreader. The slurry mixture shall be of the desired consistency when deposited on the surface and no additional elements shall be added. Total time of mixing shall not exceed four (4) minutes. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that complete coverage is obtained. No lumping, balling or unmixed aggregate shall be permitted. No segregation of the emulsion and aggregate fines shall be permitted. If the coarse aggregate settles to the bottom of the mix, the slurry will be removed from the pavement. No excessive breaking of the emulsion will be allowed in the spreader box. No streaks such as caused by oversized aggregate will be left in the finished pavement.

2. COMPOSITION AND RATE OF APPLICATION OF THE SLURRY MIX
   a. The amount of asphalt emulsion to be blended with the aggregate shall be that as determined by the laboratory report after final adjustment in the field. A minimum amount of water shall be added as necessary to obtain a fluid and homogeneous mixture. The Engineer shall give final approval to the design and rate of application used.

3. JOINTS
   a. No excessive build-up or unsightly appearance shall be permitted on longitudinal or transverse joints.

4. HAND WORK
   a. Approved squeegees shall be used to spread slurry in accessible areas to the slurry mixer. Care shall be exercised in leaving no unsightly appearance from hand work.

5. CURING
   a. Treated areas will be allowed to cure until such time as the Engineer permits their opening to traffic.

6. INTERSECTION

a. Care should be taken to achieve a clean straight line as directed by the Engineer by use of 15 pound roofing felt or equal. All roofing felt will be removed at completion of work.

7. WEATHER LIMITATION
   a. The slurry seal surface shall not be applied if either the pavement or air temperature of 55 F or below and falling but may be applied with both the air and pavement temperature is 45 F or above and rising. The mixture should not be applied if high relative humidity prolongs the curing beyond a reasonable time.

1.05 FIELD QUALITY CONTROL

A. BITUMINOUS SURFACE TREATMENT

1. INSPECTION
   a. METHOD OF MEASUREMENT: Field measurements of the areas seal coated in square yards shall be determined by the engineer in the presence of the contractor and or with his concurrence.

B. SLURRY SEAL APPLICATION

1. LABORATORY TESTING
   a. Sources of all materials shall be selected prior to the time the materials are required for use in the work. All samples shall be taken according to procedures previously mentioned. All materials shall be pretested in a qualified laboratory as to their suitability for use in slurry. The theoretical asphalt content shall be determined. The laboratory shall also determine if a mineral filler is required, and if so, how much should be used. Test samples shall be made and tested on a Wet Track Abrasion Machine. A complete laboratory analysis and test report accompanied by an un-abraded slurry test sample shall be submitted by the Contractor before the job starts.

2. INSPECTION
   a. The slurry seal surface shall be measured and paid for by the square yards of work completed and accepted as designated by the Engineer.

3. SAMPLING
   a. Samples of materials and of the finished slurry surfaces shall be furnished by the Contractor as directed by the Engineer during progress of the work. Test reports may be requested from the Contractor as additional materials arrive.

1.06 CLEANING

A. Initial sweeping and cleaning will be performed by the contractor.

B. Sweeping During Contract: The contractor will be required to sweep the chip sealed area prior to the slurry application.

C. Contractor shall ensure that all existing utility structure covers shall remain clean and visible following the installation of the capeseal surface on the streets.

END OF SECTION

SECTION 770
TURF ESTABLISHMENT

PART 1. GENERAL

1.01 SUMMARY

This work shall consist of furnishing all labor, material, and equipment necessary to perform all Section 208 and 816 of the 2020 Standard Specification for Construction is supplemented by this Special Provision. The Contractor is responsible for the performance and quality of turf growth in the areas indicated on the plans and as identified by the Engineer. Comply with all local, state and federal laws when completing this work.

It is expected that the turf growth to be turf fully established for final acceptance. Established growth shall be defined as growing seed rooted to the prepared earth bed with a minimum rooted coverage of 90 percent or greater, in a manner approved by the Engineer. The growth must be established before acceptance by the Engineer and final payment for restoration will be allowed.

Establish a durable, permanent, weed-free, mature, perennial turf. The work consists of fundamental turf work, including but not limited to top soiling, seeding, mulching, erosion control, maintenance, watering and repair of turf as described herein during the life of the contract.

Choose and implement proven turf establishment industry practices; provide all necessary labor and equipment; select and provide all turf establishment materials; and control erosion and any subsequent sedimentation at all times, or until the turf establishment is accepted.

Perform a site analysis, interpret the results and implement a turf establishment program to ensure compliance with this specification. The site analysis must take into consideration topsoil needs, fertilizer and pH requirements, seed mix, existing and future soil moisture levels, slopes and grades, required erosion control items and devices, maintenance requirements, local highway snow removal and deicing practices, and any other characteristics that influence and affect turf establishment.

PART 2. MATERIALS

Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable and according to MDOT requirements.

Testing and certifications of materials must be in accordance with contract documents and the MDOT Material Source Guide.

Provide topsoil, seed, mulch, pesticide, herbicide, mulch blankets and any other unique erosion control materials as necessary to fulfill this specification, as detailed in the plans. Use additional materials, as necessary, to meet the standards set forth for turf establishment in this special provision. The use of sod will not be allowed for this project.

Selection of all materials is the responsibility of the Contractor with the following minimum conditions. The following are recommendations for turf establishment materials, but the contractor may submit alternate materials. The contractor shall submit, for review and approval, the entire restoration/maintenance plan with materials prior to starting work.

Alternate proposals/materials will be considered with written references from MDOT or public agencies with successful use within 3 years of proposed alternate. Provide 5 successful examples of MDOT projects.

1. Soil. Topsoil shall be placed at least 4 inches deep.

Provide furnished topsoil that will support vigorous growth. Topsoil is a material that consists of natural loam, sandy loam, silty loam, or clay loam humus bearing soils adapted to sustenance of plant life.

Material shall be from an offsite topsoil screening plant, and be loose and black in color. The material shall be free from sod, stones or rocks greater than 0.25 inches, roots, plants, clay lumps, weed stalks, clods, debris or other contaminants as determined by the engineer. The manufactured topsoil shall be a homogeneously blend of mineral soils or sand with stabilized organic soil amendments to produce topsoil. The topsoil shall be obtained from the upper layer of existing fertile soil and be in nutrients with negligible clay content.

Topsoil shall be in accordance with ASTM Standard D5268, 2007, "Standard Specification for Topsoil Used for Landscaping Purposes," ASTM International, West Conshohocken, PA, 2007, DOI: 10.1520/D5268-07, www.astm.org. The contractor shall test topsoil according to ASTM D5268 and the results submitted to the Engineer.

Contractor shall also test for pH content and percent organic content. Contractor shall make recommendations using these and any additional testing required. Provide Test Data Certification according to the Materials Source Guide.

(1) The pH range shall be from 6.0 to 7.5. Topsoil outside of this range shall be amended by the addition of pH adjusters as approved by the Engineer.

(2) The organic matter content shall range between 2% and 6% (by dry sample weight).

Topsoil removed from the roadway shall not be used within the project and must be removed from the right of way before project completion. The removed topsoil may be salvaged for use on other projects at the Contractors' expense. All stripped, salvaged, and/or removed topsoil is the property of the contractor.

Temporary topsoil stockpiles shall be located away from drainage courses and wetlands and shall be located outside of the drip line of preserved trees. Temporary stockpile locations outside of the limits of construction shall be restored in accordance with 816 of the MDOT 2020 Standard Specifications for Construction, at the Contractors' expense.
If temporarily stockpiling topsoil outside the right-of-way, obtain and provide the engineer written permission from the owner of the property where the material will be placed. Temporary topsoil stockpiles shall be protected from soil erosion with silt fence and tarps, at the contractor's expense, for any exposed stockpiles left untouched over five calendar days. In lieu of tarps, the Contractor may use a Cereal Rye seeding mixture, provided it grows.

No stripping, salvaging, and/or removing of topsoil is permitted outside of the roadway. Roadway is as defined in Section 101.03 of the Michigan Department of Transportation Standard Specifications for Construction.

Topsoil shall be placed on a prepared earth bed in accordance with Section 816.03A of the MDOT Standard Specifications for Construction. The existing earth bed shall be graded such that the placement of topsoil will meet the final plan grades. Trim and grade the finished slope (MDOT Class A) in accordance with subsection 205.03.N of the Standard Specifications for Construction.

2. Seed.

Select a seed that is suitable for its application from the following:

A. THM Seed Mix (Turf Loamy to Heavy)
For areas that are described as residential and business turf, use seed mixture MDOT THM mix at a minimum rate of 220 lb/acre. These areas are well maintained, mowed about once a week during its established growing season. This seed mix is aesthetically pleasing, and is preferred to adjacent land owners who maintain their frontage.

B. TUF Seed Mix (Turf Urban Freeway)
For all other areas, described as rural turf, use seed mixture is MDOT TUF mix at a minimum rate of 220 lb/acre. These areas are unmaintained, never mowed, or only cut once or twice a year during its established growing season. This seed mix requires less maintenance and is preferred to adjacent land owners who do not maintain the frontage.

The following seed mixes are to be used as shown on the plans and pay items.

A. ES Seed Mix (Environmental Seed)
The ES seeding mix will be utilized to restore roadside embankment slopes adjacent to wetland areas with mature Michigan meadow vegetation (grasses & wildflowers) and contain the proportions of grasses and forbs as shown in Table 1. The mixture proportion of the seed mixture shall be accomplished by using MCIA certified seed from local origin. The seed must not be mixed together but must be packaged individually according to species. The Engineer will inspect seed before individual packages are opened.

This seed mix is suitable for forested wetland, emergent wetlands, berm and uplands.

Table 1: ES Seed Mixture Proportions

Common Name	Scientific Name	Minimum Purity (%)	Germination (%)	Grass, Sedges, Rushes Weight lbs (Oz)/Acre	Temporary Cover PLS Lbs (Oz)/Acre	Forbs Weight Lbs (Oz)/Acre	Total ES Seed Mix Lbs (Oz)/Acre
Big Bluestem Grass	Andropogon gerardii			3.5 (56)			
Canada Wild Rye	Elymus canadensis			4 (64)			
Switch Grass	Panicum virgatum			1.5 (24)			
Little Bluestem	Schizachyrium scoparius			2.5 (40)			
Indian Grass	Sorghastrum nutans			4.5 (72)			
Common Oat	Avena sativa	90	85		22.5 (360)		
Annual Rye	Lolium multiflorum				6.25 (100)		
Wild Bergamot	Monarda fistulosa					0.15625 (2.5)	
Yellow Coneflower	Ratibida pinnata					0.375 (6)	
Black-eyed Susan	Rudbeckia hirta					0.1875 (3)	
Smooth Aster	Aster laevis					0.125 (2)	
Showy Goldenrod	Solidago speciosa					0.09375 (1.5)	
Butterfly Milkweed	Asclepias tuberosa					0.5 (8)	
			Totals:	**16 (256)**	**28.75 (460)**	**1.4375 (23)**	**46.1875 (739)**

B. BS Seed Mix (Bio-swale Seed)

The BS seeding mix will be utilized in bio-swales or grassy swales as shown on the plans. The seed must not be mixed together but must be packaged individually according to species. The Engineer will inspect seed before individual packages are opened.

Seed shall be installed in accordance with the seasonal limitations that are described in MDOT Standard Specifications of Construction and contract documents. Provide testing of seed per MDOT Material Source Guide.

Table 2: BS Seed Mixture

Common Name	Scientific Name	Permanent Grasses/Sedges PLS Lbs (Oz)/Acre	Temporary Cover PLS Lbs (Oz)/Acre	Forbs PLS Lbs (Oz)/Acre	Total BS Seed Mix PLS Lbs (Oz)/Acre
Big Bluestem	Andropogon gerardii	0.75 (12)			
Bristly Sedge	Carex comosa	0.125 (2)			
Crested Oval Sedge	Carex cristatella	0.0625 (1)			
Bottlebrush Sedge	Carex lurida	0.15625 (2.5)			
Prairie Sedge Mix	Carex spp.	0.125 (2)			
Brown Fox Sedge	Carex vulpinoidea	0.25 (4)			
Virginia Wild Rye	Elymus virginicus	0.50 (8)			
Fowl Manna Grass	Glyceria striata	0.0625 (1)			
Switch Grass	Panicum virgatum	0.125 (2)			
Dark Green Rush	Scirpus atrovirens	0.125 (2)			
Wool Grass	Scirpus cyperinus	0.03125 (0.5)			
Prairie Cord Grass	Spartina pectinata	0.1875 (3)			
Common Oat	Avena sativa		22.5 (360)		
Annual Rye	Lolium multiflorum		6.25 (100)		
Water Plantain (Various)	Alisma spp.			0.0625 (1)	
Swamp Milkweed	Asclepias incarnata			0.125 (2)	
New England Aster	Aster novae-angliae			0.03125 (0.5)	
Tall Coreopsis	Coreopsis tripteris			0.0625 (1)	
Spotted Joe-Pye Weed	Eupatorium maculatum			0.015625 (0.25)	
Blue Flag	Iris virginica			0.25 (4)	

Marsh Blazing Star	Liatris spicata			0.0625 (1)	
Cardinal Flower	Lobelia cardinalis			0.015625 (0.25)	
Great Blue Lobelia	Lobelia siphilitica			0.03125 (0.5)	
Common Water Horehou	Lycopus americanus			0.015625 (0.25)	
Common Arrowhead	Sagittaria latifolia			0.046875 (0.75)	
Prairie Dock	Silphium terebinthinaceum			0.0625 (1)	
Blue Vervain	Verbena hastata			0.09375 (1.5)	
Golden Alexanders	Zizia aurea			0.046875 (0.75)	
	Total:	**2.5 (40)**	**28.75 (460)**	**0.921875 (14.75)**	**32.421875 (518.75)**

Alternate seeding mixes that may be submitted by the contractor (approval of alternate mixes shall solely be decided by the Engineer):

A. Use a seeding mixture that is composed of four or more species of perennial grass. Use only species and their cultivars or varieties, which are guaranteed hardy for Michigan.

B. Recommended species of perennial grasses include: Kentucky Bluegrass, Perennial Ryegrass, Hard Fescue, Creeping Red Fescue, Chewings Fescue, Turf-type Tall Fescue, Buffalo grass, and Alkaligrass-Fults Puccinellia distans. Select cultivars or varieties of grasses that are disease and insect resistant and of good color. Ensure that no one species in the mix is less than 5 percent, or more than 25 percent, of the mixture by weight. Do not select grass species considered noxious or objectionable, such as Quack Grass, Smooth Brome, Orchard Grass, Reed Canary Grass and others.

a. The seed must be legally saleable in Michigan. The seed product must not contain more than 10 percent inert materials. The seed source must be from an MDOT approved certified vender.

the site use, and to the soils, moisture and local climate. Site use may include, but is not limited to, detention pond, wildlife habitat, playground, wetlands, forested wetland, rural roadside, urban roadside and highly maintained front yard.

c. At least two of the species in the mixture proposed to be planted within 15 feet behind the curb or the shoulder must be salt tolerant.

3. Mulch. Mulch blanket or high velocity mulch blanket according to MDOT Standard

Specification 816.03 G.

Mulch blanket seeded areas with the appropriate materials for the site conditions to promote germination and growth of seed and to mitigate soil erosion and sedimentation.

Mulching, Mulch Anchoring, or Mulching Netting shall not be permitted.

A. Special Mulch

Coir Fiber Erosion Control Blanket:
The coir fiber blanket shall be a 100% organic coir (coconut) fiber blanket woven between two natural fiber nettings into a continuous matrix for temporary erosion protection (North American Green C125 or approved equal). The blankets shall be of consistent thickness with the coconut fiber evenly distributed over the entire area of the mat and a minimum mass per unit area of 0.50 lb/yd2. The blanket shall be sewn to a natural jute fiber netting on the top and bottom sides with degradable thread on 1.5-2 inch centers. The top netting shall consist of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine strands (Leno weave) to form a net opening size of approximate ½ x 1 inch mesh. Blankets with cross-lay weaves on top are not allowed. Photo-degradable polypropylene or other synthetic nettings are not allowed unless specifically indicated on the Project Plans or pre-approved by the Engineer. Products shall meet the specifications of ECTC and FHWA FP-03 Category Type 4. The following products meet the specifications for coir fiber ECB lines:

Material Properties:

Mass/Unit Area	ASTM D6475	8.83 oz/yd2 (300 g/m2)
Min. Tensile Strength	ASTM D4595	125 lb/ft
Min. Permissible Shear Stress	ASTM D6460	2.25 lb/ft2

4. Herbicides. Comply with all federal, state and local laws. As part of the MDA weed control application, the Contractor is required to make proper notifications and/or postings as per label and MDA requirements for all locations that will be sprayed. Notify the Engineer 48 hours prior to any applications being made. Furnish and apply herbicide(s) as needed. It is the Contractor's responsibility to select the herbicide(s) and the rate at which it is used. Obtain the Engineer's approval of work methods and herbicide(s) selected prior to the application of the herbicide(s). Complete a spray log and submit to the Engineer each day an application is made.

Do not draw water from any waterway (i.e. river, ditch, creek, lake, etc.) located on state, county or municipal right-of-way, for mixing with herbicides.

Weed control is not a pay item and is included in other items of work. It is the responsibility of the Contractor to control weeds as directed by the Engineer until all restoration related pay items are accepted.

5. Fertilizers. Fertilizer shall meet the following minimum requirements: MDOT Class A, 228 lb/acre. Fertilizer shall be placed in accordance with Section 816.03B of the MDOT Standard Specifications for Construction.

Furnish and apply fertilizer(s) as needed. It is the Contractor's responsibility to select the fertilizer(s) and the rate at which it is used. Phosphorus is allowed for use only at the time of planting and when required

by soil conditions. Obtain the Engineer's approval of work methods and fertilizer(s) prior to the application of the fertilizer(s).

6. Water. Furnish and apply water from an approved source at a rate to promote healthy growth. Watering seed until vigorous turf growth is accepted shall be considered included in the surface restoration work.

PART 3. CONSTRUCTION

The Contractor is responsible for all work and all construction methods used in completing this work. Implementation of any part of MDOT standard specifications or standard plans by the Contractor does not relieve the Contractor of responsibility for acceptability of the construction methods or for the quality of the work.

1. Contractor Turf Establishment Experience Requirements. Weed control must be done by a commercial herbicide applicator, licensed by the State of Michigan and certified by the Michigan Department of Agriculture (MDA) in the appropriate category to apply herbicides. Use application procedures and materials according to federal, state and local regulations. Use of restricted use chemicals is prohibited. The Contractor must provide appropriate documentation and secure approval from the Engineer before application of herbicides. Submit information to engineer.

At least 10 work days prior to start of turf establishment, submit documentation to the Engineer, from the Contractor performing the turf establishment work, that they meet one or both of the following requirements.

a) At least one person employed by the Contractor performing the turf establishment work and assigned to the job site has a degree or certificate in Turf Management, Horticulture or related field.

b) At least one person employed by the Contractor performing the turf establishment work and assigned to the job site has at least 5 years of experience in roadside turf establishment.

Contractor's Field Supervision: The Installer shall maintain an experienced full-time supervisor on Project site when work is in progress.

2. Planting Restrictions: Plant according to season limitations in Section 816. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of planting completion.

3. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

4. Examination

Examine areas to be planted for compliance with requirements and other conditions affecting performance.

a) Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.

b) Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
c) Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
d) Uniformly moisten excessively dry soil that is not workable and which is too dusty.

5. Preparation

a) Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, 100-year floodplain, wetlands, and plantings from damage caused by planting operations.
b) Protect grade stakes set by others until directed to remove them. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
c) Slopes shall be class A slopes as defined in the MDOT Standard Specifications for Construction. These slopes shall be maintained during the entire turf establishment period. Any settlement will be the responsibility of the contractor to repair at no additional cost to the contract.

d) Preparation of Earth Bed. According to 816.03 A. 1.

6. Seeding

a) Seeding shall be sown in accordance with Section 816.03C of the MDOT Standard Specifications for Construction. The application rate for the seeding shall be as specified in the Products section.
b) Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
c) Do not use wet seed or seed that is moldy or otherwise damaged.
d) Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.
e) Rake seed lightly into top 1/8-inch of soil, roll lightly, and water with fine spray.

The above requirements do not apply to wetland seeding and is part of other contract documents.

7. Turf Maintenance

a) It is the responsibility of the Contractor to regularly water new seed in order to establish a dense lawn of permanent grasses that is free from mounds and depressions. Any portion of a seeded area that fails to show a uniform germination shall be re-seeded. Such re-seeding shall be at the Contractor's expense and shall continue until a dense lawn is established.
b) Watering seed shall be considered as included in the turf establishment work.
c) Maintain and establish grass by watering, fertilizing, weeding, mowing, trimming, replanting, core aeration, and performing other operations as required to re-mulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
d) Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
e) In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
f) Watering: Maintain temporary turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.

g) Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Layout temporary watering system to avoid walking over muddy or newly planted areas.
h) Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.
i) All prepared restoration areas of the entire project limits are the responsibly of the Contractor until final acceptance by the Engineer.

8. Cleanup and Protection

a) Promptly remove soil and debris created by restoration work from paved areas.
Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
b) Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.
c) Remove non-degradable erosion-control measures after grass establishment period.

9. Inspection of the Work. The Contractor is responsible for all weekly inspection of turf establishment work.

The contractor shall also notify the engineer 24 hours before performing any work.

If requested by the Engineer, use a Contractor's Weekly Report, to be approved by the Engineer, to report inspections made and to document turf establishment work performed on this project.

- Complete and submit a Contractor's Weekly Report to the Engineer when any work performed under this special provision is in progress. Submit report within 24 hours of performing work
- Include all necessary materials documentation including tests slips, certifications, bag tags, etc. with the associated Contractor's Weekly Report.
- The Engineer will determine the acceptability of the Contractor's Weekly Report in terms of their completeness and accuracy. The Engineer reserves the right to verify all submitted measurements and computations. Failure by the Contractor to submit acceptable and timely reports to the Engineer may result in withholding of progress pay estimates on turf-related items until such time as reports are submitted and deemed acceptable.

The Engineer reserves the right to inspect the project for any reason in accordance with subsection 104.01 of the Standard Specifications for Construction, including the fulfillment of other inspection requirements such as Soil Erosion and Sedimentation Control, NPDES, etc. Inspections made by the Engineer do not relieve the Contractor of the responsibility for inspections required by this special provision or the Contractor's responsibilities for erosion control and turf establishment.

10. Erosion Control. Erosion must be controlled at all times according to section 208 of the Standard Specifications for Construction. Control of soil erosion is the responsibility of the Contractor. However, sedimentation controls must be placed as indicated on the plans or as directed by the Engineer. The site must be continuously monitored by the Contractor for needed erosion repair from any cause as addressed in the contract documents. All eroded areas must be returned to original grade as detailed in the contract documents.

If sedimentation occurs in drainage structures or any watercourse or water containment area, corrective action must be taken immediately and all disturbed areas contributing to this sedimentation must be

stabilized within 24 hours after the erosion occurrence. Sediment deposited as a result of the Contractor's inability to control the soil erosion must be removed at the Contractor's expense.

The Contractor must reimburse for any costs levied against the , such as fines, environmental costs, costs for remedies required, or any other costs as a result of the Contractor's failure to comply with this special provision and with federal, state and local laws.

11. Erosion Repair. The Contractor is responsible for all repairs and liable for all consequences (legal, monetary or other) associated with erosion or sedimentation damage to finished or unfinished work.

All erosion occurrences and the repairs made by the Contractor must be reported to the Engineer in the format and at the frequency required by the Engineer. Any erosion, displacement or disturbance to ongoing or completed work by any cause must be repaired by the Contractor at no additional cost to the contract unless otherwise noted herein.

The Contractor is responsible and liable for all traffic control and safety measures required to repair and protect damaged turf areas. Any eroded area that may affect the support of the roadbed or safety of the public must be repaired within 24 hours of the erosion occurrence.

Protective devices such as barriers, directional signs/signals, temporary fence, or any other safety measures must be placed by the Contractor immediately after any erosion damage occurs that has the potential of endangering the public. In these instances, the Contractor must, within 24 hours of the occurrence of the damage, provide the Engineer with a written summary of the immediate action taken describing the repairs made and the safety measures taken. These protective devices are at the Contractors expense.

Shoulders, slopes, and other areas damaged by erosion prior to final acceptance of the project shall be fully repaired as directed by the Engineer at the Contractor's expense. To fully repair damaged areas the Contractor may be required to perform the following work. Fill and/or regrade rills and gullies with topsoil; fill and/or re-grade shoulder with gravel as specified on plans; re-seed, fertilize, and mulch with anchoring or mulch mats whichever was originally used to restore the area.

All corrective action erosion repairs shall be made according to contract documents and shall be made within 24 hours if sedimentation has occurred into a watercourse or public safety may be compromised. Otherwise, corrective action shall be made within 5 calendar days.

Due to any erosion as part of restoration, the Contractor shall be responsible for cleaning out all drainage structures, culverts, and ditches that are located within the area of construction. All ditches shall be restored such that drainage will flow freely. The cost of this work shall be considered as included in the pay items for restoration work.

12. Mowing and Weeding. Turf must be maintained to a visually appealing level, and not more than 8 inches in height at any time, prior to acceptance. Weeds must be controlled to less than 1 percent of the Turf Establishment area at all times during construction.

13. Contractor maintenance plan during establishment period

Contractor shall submit plan for review/approval. The plan may be revised based on inadequate field results.

14. Establishment Period

Contractor is responsible for growth according to Special Provision. Engineer determines acceptance after the Contractor's written request for final inspection of turf. Acceptance will only be considered after 60 calendar days of placement. The days do not include the seasonal limitations between October 10 and April 15.

If the contractor does not establish growth before seasonal limitations, the contractor is responsible for all SESC measures. At a minimum, this includes temporary mulch blanket. The cost for this work is paid for separately.

15. Submittals

The following is a general list of submittals for this special provision:
a) Documentation showing that Contractor meets Turf Establishment Experience Requirements.
b) Alternate materials (seed, fertilizer, etc.), if contractor requests
c) Topsoil test results
d) Herbicide spray log
e) Contractor's Weekly Report of inspections
f) Contractor maintenance plan
g) Certifications according to MDOT Material Source Guide
h) Any other documents to meet this Special Provision and Contract Documents.

16. Final Acceptance

A. Final Acceptance Parameters. Before final acceptance of the turf establishment work, all of the following minimum parameters must be met throughout all exposed areas of the project designated on the plans or identified by the Engineer as turf establishment areas:

1) Meet all requirements of this Special Provision
2) No exposed bare soil and the turf must be fully germinated
3) Dark green in color and in a vigorous growing condition
4) Healthy, uniform, erosion free, weed free, disease free
5) Free of surface irregularities
6) 90% of the restoration areas must have established growth.

The Engineer will notify the Contractor of the dates and times of all acceptance inspections. The Contractor may accompany the Engineer during these inspections. If the Contractor does not agree with the decision made by the Engineer, the Contractor may request an inspection by a mutually agreed upon third party (Michigan State University Extension service or other). A joint inspection, to include the Engineer, the Contractor, and the third party, will be scheduled by the Engineer. All expert fees and expenses charged by the third party must be paid by the Contractor.

Progress of Final Restoration: If in the judgment of the Owner, adequate site restoration efforts are not being expended, then the Owner will take the necessary steps to perform such restoration and shall charge the Contractor for all of the costs until proper order is restored. The Owner may also charge damages or reduce the amount of payment.

3.01 PAYMENT

Turf Establishment and Turf Establishment, (Type) Seed will be measured in place by area in square yards. All materials, labor and equipment required or selected by the Contractor to install, maintain, inspect, repair and meet the acceptance parameters for turf establishment specified in this special provision, including preparation, updating and submittal of the Contractor's Weekly Reports, are included in the contract unit price bid for Turf Establishment.

All of the above requirements within the Special Provision shall not be considered for additional payment, and shall be included as part of the contract unit price for Turf Establishment until the turf is accepted.

Repairs made to damaged turf establishment areas as a result of any storm event shall be included in the pay item Turf Establishment and Turf Establishment, (Type) Seed.

The following schedule of payment applies to work performed according to this special provision. Upon completion of mulch blanket stage, 50 percent of the authorized amount for Turf Establishment will be paid to the Contractor. The remaining 50 percent of the authorized amount will be paid upon completion of all other work necessary to comply with this special provision and to meet all final acceptance parameters for Turf Establishment.

If the construction schedule is modified or there are extensions of times, the contractor shall adjust the turf establishment plan at no additional cost to the contract.

The Turf Establishment pay item includes all testing by the contractor.

END OF SECTION

CITY OF BIRMINGHAM
2022 - 2023 CAPESEAL PROGRAM - CONTRACT #06-22(P)
BREAKDOWN OF QUANTITIES BY STREET

No.	DESCRIPTION	UNITS	BRADFORD	HUMPHREY	PENISTONE	TORRY	MELTON	BANBURY	TAUNTON	CROFT	TOTAL
DIVISION C			Southfield to Eton	Torry to Eton	Torry to 14 Mile	Taunton to Sheffield	Taunton to Eton	Taunton to Eton	Lincoln to Sheffield	Bradford to 14 Mile	
1	Mobilization, Maximum $25,000	LS	1	1	1	1	1	1	1	1	1
2	Erosion Control, Inlet Protection, Fabric Drop	EA	8	6	6	6	4	2	10	1	43
3	Capeseal Surface	SY	2,166	2,762	3,930	1,854	1,389	2,878	3,703	532	19,214
4	Supplemental Aggregate, MDOT 23A Limestone, as Required	TON	25	25	25	25	25	25	25	25	200
5	Sidewalk, Remove	SF	70	420	320	413	70	210	420	140	2,063
6	Curb and Gutter, Remove	FT	60	60	80	80	0	0	0	20	300
7	Curb and Gutter, Concrete, Detail F4	FT	60	0	60	0	0	0	0	0	120
8	Curb Ramp Opening, Concrete	FT	10	60	40	80	10	60	120	20	400
9	Curb Ramp, 6 inch	SF	70	210	195	238	70	210	420	140	1,553
10	Sidewalk, Concrete, 4 inch	SF	0	210	125	175	0	0	0	0	510
11	Detectable Warning Surface, Modified	FT	10	60	40	60	10	60	120	20	380
12	Subgrade Undercutting, 1 x 3, Special	CY	0	0	0	0	0	225	0	0	225
13	Subgrade Undercutting, 21AA	CY	10	10	10	10	10	10	10	10	80
14	Structure Cover, Adjust, Case 1	EA	2	2	12	2	3	4	10	1	36
15	Traffic Maintenance & Control	LS	1	1	1	1	1	1	1	1	1
16	Turf Establishment, THM Seed Mix	LS	1	1	1	1	1	1	1	1	1
17	Inspector Crew Days	DAY									
	Subtotal										

BIRMINGHAM
A WALKABLE CITY

HRC
HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

555 HULET DRIVE
BLOOMFIELD HILLS, MICH.

P.O. BOX 824
48303-0824

LEGEND

CAPE SEAL ROUTE

CITY OF BIRMINGHAM

2022 – 2023
CAPE SEAL
PROGRAM

HRC JOB NO.	FIGURE NO.
20220234	1
DATE JULY 2022	

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5K

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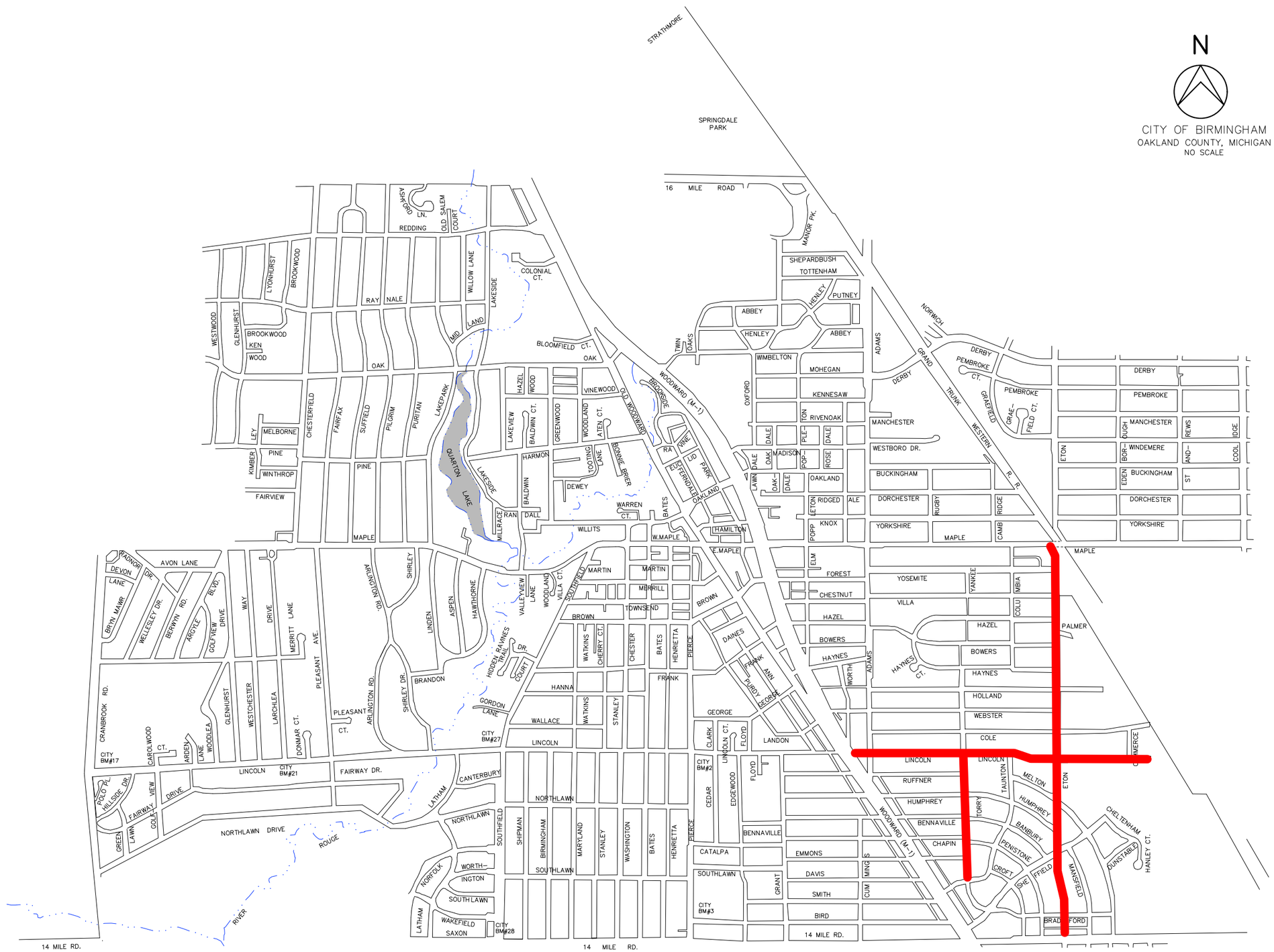

BIRMINGHAM
A WALKABLE CITY

HRC
HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

555 HULET DRIVE
BLOOMFIELD HILLS, MICH.

P.O. BOX 824
48303-0824

LEGEND

AUTHORIZED HAUL ROUTE

CITY OF BIRMINGHAM

2022 – 2023
CAPE SEAL
PROGRAM

HRC JOB NO.	FIGURE NO.
20220234	2
DATE JULY 2022	

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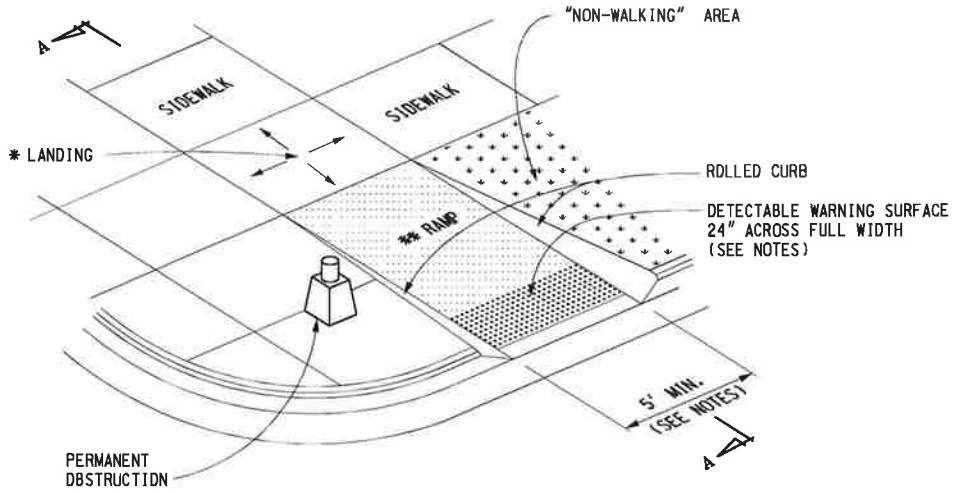
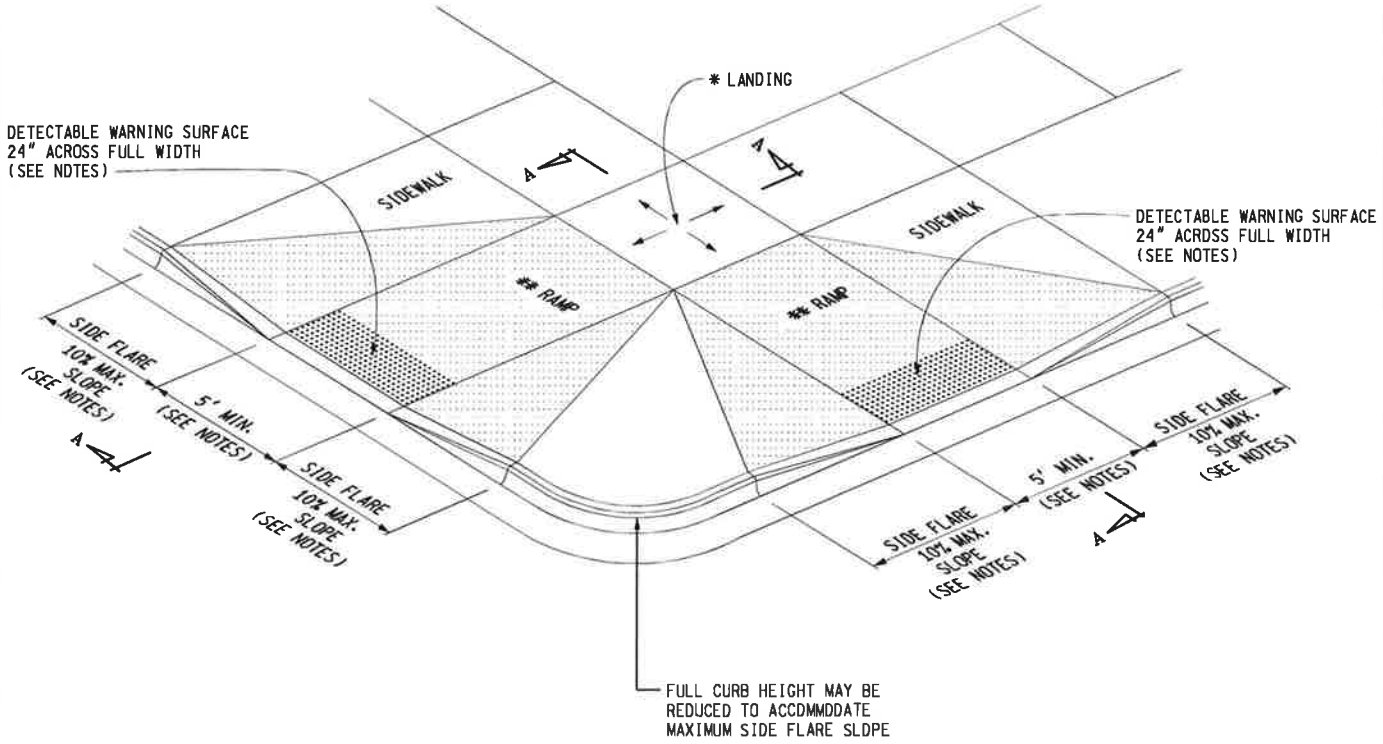
* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE R

(ROLLED SIDES)



CURB RAMP TYPE F

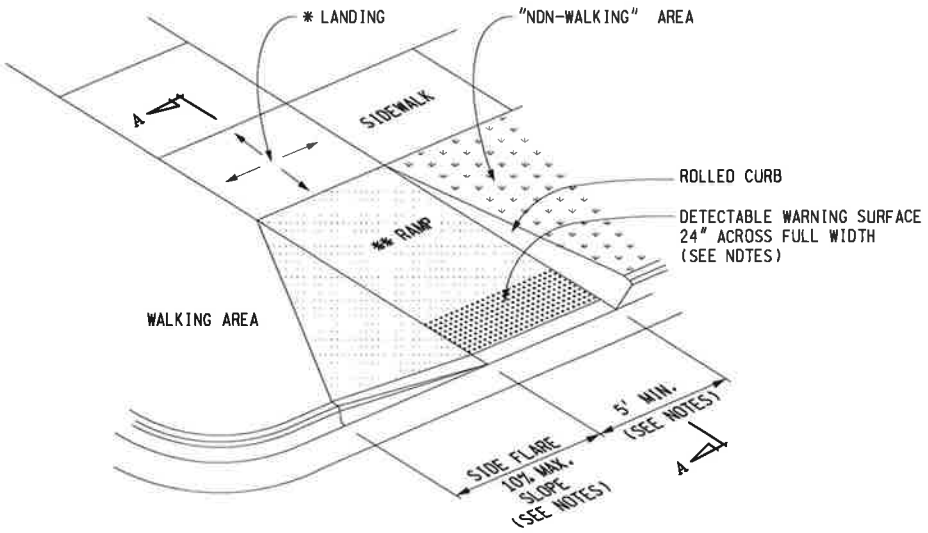
(FLARED SIDES, TWO RAMPS SHOWN)

MDOT Michigan Department of Transportation PREPARED BY DESIGN DIVISION DRAWN BY: B.L.T. CHECKED BY: W.K.P.	DEPARTMENT DIRECTOR Paul C. Ajegba APPROVED BY: Gregg Brunner, P.E. Gregg Brunner Oct 14 2021 12:32 PM DIRECTOR, BUREAU OF FIELD SERVICES APPROVED BY: Bradley C. Wieferich Bradley C. Wieferich Oct 14 2021 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 F.H.W.A. APPROVAL 5-8-2020 PLAN DATE R-28-J SHEET 1 OF 7

5K

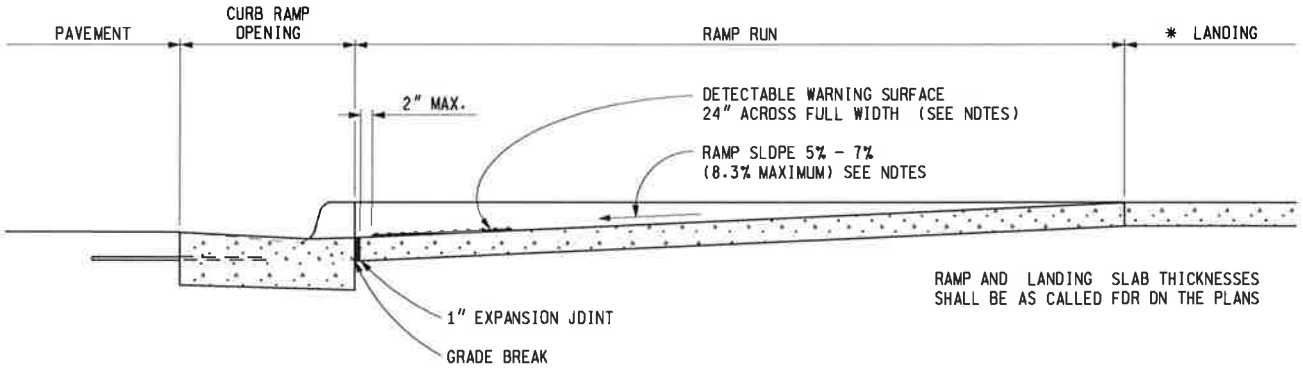
* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE RF

(ROLLED / FLARED SIDES)

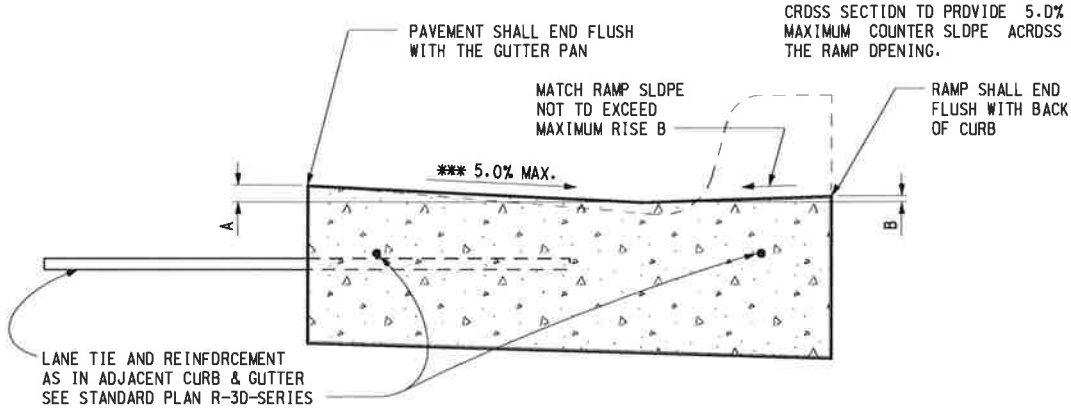


SECTION A-A

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-3D-SERIES

*** TRANSITION ADJACENT GUTTER PAN CROSS SECTION TO PROVIDE 5.0% MAXIMUM COUNTER SLOPE ACROSS THE RAMP OPENING.



SECTION THROUGH CURB RAMP OPENING

(TYPICAL ALL RAMP TYPES)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

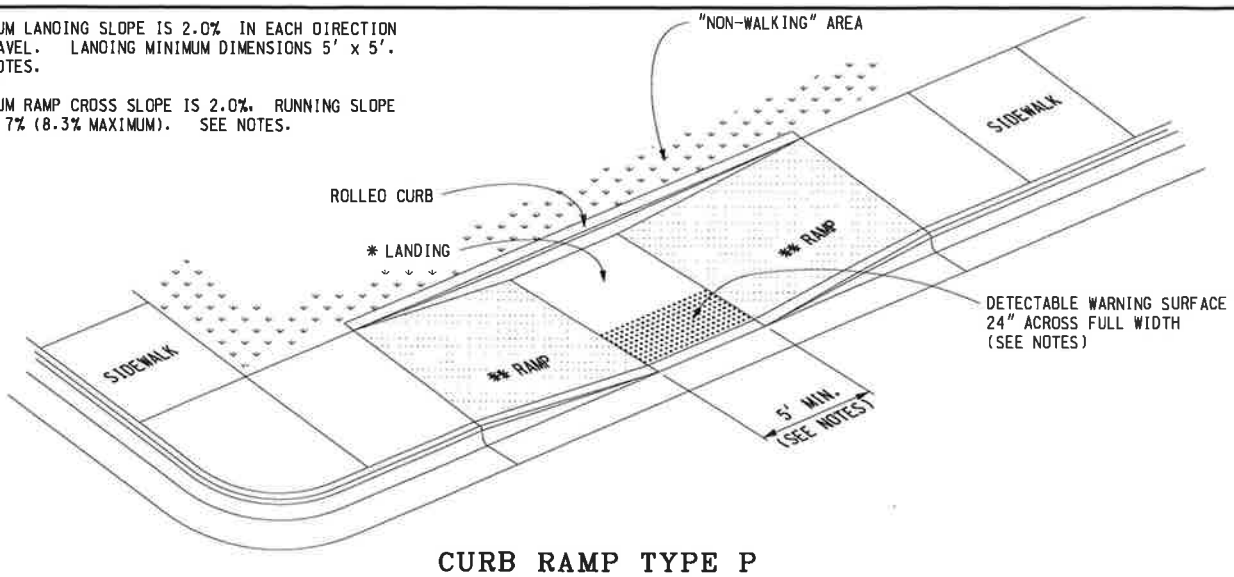
CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022	5-8-2020	R-28-J	SHEET
E.H.W.A. APPROVAL	PLAN DATE		2 OF 7

5K

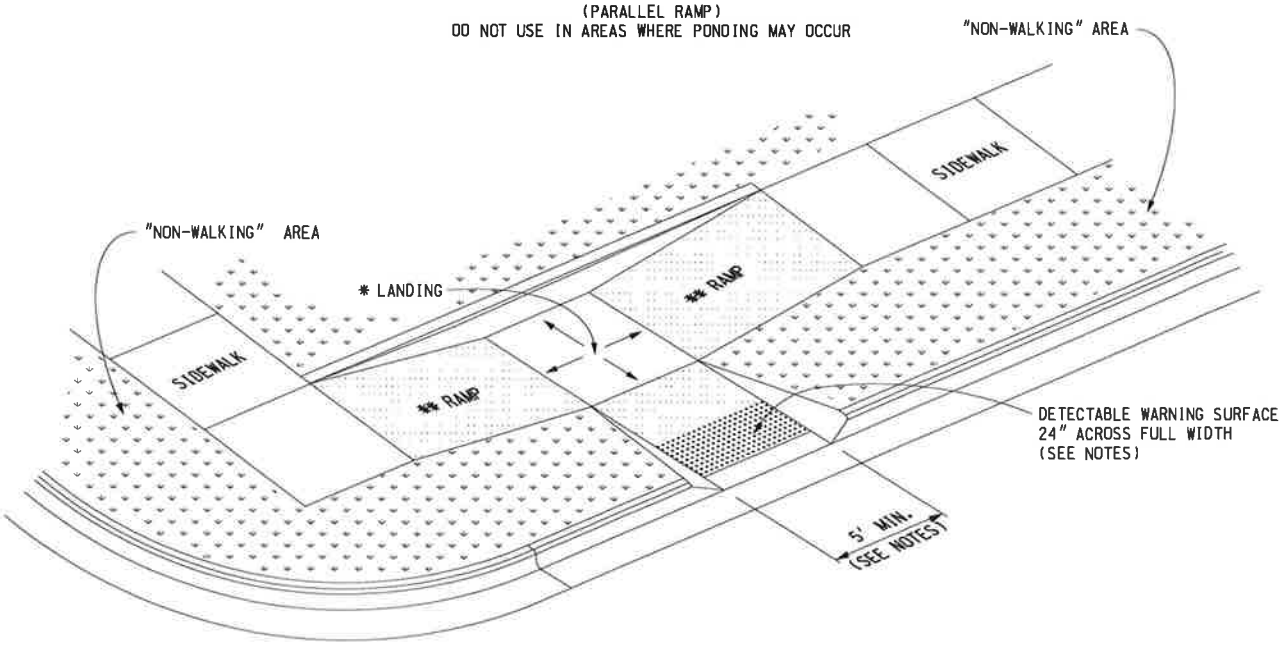
* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE P

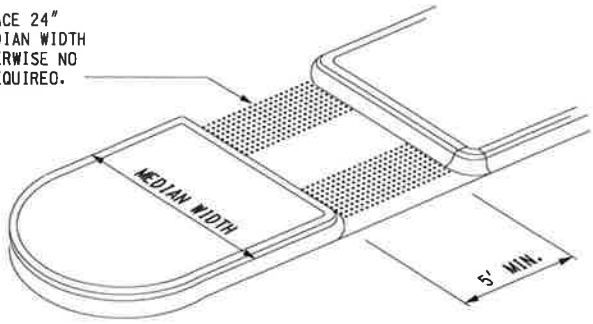
(PARALLEL RAMP)
DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



CURB RAMP TYPE C

(COMBINATION RAMP)

DETECTABLE WARNING SURFACE 24" ACROSS FULL WIDTH IF MEDIAN WIDTH IS AT LEAST 6'-0". OTHERWISE NO DETECTABLE WARNING IS REQUIRED.



CURB RAMP TYPE M

(MEDIAN ISLAND)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

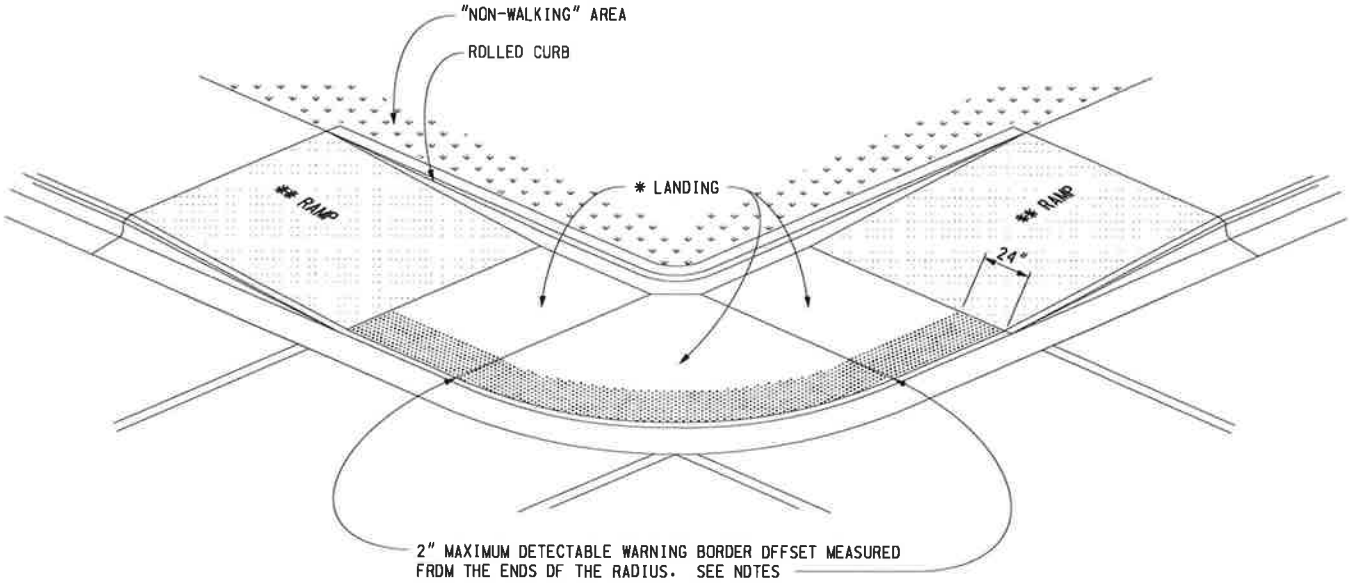
CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022	5-8-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		3 OF 7

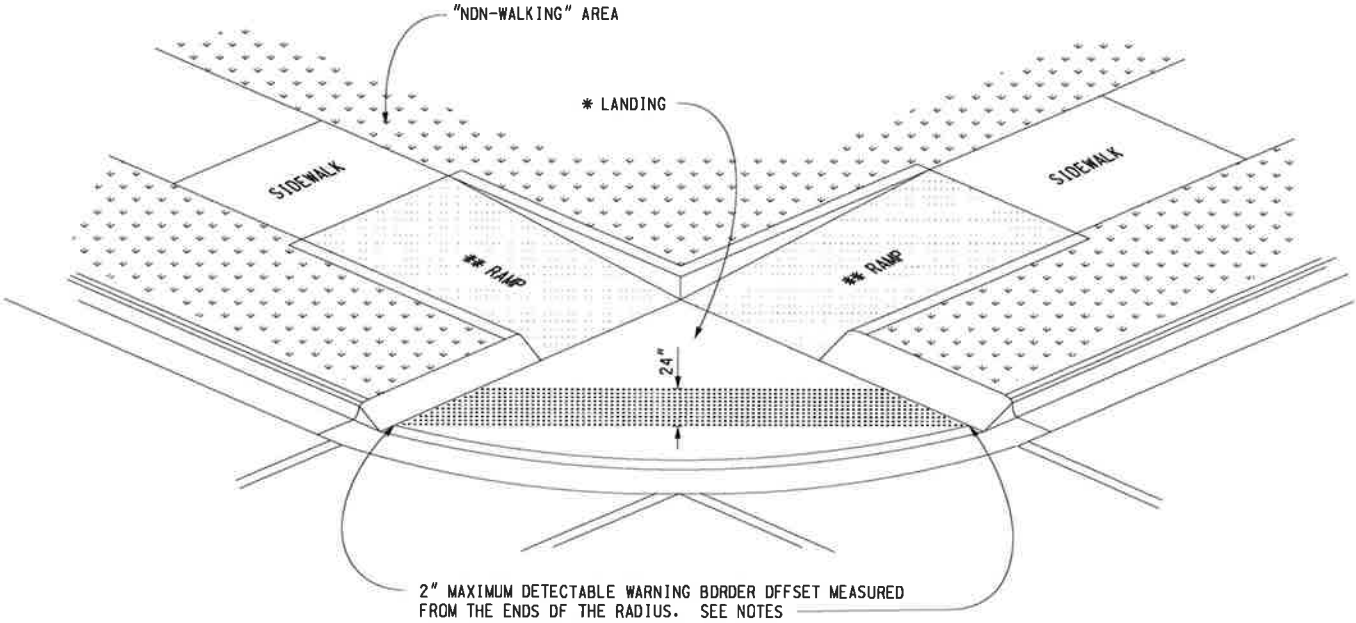
5K

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



(RADIAL DETECTABLE WARNING SHOWN)



(TANGENT DETECTABLE WARNING SHOWN)

CURB RAMP TYPE D

(DEPRESSED CORNER)

USE ONLY WHEN INDEPENDENT DIRECTIONAL RAMPS CAN NOT BE CONSTRUCTED FOR EACH CROSSING DIRECTION

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

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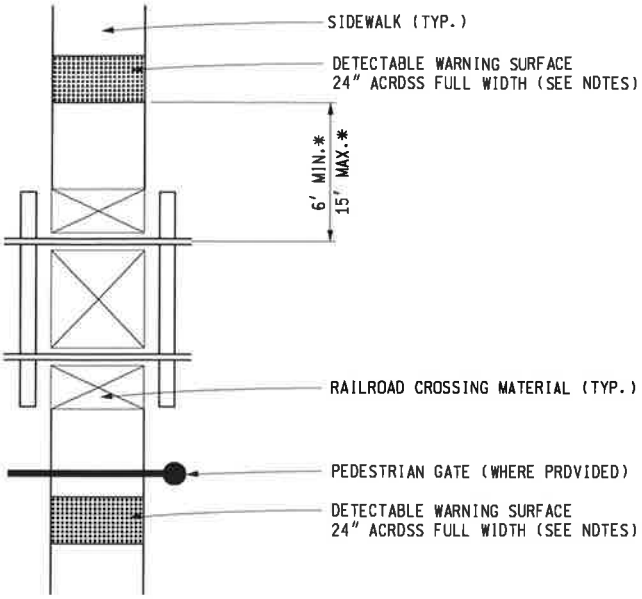
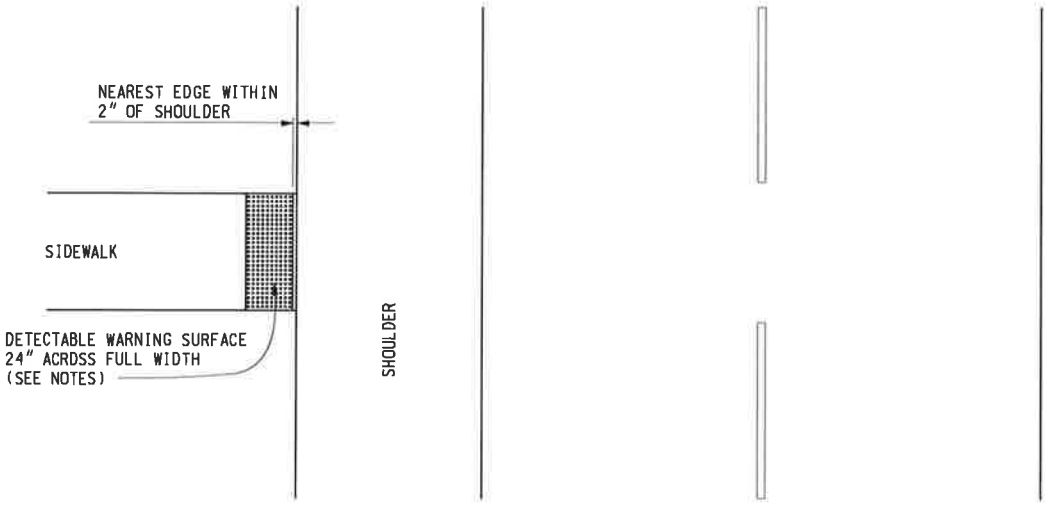
* THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE RAIL CROSSING IS 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. DO NOT PLACE DETECTABLE WARNING ON RAILROAD CROSSING MATERIAL.



DETECTABLE WARNING AT RAILROAD CROSSING

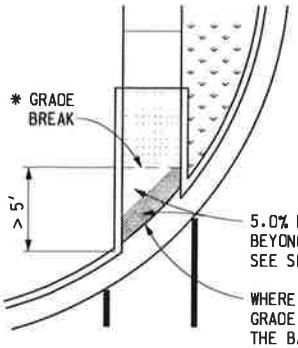


DETECTABLE WARNING AT FLUSH SHOULDER OR ROADWAY

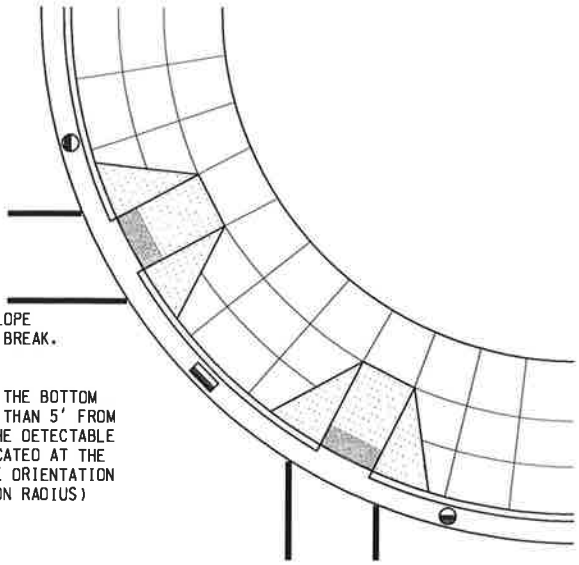
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

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



CURB RAMP LOCATED IN RADIUS (TYPE R SHOWN)
(GRADE BREAK OFFSET GREATER THAN 5')

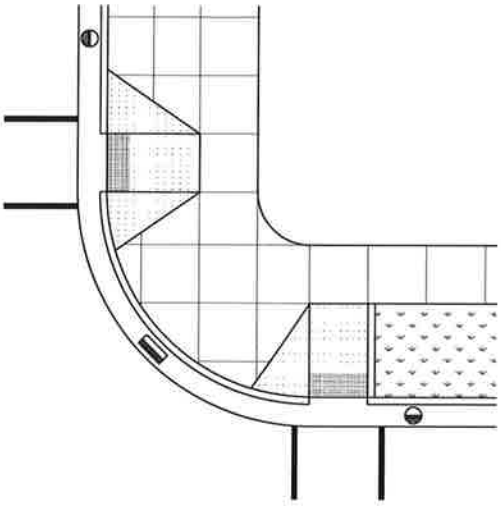


CURB RAMP PERPENDICULAR TO RADIAL CURB (TYPE F SHOWN)

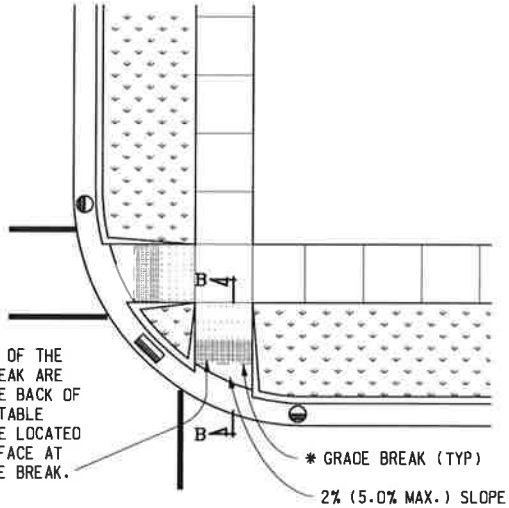
(USE WITH RADIAL CURB WHEN THE CROSSWALK AND CURB RAMP ARE NOT ALIGNED)

LEGEND

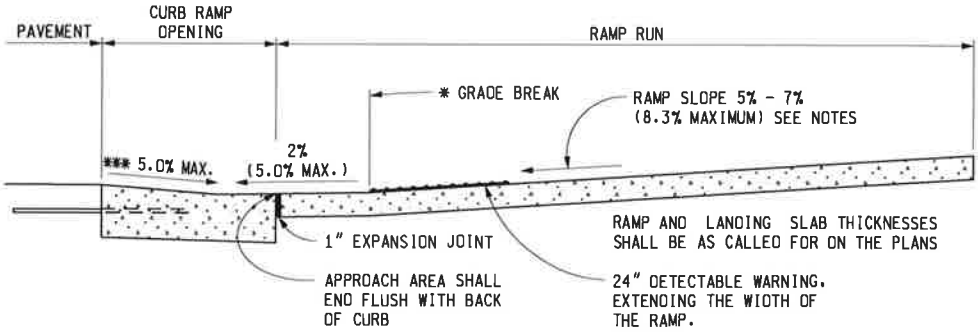
- SLOPED SURFACE
- DETECTABLE WARNING
- "NON-WALKING" AREA
- CROSSWALK MARKING
- PREFERRED LOCATION OF DRAINAGE INLET (TYP.)
- ALTERNATE LOCATION OF DRAINAGE INLET (TYP.)



CURB RAMP PERPENDICULAR TO TANGENT CURB
(TYPE F AND TYPE RF SHOWN)



CURB RAMP LOCATED IN RADIUS (TYPE R SHOWN)
(GRADE BREAK OFFSET LESS THAN 5')



* 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.

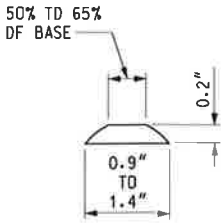
SECTION B-B
CURB RAMP ORIENTATION

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

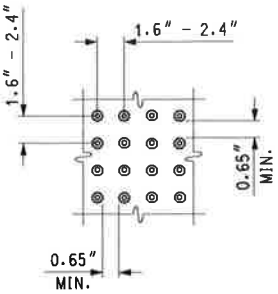
CURB RAMP AND DETECTABLE WARNING DETAILS

4-7-2022 F.H.W.A. APPROVAL	5-8-2020 PLAN DATE	R-28-J	SHEET 6 OF 7

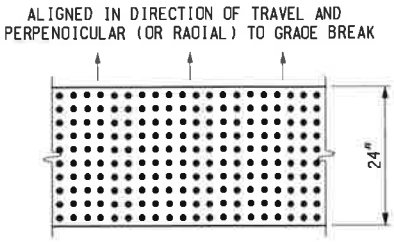
5K



DOME SECTION



DOME SPACING



DOME ALIGNMENT

DETECTABLE WARNING DETAILS

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 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. 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/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 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 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, 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-B-2020	R-28-J	SHEET
F.H.W.A. APPROVAL	PLAN DATE		7 OF 7

5K

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Engineering Department

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Melissa A. Coatta, City Engineer**

SUBJECT: **2023 Sewer Root Control Program Award**

INTRODUCTION:
The Engineering Department in cooperation with the Department of Public Service recommends conducting another round of sewer root control treatment to sewer segments throughout the City. The City has previously used Duke's Root Control, Inc. to perform this work in the past using HGACBuy and we recommend awarding this year's work using HGACBuy pricing.

BACKGROUND:
Root control treatment in sewer segments is a regular practice to eliminate tree roots in the sewer system. The treatment includes injecting a chemical foam into the sewer pipes from manholes, and the chemical foam makes the root friable and will break off over time. The chemicals used for root treatment are for the public municipal sewer system and are not harmful to humans, animals, or trees.

Duke's Root Control, Inc. has provided these specialized services across the county. The City has previously used Duke's Root Control, Inc. in 2019 to address "Year 1" segments from the 2018-2019 sewer televising and inspection work, and "Year 2" segments in 2022. The scope of work for the 2023 project includes "Year 3" segments which include 33,920 feet of 8-inch to 30-inch sewers. The quote from Duke's Root Control, Inc. for completing the 2023 project is $99,465.67 and is in the 2022/2023 fiscal year budget.

HGACBuy is a nationwide, government procurement service that the City of Birmingham has been a member of since 2012. All contracts available to participating members of HGACBuy have been awarded by a public competitive procurement process compliant with State statutes. HGACBuy offers expedited procurement, volume purchasing discounts, on-duty professional staff assistance, research and development of technical specifications, and contract administration.

LEGAL REVIEW:
Purchasing through a cooperative purchasing service, such as HGACBuy, complies with the City's procurement policies related to competitive bidding. The City Attorney has reviewed and approved the documentation. Prior to issuing the notice to proceed, Duke's Root Control must provide evidence of insurance coverage meeting the City's requirements.

FISCAL IMPACT:
This project was budgeted for in the 2022/023 budget in the Sewer Fund, Other Contractual Services, account number 590.0-538.000-811.0000. No amendments to the 2022/2023 fiscal year budget are required for this work as there is adequate funding in the Sewer Fund to accommodate this request. Additionally, continued maintenance on sewer segments is more sustainable and cost effective by extending the service life of the pipe versus spot repairs or removal and replacement of the pipe.

PUBLIC COMMUNICATIONS:
Sewer service will not be interrupted with this proposed work and no action is required by property owners. The Engineering Department will issue notices to property owners in advance of the work being performed to their section of the sewer system.

SUMMARY:
It is recommended the 2023 Sewer Root Control Program be awarded to Duke's Root Control, Inc., with purchasing through HGACBuy, and the Engineering Department is also requesting authorization to issue a purchase order in the amount of $99,465.67.

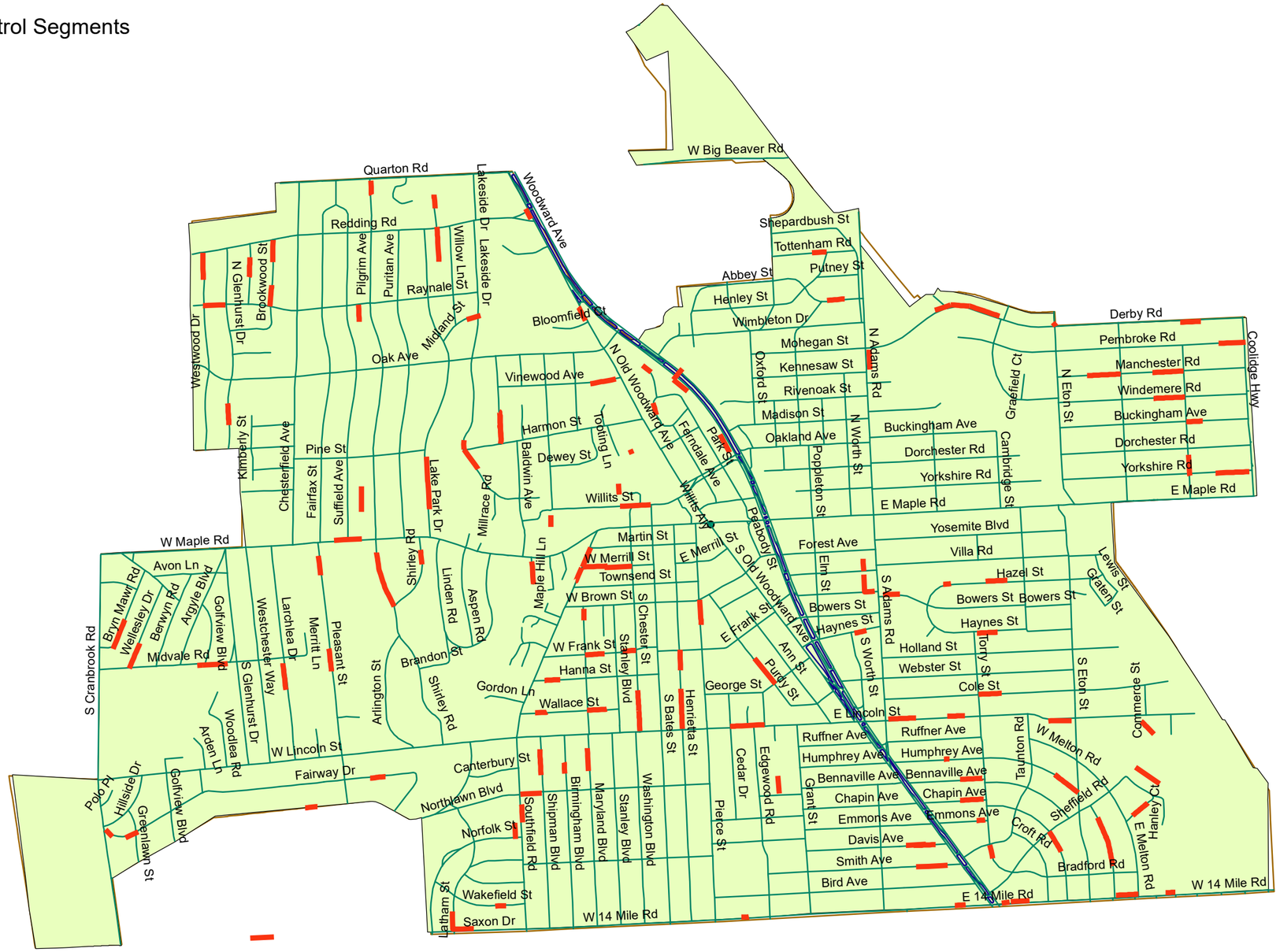
ATTACHMENTS:

- Location Map of sewer segments recommended for root control treatment (1 page)
- HGACBuy Contract Pricing Worksheet from Duke's Root Control, Inc. for the 2023 Sewer Root Control Program (1 page)

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the purchase of root control services, as quoted by Duke's Root Control, Inc. for the 2023 Sewer Root Control Program, in the amount not to exceed $99,465.67. Funds for this purchase are available in the Sewer Fund, Other Contractual Services, account number 590.0-538.000-811.0000.

Legend

Year 3 Root Control Segments



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HGACBuy	CONTRACT PRICING WORKSHEET For Catalog & Price Sheet Type Purchases	Contract No.:	SC01-21	Date Prepared:	14-Feb

This Worksheet is prepared by Contractor and given to End User. If a PO is issued, both documents MUST be faxed to H-GAC @ 713-993-4548. Therefore please type or print legibly.

Buying Agency:	City of Birmingham, MI	Contractor:	DUKE'S ROOT CONTROL, INC.
Contact Person:	Melissa Coatta	Prepared By:	Bob Hunn
Phone:	248-530-1839	Phone:	614-354-3927
Fax:		Fax:	
Email:	mcoatta@bhamgov.org	Email:	bob@dukes.com / lisa@dukes.com

Catalog / Price Sheet Name:	SEWER CLEANING, HYDRO EXCAVATING, INSPECTION EQIPMENT,AND MISCELLIOUS SERVICES
General Description of Product:	RAZOR ROOTER II CHEMICAL ROOT CONTROL

A. Catalog / Price Sheet Items being purchased - Itemize Below - Attach Additional Sheet If Necessary

Quan	Description	Unit Pr	Total
7000	SC211003 RAZOROOTER II CHEMICAL ROOT CONTROL 4" THRU 9"	1.69	11830
12998	SC211004 RAZOROOTER II CHEMICAL ROOT CONTROL 10" THRU 12"	2.02	26255.96
5701	SC211005 RAZOROOTER II CHEMICAL ROOT CONTROL 13" THRU 16"	2.83	16133.83
5522	SC211006 RAZOROOTER II CHEMICAL ROOT CONTROL 18" THRU 22"	5.04	27830.88
1958	SC211007 RAZOROOTER II CHEMICAL ROOT CONTROL 24" THRU 30"	6.45	12629.1
294	SC211008 RAZOROOTER II CHEMICAL ROOT CONTROL 32" THRU 36"	6.45	1896.3
448	SC211009 RAZOROOTER II CHEMICAL ROOT CONTROL 36" THRU 48"	6.45	2889.6
			0
			0
			0
			0
			0
		Total From Other Sheets, If Any:	
		Subtotal A:	99465.67

HGACBuy THE SMART PURCHASING SOLUTION

B. Unpublished Options, Accessory or Service items - Itemize Below - Attach Additional Sheet If Necessary
(Note: Unpublished Items are any which were not submitted and priced in contractor's bid.)

Quan	Description	Unit Pr	Total
			0
			0
			0
			0
		Total From Other Sheets, If Any:	
		Subtotal B:	0

Check: Total cost of Unpublished Options (B) cannot exceed 25% of the total of the Base Unit Price plus Published Options (A+B).	For this transaction the percentage is:	0%

C. Trade-Ins / Special Discounts / Other Allowances / Freight / Installation / Miscellaneous Charges

Subtotal C:	0

Delivery Date:	5/31/2023	D. Total Purchase Price (A+B+C):	99465.67

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BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Department of Public Services

DATE: February 16, 2023

TO: Thomas M. Markus, City Manager

APPROVED: Scott D. Zielinski, Director DPS

FROM: Carrie Laird, Parks and Recreation Manager

SUBJECT: 2023-2024 Annual Flower Purchase

INTRODUCTION:
As part of its beautification efforts, the Department of Public Services (DPS) budgets and plans for annual flowers to be planted by city staff in flower beds located on city property each year. This purchase agreement is for two years, 2023 and 2024. Locations include City Hall, Shain Park, parking structure grounds, the golf courses, some parks and throughout the downtown. Annual flowers are often the most bright and colorful plantings.

This purchase does not include all of the hanging flower baskets around downtown, which are provided by the Birmingham Shopping District.

BACKGROUND:
Sealed bids were opened on Tuesday, February 7, 2023 for the purchase of annual flowers for spring planting for two years (2023 & 2024). One bid was received. The result of the sealed bid is shown below:

Bidder	Complete Bid	Deviations Exceptions	Total for 2023	Total for 2024
Croswell Greenhouse	**Yes**	**None**	**$22,032.25**	**$23,133.86**

Croswell Greenhouse submitted a complete bid and the DPS has purchased annual flowers from this vendor in the past and has been very pleased with the quality of plant material. This cost proposal is reasonably comparable to pricing from previous purchases of annual flowers.

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

FISCAL IMPACT:
This purchase was included in the City's approved budget in the General Fund, Property Maintenance Operating Supplies account number 101.0-441.003-729.0000.

SUSTAINABILITY COMMENTS:
Staff took the opportunity to review some of the annual planting bed areas and made the determination to plant areas of perennials. Five (5) annual beds will be replaced with perennials, as such the quantities of annuals have been reduced to reflect this change. Once established, they will require less water, greater root systems to help filter storm water, less manpower requirements, ultimately resulting in greater sustainability. Note that perennials are not part of this purchase.

PUBLIC COMMUNICATIONS:
This purchase does not require public communications.

SUMMARY:
The Department of Public Services recommends the purchase of the 2023-2024 annual flowers from Croswell Greenhouse at a total cost not to exceed $22,032.25 for 2023 and for 2024 not to exceed $23,133.86. Croswell's has supplied the city in the past with annual flowers and DPS has been satisfied with the quality of stock, delivery of products, and overall customer service this vendor has provided.

Money is budgeted for this purchase in General Fund – Property Maintenance – Operating Supplies account #101.0-441.003-729.0000.

ATTACHMENTS:

- Agreement including insurance
- Cost Proposal
- Iran Sanctions Act Vendor Certification Form

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the 2023-2024 Annual Flower Purchase from Croswell Greenhouse Inc. in the amount not to exceed $22,032.25 for 2023 and $23,133.86 for 2024. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for the Annual Flower Purchase has been budgeted for in the General Fund – Property Maintenance – Operating Supplies account #101.0-441.003-729.0000.

AGREEMENT OF 2023-24 Annual Flowers Purchase

THIS AGREEMENT is entered into this ___ day of _____, 2023, by and between the **CITY OF BIRMINGHAM,** whose address is 151 Martin Street, Birmingham, MI 48009 (hereinafter referred to as the City) and Croswell Greenhouse (name of party) a Michigan Corp. _____ (Corporation, P.C., LLC, etc.), whose address is 180 Davis St Croswell MI 48422 (hereafter referred to as Vendor and the foregoing shall collectively be referred to as the parties.

WHEREAS, the City desires annual flowers supply and delivery for 2023 and 2024, and in connection therewith has requested proposals for the supply and delivery of annual flowers; and

WHEREAS, Vendor has qualifications that meet the project requirements and has provided a response and cost proposal to perform the supply and delivery of annual flowers.

NOW, THEREFORE, in consideration of the foregoing preambles, the adequacy of which is acknowledged by and between the parties to this Agreement, the parties agree as follows:

1. **MUTUALLY AGREE**: It is mutually agreed by and between the parties that the City's Request for Proposal for 2023-24 Annual Flowers purchase dated 2-6, 2023, which includes supply and delivery of annual flowers shall be fully incorporated herein by reference and shall become a part of this Agreement, and shall be binding upon both parties hereto (attached hereto as Attachment "A").

2. **TERM:** This Agreement shall will be for flower supply and delivery for 2023 and 2024. The City shall have the right to unilaterally terminate this Agreement on thirty (30) days written notice. In the event of termination, the Vendor shall receive compensation for services to the date the termination takes effect and the City shall be entitled to retain and use the results of all items and goods prepared by the Vendor through such date.

3. **TERMS OF PAYMENT:** The Vendor will invoice monthly for all labor supplied and work completed. In no event shall invoices be submitted more than 45 days after completion of services.. The City may, at its sole discretion demand review and the right to request at any time further detailed accounting information for any or all bills. The right to inspection of any bill and invoice shall never be at any cost or billings to the City, nor shall preparation of said invoices be billed to the City or against the general retainer. Payment terms will be net 30 days unless otherwise specified by the City.

4. **WARRANTY:** This Agreement shall have a warranty each year of the term for the flower products described in Attachment A, the first warranty for a term of six (6) months from the first delivery of the flowers, and the second warranty for a term of six (6) months beginning with the first delivery in 2024. The products offered shall be of good quality, healthy and free of disease, regular stock product. Vendor further warrants and represents that components or deliverables specified and furnished by or through the Vendor shall individually, and where specified and furnished as a system, be substantially uninterrupted or error free and guaranteed annually for the warranty period, or for two (2) years from the date of acceptance, whichever is longer. During the project warranty period, defects in the materials or workmanship of components or deliverables specified and furnished by or through the Vendor shall be repaired or replaced by Vendor at no cost or expense to the City.

5. **PERSONNEL:** Vendor shall employ personnel of good moral character and fitness

in performing all services under this Agreement.

6. **INSURANCE SUBMISSION REQUIREMENTS:** The Vendor has submitted proof to the City that it meets all City insurance requirements. Insurance, with coverage amounts at no less than the City's minimum requirements, must be held by the Vendor throughout the term of this Agreement. Certificates of insurance as stated below will be required no later than five (5) business days from the date of Vendor's acceptance of the terms of this Agreement.

7. **CONFIDENTIAL AND OR PROPRIETARY INFORMATION:** The Vendor acknowledges that in performing services pursuant to this Agreement, certain confidential and/or proprietary information (including, but not limited to, internal organization, methodology, personnel and financial information, etc.) may become involved. The Vendor recognizes that unauthorized exposure of such confidential or proprietary information could irreparably damage the City. Therefore, the Vendor agrees to use reasonable care to safeguard the confidential and proprietary information and to prevent the unauthorized use or disclosure thereof. The Vendor shall inform its employees of the confidential or proprietary nature of such information and shall limit access thereto to employees rendering services pursuant to this Agreement. The Vendor further agrees to use such confidential or proprietary information only for the purpose of performing services pursuant to this Agreement.

8. **INDEPENDENT VENDOR:** The Vendor and the City agree that the Vendor is acting as an independent vendor with respect to the Vendor's role in providing services to the City pursuant to this Agreement, and as such, shall be liable for its own actions and neither the Vendor nor its employees shall be construed as employees of the City. Nothing contained in this Agreement shall be construed to imply a joint venture or partnership and neither party, by virtue of this Agreement, shall have any right, power or authority to act or create any obligation, express or implied, on behalf of the other party, except as specifically outlined herein. Neither the City nor the Vendor shall be considered or construed to be the agent of the other, nor shall either have the right to bind the other in any manner whatsoever, except as specifically provided in this Agreement, and this Agreement shall not be construed as a contract of agency. The Vendor shall not be considered entitled or eligible to participate in any benefits or privileges given or extended by the City, or be deemed an employee of the City for purposes of federal or state withholding taxes, FICA taxes, unemployment, workers' compensation or any other employer contributions on behalf of the City.

9. **COMPLIANCE WITH LAWS:** Vendor agrees to fully and faithfully carry out the duties set forth herein using its best efforts in accomplishing all assignments from the City, and further, in addition to upholding all federal, and state laws and applicable codes of professional conduct to which Vendor is subject, Vendor hereby agrees to be bound by all Federal, State, or City of Birmingham ordinances, rules, regulations and policies as are amended from time to time, and including without limitation the Fair Labor Standards Act, the Equal Employment Opportunity rules and regulations, the Transportation Safety Act and the Occupational Safety and Health Acts.

10. **NON-COMPLIANCE WITH INSURANCE REQUIREMENTS:** Failure to deliver and maintain insurance in accordance with the terms of this Agreement will be cause for the City, by and through its City Manager, to terminate this Agreement, or at the City's option, the City may purchase on the open market such required insurance and shall be entitled to charge any additional cost to the Vendor, either by offset to any amounts due and owing Vendor for services provided to the City, or, by separate bill and demand for payment. Nothing in this paragraph shall be deemed to create or

be interpreted as establishing a "for cause" termination; Vendor agrees and understands that its engagement is at will and may be terminated by the City Manager for any cause or no cause.

11. INDEMNIFICATION: To the fullest extent permitted by law, the Vendor and any entity or person for whom the Vendor 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 their behalf 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, its elected and appointed officials, employees, volunteers or others working on their behalf, by reason of personal injury, including bodily injury and death and/or property damage, including loss of use thereof, which arise out of the acts, errors or omissions of the Vendor including its employees and agents, in the performance of 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 others working on behalf of the City.

12. STANDARD INSURANCE REQUIREMENTS:

The Vendor shall maintain during the life of this Agreement the applicable types of insurance coverage and minimum limits as set forth below:

A. Workers' Compensation Insurance:

For Non-Sole Proprietorships: Vendor shall procure and maintain during the life of this Agreement, Workers' Compensation Insurance, including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

For Sole Proprietorships: Vendor shall complete and furnish to the City prior to the commencement of work under this Agreement a signed and notarized Sole Proprietor Form, for sole proprietors with no employees or with employees, as the case may be.

B. Commercial General Liability Insurance: Vendor shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than **$1,000,000** 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 Vendor Coverage; (D) Broad Form General Liability Extensions or equivalent; (E) Deletion of all Explosion, Collapse and Underground (XCU) Exclusions, if applicable.

C. Motor Vehicle Liability: Vendor shall procure and maintain during the life of this Agreement Motor Vehicle Liability Insurance, including all applicable no-fault coverages, with limits of liability of not less than $1,000,000 per occurrence combined single limit Bodily Injury and Property Damage. Coverage shall include all owned vehicles, all non owned vehicles, an

D. Additional Insured: Commercial General Liability and Motor Vehicle Liability Insurance, as described above, shall include an endorsement stating the

following **Additional Insureds: The City of Birmingham, including all elected and appointed officials, all employee and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof.** This coverage shall be primary to any other coverage that may be available to the additional insured, whether any other available coverage by primary, contributing or excess.

E. Coverage Expiration: If any of the above coverages expire during the term of this Agreement, Vendor shall deliver renewal certificates and/or policies to the City at least (10) days prior to the expiration date.

F. Proof of Insurance Coverage: Vendor shall provide the City of Birmingham at the time the Agreement is 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 Insurance, or a signed and notarized copy of the Sole Proprietor Form;
2) Two (2) copies of Certificate of Insurance for Commercial General Liability Insurance;
3) Two (2) copies of Certificate of Insurance for Vehicle Liability Insurance;
4) Two (2) copies of Certificate of Insurance for Professional Liability Insurance, if applicable;
5) If so requested, Certified Copies of all policies mentioned above will be furnished.

G. Maintaining Insurance: Upon failure of the Vendor to obtain or maintain such insurance coverage for the term of the Agreement, the City of Birmingham may, at its option, purchase such coverage and subtract the cost of obtaining such coverage from the Agreement 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.

13. WRITTEN NOTICES: Written notices regarding this Agreement shall be addressed to the following:

City: City of Birmingham
P.O. Box 3001
Birmingham, Michigan 48012
Attn: Scott Zielinski

(Vendor address)
Attn: Gill VanCamp

14. COVID: The Vendor shall follow all of the City's COVID-19 safety protocols while on City property. Additionally, Vendor's staff which will be in physical contact with city staff must have current vaccinations against COVID-19. The City, at its discretion, may ask for proof of vaccination of Vendor's staff. Failure to provide proof of vaccination when requested will cause the City to request un-vaccinated personnel to leave, request alternate staff, and if the Vendor is unable to comply, this violation of safety protocols will constitute a breach of contract by the

Vendor.

15. AMENDMENTS: No amendment, modification or supplement to this Agreement shall be binding unless it is in writing and signed by authorized representatives of the parties.

16. WAIVER OF BREACH: No waiver by either party of any breach of any of the terms, covenants or conditions herein contained by the other party shall be construed as a waiver of any succeeding breach of this same or of any other term, covenant or condition.

17. COMPLETE AGREEMENT: The parties agree that the Vendor's 2-6-23 proposal shall be incorporated herein by reference, except as stricken by mutual agreement, and shall become a part of this Agreement, and the parties agree this Agreement sets forth all terms and conditions of Vendor's agreement with the City of Birmingham. This Agreement supersedes all prior agreements or understandings between the parties. There are no promises, conditions or understandings other than those stated herein, and, that any prior negotiations, terms or conditions discussed between the City and the Vendor shall not constitute a part of this Agreement. The term "Agreement" as used in this clause shall include any future written amendments, modifications, or supplements made in accordance herewith.

18. DIRECT OR INDIRECT INTEREST: If, after the effective date of this Agreement, any official of the City, or spouse, child, parent or in-law of such official or employee shall become directly or indirectly interested in this Agreement or the affairs of the Vendor, the City shall have the right to terminate this Agreement without further liability to the Vendor if the disqualification has not been removed within thirty (30) days after the City has given the Vendor notice of the disqualifying interest. Ownership of less than one percent (1%) of the stock or other equity interest in a corporation or partnership shall not be a disqualifying interest. Employment shall be a disqualifying interest.

19. FAILURE TO PERFORM. If Vendor fails to perform its obligations hereunder, the City may take any and all remedial actions provided by the general specifications or otherwise permitted by law.

20. LEGAL PROCEEDINGS: 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 a federal or state court with jurisdiction over Oakland County, Michigan.

21. FAIR PROCUREMENT OPPORTUNITY: 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.

IN WITNESS WHEREOF, the parties hereto agree to be bound by the above terms and conditions, and Vendor, by its authorized signature below, expressly accepts this Agreement upon the above provided terms and conditions contained in this Agreement as of the date first above written.

(Vendor)

By: C Boswell Greenhouse
Its: GM

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

On this 9th day of February, ~~2022~~ 2023 before me personally appeared Gill Vancamp, who acknowledged that with authority on behalf of (Vendor) to do so he/she signed this Agreement.

Talysha VanEenoo
Notary Public
Saniac County, Michigan
Acting in Saniac County, Michigan
My commission expires: September 17, 2027

Talysha VanEenoo
Notary Public, Saniac County, Michigan
My commision expires Sept. 17, 2027

CITY OF BIRMINGHAM:

By: _____
Therese Longe, Mayor

By: _____
Alexandria D. Bingham, City Clerk

APPROVED:

Thomas M. Markus, City Manager
(Approved as to substance)

Scott D. Zielinski, PE, DPS Director
(Approved as to substance)

Mary M. Kucharek, City Attorney
(Approved as to form)

Mark A. Gerber, Finance Director
(Approved as to Financial Obligation)

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ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 02/16/2023

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

SOULE AGENCY
PO BOX 97 BROWN CITY MI 48416

CONTACT NAME: CURT SOULE
PHONE (A/C, No, Ext): 810-346-3482 FAX (A/C, No): 810-346-3412
E-MAIL ADDRESS: CSOULE@FBINSMI.COM

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : FARM BUREAU GENERAL INSURANCE CO	215470067
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

CROSWELL GREENHOUSES INC
180 DAVIS STREET CROSWELL MI 48422

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:	Y		BAP2751068	1/10/2023	1/10/2024	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 1,000,000
								$
A	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [ ] HIRED AUTOS ONLY [X] SCHEDULED AUTOS [ ] NON-OWNED AUTOS ONLY	Y		BAP2751067	1/10/2023	1/10/2024	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$ 1,000,000
							BODILY INJURY (Per accident)	$ 1,000,000
							PROPERTY DAMAGE (Per accident)	$ 1,000,000
								$
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE	$
							AGGREGATE	$
								$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [N] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WCC2751069	1/10/2023	1/10/2024	[X] PER STATUTE [ ] OTH-ER	
							E.L. EACH ACCIDENT	$ 500,000
							E.L. DISEASE - EA EMPLOYEE	$ 500,000
							E.L. DISEASE - POLICY LIMIT	$ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

ADDITIONAL INSURED:
THE CITY OF BIRMINGHAM, INCLUDING ALL ELECTED AND APPPOINTED OFFICIALS, ALL EMPLOYEE AND VOLUNTEERS, ALL BOARDS, COMMISIONS AND/OR AUTHORITIES AND BOARD MEMBERS, INCLUDING EMPLOYEES AND VOLUNTEERS THEREOF.

CERTIFICATE HOLDER

THE CITY OF BIRMINGHAM
PARKS & RECREATION
851 S. ETON
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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ATTACHMENT B - BIDDER'S AGREEMENT
For 2023-24 Annual Flowers Purchase

In submitting this proposal, as herein described, the Vendor agrees that:

1. They have carefully examined the specifications, terms and Agreement of the Request for Proposal and all other provisions of this document and understand the meaning, intent, and requirement of it.

2. They will enter into a written contract and furnish the item or items in the time specified in conformance with the specifications and conditions contained therein for the price quoted by the proponent on this proposal.

Gill VanCamp — 2-6-23
PREPARED BY (Print Name) — **DATE**

Grower — 2-6-23
TITLE — **DATE**

Gill VanCamp — VanCamps01@yahoo.com
AUTHORIZED SIGNATURE — **E-MAIL ADDRESS**

Croswell Greenhouse
COMPANY

180 Davis St Croswell, MI 48422 — (810) 679-3298
ADDRESS — **PHONE**

Same
NAME OF PARENT COMPANY — **PHONE**

Same
ADDRESS

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ATTACHMENT C - COST PROPOSAL
For 2023-24 Annual Flowers Purchase

In order for the bid to be considered valid, this form must be completed in its entirety. The cost for the Scope of Work as stated in the Request for Proposal documents shall be a lump sum, as follows:

The vendor shall complete the following information in regard to ***supplying*** flowers and indicate the "Unit Price" and "Total Price", and other requested information. Indicate alternate species, size or color in the event the requested materials cannot be bid. The City reserves the right to determine if an alternate species, size or color is an acceptable equivalent. There will be three deliveries each year during the months of May and June.

UNLESS NOTED TO THE CONTRARY, ALL PRICES QUOTED ARE F.O.B. at BIRMINGHAM, MICHIGAN. Assistance in unloading will be provided by the City without additional expense to the supplier provided delivery meets the terms contained in the specifications.

ANNUALS

NOTE: The following annual flats below are to be of a 48 count

SPECIES	FLOWER COLOR/TYPE	QUANTITY	SIZE	UNIT PRICE	TOTAL PRICE
BEGONIA	BADABING-WHITE	185	48	9.50	1757.50
BEGONIA	BADABING-ROSE	50	48	9.50	475.00
BEGONIA	BADABOOM-ROSE	174	48	9.50	1653.00
BEGONIA	GREEN LEAF-ORANGE FLR	20	48	9.50	190.00
DIANTHUS	TELSTAR-PURPLE	86	48	9.50	817.00
DUSTY MILLER	SILVERDUST	109	48	9.50	1035.50
IMPATIENS	BEACON-ROSE	32	48	9.50	304.00
IMPATIENS	BEACON-WHITE	32	48	9.50	304.00
MARIGOLD	SAFARI YELLOW FIRE	45	48	9.50	427.50
SALVIA	ROCKIN-DEEP PURPLE	12	48	9.50	114.00
SALVIA	MOJAVE-RED	174	48	9.50	1653.00
SALVIA	VISTA-WHITE	17	48	9.50	161.50

MISCELLANEOUS ANNUALS

NOTE: The following miscellaneous annuals below are to be in a 4 ½" pot size

SPECIES	FLOWER COLOR/TYPE	QUANTITY	SIZE	UNIT PRICE	TOTAL PRICE
BEGONIA	BIG SERIES PINK/GREEN LEAF	408	4½	3.00	1224.00
BEGONIA	WHOPPER SERIES RED/BRONZE LEAF	150	4½	3.00	450.00
BEGONIA	WHOPPER SERIES ROSE/GREEN LEAF	610	4½	3.00	1830.00
CLEOME	PROVEN WINNER SENORITA BLANCA	6	4½	3.00	18.00
EUPHORBIA	PROVEN WINNER DIAMOND SNOW	214	4½	3.00	642.00
SUN PATIENS	COMPACT-NEON PINK	30	4½	3.00	90.00
SUN PATIENS	COMPACT WHITE	857	4½	3.00	2571.00
SUPERTUNIA	PROVEN WINNER-VISTA BUBBLE GUM	716	4½	3.00	2148.00
SUPERTUNIA	PROVEN WINNER VISTA-PARADISE	712	4½	3.00	2136.00

NOTE: The Following miscellaneous annuals below are to be IN A 6" Pot size.

CANNA	PROVEN WINNER TOUCAN-ROSE	3	6	6.25	18.75
CANNA	PROVEN WINNER-TOUCAN-DARK ORANGE	2	6	6.25	12.50
CANNA	PROVEN WINNER-TOUCAN SCARLET	155	6	6.25	968.75
CANNA	PROVEN WINNER TOUCAN-YELLOW	120	6	6.25	750.00
PENNISETUM	PURPLE FOUNTAIN GRASS	45	6	6.25	281.25

2023 TOTAL AMOUNT OF BID $ 22,032.25

2024 TOTAL AMOUNT OF BID $ 23,133.86
(If different than 2023 pricing, vendors encouraged to use an estimated percentage increase for total cost instead of individually pricing each unit)

All items bid? (Yes/No)(Circle one) If no, indicate number of items *not* bid_____

Any substitutions? (Yes/No)(Circle one)
If yes, indicate how many_____
What were the substitutions? _____

Firm Name Croswell Greenhouse

Authorized signature [signature] Date 2-6-23

5M

ATTACHMENT D - IRAN SANCTIONS ACT VENDOR CERTIFICATION FORM
For 2023-24 Annual Flowers Purchase

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.

Gill VanCamp — 2-6-23
PREPARED BY (Print Name) — **DATE**

Grower — 2-6-23
TITLE — **DATE**

Gill VanCamp — VanCamp501@yahoo.com
AUTHORIZED SIGNATURE — **E-MAIL ADDRESS**

Croswell Greenhouse
COMPANY

180 Dawes St Croswell MI 48422 — 810-679-3298
ADDRESS — **PHONE**

Same
NAME OF PARENT COMPANY — **PHONE**

Same
ADDRESS

46-3806437
TAXPAYER I.D.#

5M

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Finance Department

DATE: February 13, 2023

TO: Thomas M. Markus, City Manager

FROM: Mark Gerber, Finance Director

SUBJECT: MIDC Budget Amendment

INTRODUCTION:
The Finance Director is seeking approval of a budget amendment to the Indigent Defense Fund in order to fully fund the program for the entire fiscal year.

BACKGROUND:
The Michigan Indigent Defense Commission (MIDC) is a program which provides legal defense to defendants that don't have the financial means to hire an attorney. This program was administered by the 48th District Court through December 31, 2021. The State said that the court could no longer assign defense counsel for defendants as there was an appearance of a conflict of interest. As a result, the City took over administration of the Michigan Indigent Defense Commission program on January 1, 2022.

When the fiscal year 2022-2023 budget was approved, the budget for the MIDC program was only funded through the end of September 2022 which was the end of the program year. The thought then was that the responsibility for administering the program would be shared amongst the municipalities within the 48th District Court with each funding unit of the court taking a turn administering the program. However, this did not occur at the end of the program year in 2022, so the City will continue to administer this program until at least the end of the program year in September 2023. As a result, the City will need to amend the budget to provide authorization to spend funds through the end of the fiscal year.

LEGAL REVIEW:
No legal review required.

FISCAL IMPACT:
Funding for the MIDC program is primarily received from the State with a small local share provided by all the communities in the 48th District Court. The requested amendment would

bring the total budget in this fund up to the annual amount budgeted for the MIDC program. The amendment to the expenditures would be funded by the State grant and local share funding.

PUBLIC COMMUNICATIONS:
No public communications are required.

SUMMARY:
The Finance Department is recommending increasing the budget for the MIDC grant through the end of the fiscal year which will be funded by State and local share revenues.

ATTACHMENTS:
There are no attachments.

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve the appropriation and amendment to the Michigan Indigent Defense Fund for the fiscal year 2022-2023 as follows:

Revenues:		
State Grant Revenue	260.0-698.000-571.0000	$365,150
Local Contributions	260.0-698.000-590.0000	17,600
Total Revenues		$382,750
Expenditures:		
Supplies	260.0-698.000-729.0000	$ 500
Other Charges-Attorneys	260.0-698.000-801.0400	373,550
Other Charges-Experts	260.0-698.000-803.0200	7,500
Other Charges-Training	260.0-698.000-957.0100	1,200
Total Expenditures		$382,750

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Finance Department

DATE: February 13, 2023

TO: Thomas M. Markus, City Manager

FROM: Mark Gerber, Finance Director

SUBJECT: Credit Limit – City Credit Card

INTRODUCTION:
The Finance Director is seeking approval to increase the City credit card limit to $35,000.

BACKGROUND:
At the City Commission meeting on October 25, 2021, the City Commission approved a new credit card policy which allowed department heads to receive and use City credit cards for City business. Additionally, the City Commission set the credit card limit to $25,000.

This policy has been implemented with all department heads receiving a credit card. Utilization has increased to approximately $14,000 per month on a regular basis. Since our credit card is not paid until the 15th of the month, we are continually hitting approximately $21,000 of our line of credit at its highest point.

Just recently, we have added the Baldwin Library on the City credit card. Based on their previous credit card statements, the library regularly spends approximately $4,000 per month on their credit card. This is on top of what the City regularly spends.

In addition, we are seeing more and more issues with our vendors applying our ACH and check payments incorrectly to our accounts or check payments being delayed due to the mail. This was not an issue just a couple of years ago. This requires a great deal of staff time to resolve these differences with our vendors. As a result, we will be shifting more payments for these vendors to our credit card which will result in fewer issues as these transactions will be more one-to-one. The total of these payments per month is approximately $10,000.

LEGAL REVIEW:
No legal review required.

FISCAL IMPACT:
Increasing the credit limit will allow more transactions to be conducted via credit card instead of check or ACH. In addition, the increased spending will result in a larger credit card rebate for the City and lower staff time resolving accounts payable issues with vendors.

PUBLIC COMMUNICATIONS:
No public communications are required.

SUMMARY:
The Finance Department is recommending increasing the City's credit card limit to $35,000.

ATTACHMENTS:
There are no attachments.

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to approve an increase to the City's credit card limit to $35,000.

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Clerk's Office

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Alexandria Bingham, City Clerk**

SUBJECT: **Special Event Application: Day on the Town**

INTRODUCTION:
Birmingham Shopping District has submitted a Special Event application to hold the Day on the Town Saturday July 29, 2023. Set up for the event is scheduled for 7:00 a.m.–9:00 a.m. The event begins at 9:00 a.m. and concludes at 6:00 p.m. Tear down is scheduled for 6:00 p.m.- 8:00 p.m.

BACKGROUND:
The necessary departments reviewed the proposed event details submitted in the application, departments gave feedback on requirements and estimated costs. DPS, Planning, Building, Engineering, Police, and Fire have indicated their approval. SP+ Parking has been notified of the event for planning purposes.

The location of Day on the Town will be West Maple Ave., N. Old Woodward Ave., S. Old Woodward Ave., Pierce St., Merrill St., and Hamilton Ave.

The following events occur in July in Birmingham, and do not pose a conflict for this event:

- In the Park Concert Series Wednesdays 6/14 – 8/16 Shain Park
- Movie Nights Fridays 6/9, 7/14, 8/11, 9/8 Booth Park

LEGAL REVIEW:
The City Attorney has reviewed and has no concerns or objections.

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

PUBLIC COMMUNICATIONS:
Birmingham Shopping District notified residents and businesses about the details of this event by letter which was mailed at least two weeks prior to the 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 Day on the Town from 9:00 a.m.-6:00 p.m. with set up 7:00 a.m.-9:00 a.m. Tear down will begin 6:00 p.m.-8:00 p.m.

ATTACHMENTS:
1. Special Event application
2. Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated 02/08/23. Notification addresses are on file in the Clerk's Office.
3. 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 Birmingham Shopping District to hold the Day on the Town on July 29, 2023, 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.

23-00012106

Clerk's Office
City of Birmingham, MI

JAN 24 2023

RECEIVED

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: RK

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**

(Please print clearly or type)

Date of Application January 6, 2023

Name of Event Day on the Town

Detailed Description of Event (attach additional sheet if necessary) This all day shopping event in the heart of downtown Birmingham has proven to be the largest sale day of the year for many local merchants. The event may also include music and family friendly activities. We will follow all applicable state, county and local safety guidelines.

Location Old Woodward, Maple, Merrill, Pierce, Hamilton

Date(s) of Event July 29, 2023 Hours of Event 9 a.m. - 6 p.m.

Date(s) of Set-up day of event Hours of Set-up 7-9 a.m.

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

Date(s) of Tear-down day of event Hours of Tear-down 6-8 p.m. (port-a-potties will be picked-up on Sunday morning)

Organization Sponsoring Event Birmingham Shopping District

Organization Address 151 Martin St., Birmingham, MI 48009

Organization Phone 248-530-1200

Contact Person Jaimi Brook

Contact Phone 248-530-1254 office 248-508-5518 cell

Contact Email jbrook@bhamgov.org

II. EVENT INFORMATION

1. Organization Type city- Birmingham Shopping District

   (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 amongst non-profit organizations to bring the greatest benefit to the community. Please explain your efforts to do so**

   In the past, we have offered organizations like the Birmingham Bloomfield Community Coalition and the City of Birmingham's Arts Council space to share information with attendees. We are planning to do that again this year.

4. Is the event a fundraiser? YES [ ] NO [x]

   List beneficiary _____

   List expected income _____ Attach information about the beneficiary.

5. First time event in Birmingham? YES [ ] NO [x]

   If no, describe This is an annual event.

6. Total number of people expected to attend per day 10,000-15,000

7. The event will be held on the following City property: (Please list)

   [x] Street(s) Old Woodward, Maple, Merrill, Pierce, Hamilton (see attached map)

   [x] Sidewalk(s) N. Old Woodward & S. Old Woodward (see attached map)

   [ ] Park(s) _____

8. Will street closures be required? YES [x] NO [ ]

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

What parking arrangements will be necessary to accommodate attendance?
Describe We would like to offer free parking in all structures and at meters from 9 a.m. - 7 p.m.

9. Will staff be provided to assist with safety, security and maintenance? YES [x] NO [ ]

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

Describe BSD event staff will be on-site during the event.

10. Will the event require safety personnel (police, fire, paramedics)? YES [x] NO [ ]

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

Describe police presence to help with crowds

11. Will alcoholic beverages be served? YES [ ] NO [X]

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

12. Will music be provided? YES [x] NO [ ]

X Live X Amplification _____ X Loudspeakers

Recorded Time music will begin 9 a.m.

Time music will end 6 p.m.

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

13. Will there be signage in the area of the event? YES [x] NO [ ]

Number of signs/banners 2 banners

Size of signs/banners 14'x5' (sample attached)

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

14. Will food/beverages/merchandise be sold? YES [x] 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			

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		6 for $500.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		$10.00 each includes 1 bag For additional bags, the cost is $32/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		$350.00/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)	80	10'x10' and 10'x20'
Portable Toilets	12	7 reg & 5 handicap
Rides		
Displays	TBD	
Vendors	TBD	
Temporary Structure (must attach a photo)		
Other (describe)		

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME Day on the Town

EVENT DATE July 19, 2023

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.

1-23-23

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

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

Birmingham Shopping District
151 Martin Street
Birmingham, MI 48009

MT PROPLEX MI 480
8 FEB 2023 PM 4 L

US POSTAGE PITNEY BOWES
ZIP 48009 $ 000.48⁰
02 1W
0001404691 FEB 08 2023

1925378028
STEPHEN D ROGERS TRUST

111 WILLITS ST STE 301
BIRMINGHAM, MI48009

NOTIFICATION

DATE: February 8, 2023
TO: Downtown Birmingham Business/Property Owner

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: Day On The Town

LOCATION: Old Woodward from Oakland/Willits to Brown
Hamilton from Old Woodward to Ferndale
Pierce from Maple to Merrill; Merrill from Pierce to Old Woodward
Maple from Bates to Peabody
526 N. Old Woodward to 588 N. Old Woodward (no street closures)
S. Old Woodward from Brown to Lincoln (no street closures)
N. Old Woodward from Oak to 474 N. Old Woodward (no street closures)

DATES/TIMES: Saturday, July 29, 2023 from 9 a.m. until 6 p.m.

DATE/TIME OF CITY COMMISSION MEETING: February 27, 2023 at 7:30pm

The City Commission will meet in the Municipal Building. 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: 655079760. 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.

EVENT ORGANIZER: Birmingham Shopping District
ADDRESS: 151 Martin
PHONE: 248-530-1200

For questions on day of event, contact BSD Operations & Events Manager, Jaimi Brook at 248-508-5518

5P

Day on the Town 2023

Special Event Application Addendum

The Birmingham Police Department is planning to hold a Police Department Open House in conjunction with Day on the Town on July 29, 2023. They will be using the parking lot behind City Hall and Pierce St. from Martin to Merrill, which is already included on our event map.

We would like to add the request to have the parking meters bagged, for police vehicle parking, on both sides of Henrietta between Merrill and Martin.

DAY ON THE TOWN 2023 EVENT FOOTPRINT

Event Area A – (green) streets closed, tents in streets

Maple from Bates to Peabody

Old Woodward from Brown to Willits

Hamilton from N. Old Woodward to Ferndale

Pierce from W. Maple to Merrill

Merrill from Pierce to S. Old Woodward

Event Area B – (yellow) streets open, tents on sidewalk/right of way leaving walking path at least 5 feet wide

N. Old Woodward from 526 N. Old Woodward to 588 N. Old Woodward

Event Area C – (pink) streets open, only tables on sidewalks leaving walking path at least 5 feet wide

N. Old Woodward from Oak to 474 N. Old Woodward (Market North End)

Event Area D – (purple) no tables on sidewalks, stores may have in-store sales and be promoted as participating

S. Old Woodward from Brown to Lincoln

Henrietta – (blue) between Martin & Merrill – bagged parking meters for police vehicles

DAY ON THE TOWN MAP 2023

BIRMINGHAM
The Shopping District

2 HOURS FREE PARKING IN ALL CITY DECKS

A. Chester Street
B. N. Old Woodward
C. Park Street
D. Peabody Street
E. Pierce Street

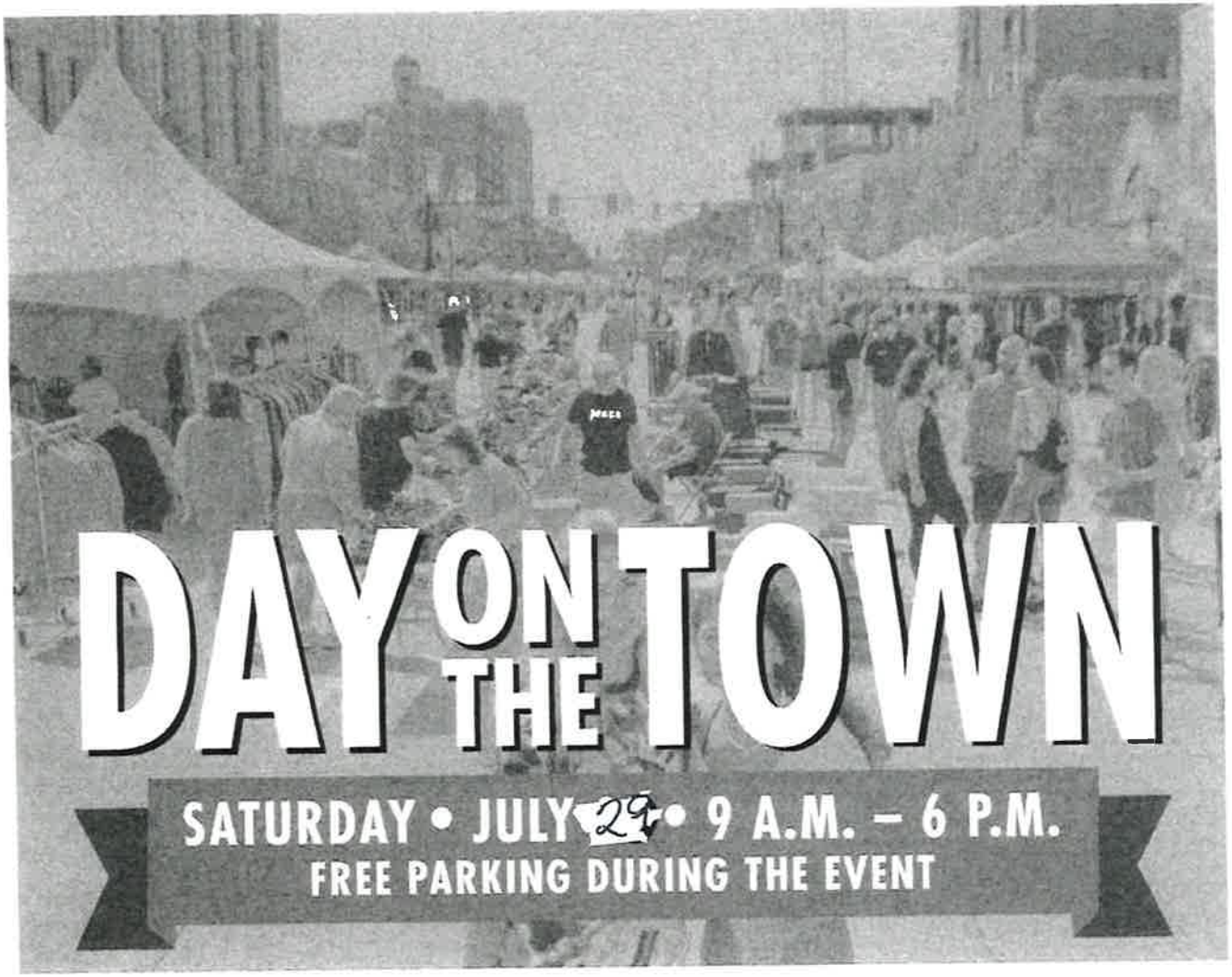
OAK
VINEWOOD
HARMON
RAVINE
EUCLID
Booth Park
N. OLD WOODWARD
OAKLAND
TEPNDALE
PARK
HAMILTON
WILLITS
E. MAPLE
W. MAPLE
Holiday Inn Express
Birmingham Historical Museum
BATES
MARTIN
City Hall
MERRILL
Baldwin Library
The Townsend Hotel
The Community House
TOWNSEND
CHESTER
BROWN
PEABODY
WOODWARD AVENUE
FOREST
CHESTNUT
BOWERS
Birmingham Fire Dept
DAINES
FRANK
ADAM
GEORGE
PURDY
LINCOLN
WEBSTER
WORTH
S. OLD WOODWARD

KEY:

Yellow - only tents on sidewalk, 5 ft. path
Green - Streets closed, tents
Pink - only tables on sidewalk leaving 5 ft. path
* - speakers
Purple - no tables on sidewalk, stores may have in-store sales
RR - port-a-potties
- bagged parking meters

5P

Sample



WHEN UPSCALE GOES ON SALE

BIRMINGHAM
Day on the Town!

WWW.ALLINBIRMINGHAM.COM

BIRMINGHAM SHOPPING DISTRICT

@BHAMSHOPPING

14' x 5'

5P

michigan municipal league

Liability & Property Pool

CERTIFICATE OF COVERAGE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED AS LISTED BELOW.

Name and Address of Participant:
City of Birmingham

151 Martin St., PO Box 3001
Birmingham, MI 48012-3001

Coverage Afforded:
Michigan Municipal League Liability and Property Pool
1675 Green Road
Ann Arbor, MI 48105-2530

Name and Address of Service Provider:
Meadowbrook, Inc.
P.O. Box 2054
Southfield, MI 48037-2054

This is to certify that the coverage listed below has been issued to the participant named above and is in-force at this time. 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 coverage afforded herein is subject to all the terms, exclusions and conditions of the Pool contract.

Coverage	Contract Number	Expiration Date	Limits of Liability
General Liability	MML001444021	7/1/2023	$10,000,000
Automobile Liability			Bodily Injury & Property Damage Combined Single Limit
Other			

Description of Operations/Locations/Vehicles:

Certificate Holder Additional Insured solely with respect to: Services provided on behalf of the City of Birmingham.

CANCELLATION: Should any of the above described coverages be canceled before the expiration date thereof, the administrator will endeavor to mail 60 days' written notice to the certificate holder named below, but failure to mail such notice shall impose no obligation or liability of any kind upon the Pool.

Name and Address of Certificate Holder:
Birmingham Principal Shopping District
151 Martin St.
Birmingham, MI 48009

Date Issued: 6/2/2022

By: _____
Authorized Representative

MML-1(11/99)

RECEIVED JUN 09 2022

5P

DEPARTMENT APPROVALS

EVENT NAME: Day on the Town

LICENSE NUMBER #23-00012106

COMMISSION HEARING DATE: 02-27-23

NOTE TO STAFF: Please submit approval by 02/13/23

DATE OF EVENT: 07/29/23

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)
PLANNING **101.0-000.000-636.0005** 248.530.1855				0	
BUILDING **101.0-000.000.636.0005** 248.530.1850	MJM	1. All exits, exit accesses, and exit discharges must be maintained 2. Tents that require permits need a tent layout plan for review 3. All tents are required to have flame certification 4. Tents and canopies must be stabilized with weights 5. Electrical cords or water lines must be taped or matted to prevent trip hazards	Tents over 400 Sqft.	$166.11	
FIRE **101.0-000.000-636.0004** 248.530.1900	AS	1.Crowd managers required for event 1/250 ratio 2.Maintain proper clearance around fire hydrants and fire department connections to buildings 3.Maintain fire lanes 4.Fire extinguishers required for tents, size 5lb, ABC extinguisher 5.Food trucks and cooking areas require inspection		$0	

POLICE **101.0-000.000.636.0003** 248.530.1870	RK 1/26/23	2 Officers + 2 additional for Overwatch, barricades.		$3,579.52	
PUBLIC SERVICES **101.0-000.000-636.0002** 248.530.1642	CL 1/25/2023	Set up and Clean up costs including Barricades. ADDITIONAL COST COULD OCCUR for any items added to the typical set up scope or if clean up is more extensive than previous years.		$4,000	
ENGINEERING **101.0-000.000.636.0002** 248.530.1839	KC 1/26/2023		Obstruction Permit Required	$65	
SP+ PARKING	AF	Free parking in all five City garages and metered spaces		$0	$0
INSURANCE 248.530.1807	CW	Need to submit COI no less than 2 weeks prior to event	None	$0	$0
CLERK **101.0-000.000-614.0000** 248.530.1803	CW		Applications for vendors license must be submitted no later than 2 weeks prior.	$165	
				TOTAL DEPOSIT REQUIRED **$7975.63**	**ACTUAL COST**

FOR CLERK'S OFFICE USE

Deposit paid _____

Actual Cost _____

Due/Refund_____

MEMORANDUM

City Clerk's Office

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Alexandria Bingham, City Clerk**

SUBJECT: **Special Event Application: Birmingham Farmers Market**

INTRODUCTION:
Birmingham Shopping District has submitted a Special Event application to hold the Birmingham Farmers Market Sunday May 7, 2023 – October 29, 2023. Set up for the event is scheduled for Sundays 7 a.m.- 9 a.m. The event begins at 9:00 a.m. and concludes at 2:00 p.m. Tear down is scheduled for 2:00 – 3:30 p.m.

BACKGROUND:
The necessary departments reviewed the proposed event details submitted in the application, departments gave feedback on requirements and estimated costs. DPS, Planning, Building, Engineering, Police, and Fire have indicated their approval. SP+ Parking has been notified of the event for planning purposes.

The location of the Birmingham Farmers Market (21st season) will be the Municipal Parking Lot #6 on N. Old Woodward.

The following events occur May-October in Birmingham, and do not pose a conflict for this event:

• Celebrate Birmingham Parade/Party	5/21	Shain Park & city streets
• Art Birmingham	5/13-5/14	Shain Park & city streets
• Memorial Day Ceremony	5/29	Shain Park
• Movie Nights	6/9, 7/14, 8/11, 9/8	Booth Park
• Village Fair	5/31 - 6/4	Shain Park & city streets
• Day on the Town	7/29	City Streets
• In the Park Concert Series	6/14 – 8/16	Shain Park
• Common Ground Art Fair	9/23 – 9/24	Shain Park & city streets
• Yoga in the Park	6/24	Shain Park

LEGAL REVIEW:
The City Attorney has reviewed and has no concerns or objections.

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

PUBLIC COMMUNICATIONS:
Birmingham Shopping District notified residents and businesses about the details of this event by letter which was mailed February 8, 2023. 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 Birmingham Farmers Market to be held Sunday May 7, 2023 – October 29, 2023 from 9:00 a.m. until 2:00 p.m. with set up 7:00 a.m.- 9:00 a.m. Tear down will begin 2:00 pm – 3:30 p.m.

ATTACHMENTS:
1. Special Event application
2. Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated 02/08/23. Notification addresses are on file in the Clerk's Office.
3. 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 Birmingham Shopping District to hold the Birmingham Farmers Market on May 7, 2023 – October 29, 2023 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.

23-00012103

Clerk's Office
City of Birmingham, MI

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

JAN - 24 2023

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.

RECEIVED

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**

(Please print clearly or type)

Date of Application January 23, 2023

Name of Event Birmingham Farmers Market

Detailed Description of Event (attach additional sheet if necessary) This will be the 21st season of the Farmers Market. The market offers the community access to fresh produce directly from growers. Throughout the season, more than 70 booths will feature a diverse array of Michigan-grown produce including vegetables, fruits, flowers, and garden plants, plus prepared foods, baked goods, soaps and miscellaneous items. We will follow all applicable state, county, and local safety guidelines.

Location Municipal Parking Lot #6 on N. Old Woodward

Date(s) of Event Sundays, May 7 - October 29, 2023 Hours of Event 9 a.m. - 2 p.m.

Date(s) of Set-up day of event Hours of Set-up 7 a.m. - 9 a.m.

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

Date(s) of Tear-down day of event Hours of Tear-down 2-3:30 p.m.

Organization Sponsoring Event Birmingham Shopping District

Organization Address 151 Martin St., Birmingham, MI 48009

Organization Phone 248-530-1200

Contact Person Jaimi Brook

Contact Phone 248-530-1254 - office/ 248-508-5518 - cell

Contact Email jbrook@bhamgov.org

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II. EVENT INFORMATION

1. Organization Type city - Birmingham Shopping District

   (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 amongst non-profit organizations to bring the greatest benefit to the community. Please explain your efforts to do so** _____

   We invite non-profit organizations and other community groups to help at the Kids Zone to gain exposure.

4. Is the event a fundraiser? YES [ ] NO [x]

   List beneficiary _____

   List expected income _____ Attach information about the beneficiary.

5. First time event in Birmingham? YES [ ] NO [x]

   If no, describe This will be the 21st season of the Birmingham Farmers Market.

6. Total number of people expected to attend per day 1,000-3.000

7. The event will be held on the following City property: (Please list)

   [x] Street(s) Municipal Parking Lot #6 on N. Old Woodward

   [ ] Sidewalk(s) _____

   [ ] Park(s) _____

8. 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 nearby parking deck and street parking will be sufficient

9. 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 Typically, 3 BSD event staff will be on-site during the event. We will also have communtiy volunteers (when available).

10. 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

11. 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.

12. Will music be provided? YES ☒ NO ☐

X Live X Amplification _____ X Loudspeakers

Recorded Time music will begin 9 a.m.

Time music will end 2 p.m.

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

13. Will there be signage in the area of the event? YES [x] NO [ ]

Number of signs/banners one 20'x4' sign and four A-frame signs, 2 banners

Size of signs/banners 20'x4' sign on the south end of the parking lot; a-frame signs are 2'x3', banners are 14'x5'

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

14. Will food/beverages/merchandise be sold? YES [x] 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			

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		6 for $500.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		$10.00 each includes 1 bag For additional bags, the cost is $32/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		$350.00/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)	1-70	10'x10' and 10'x20'
Portable Toilets	2	1 reg & 1 handicap
Rides		
Displays		
Vendors	1-70	
Temporary Structure (must attach a photo)		
Other (describe)		

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME Birmingham Farmers Market

EVENT DATE Sundays, May 7 - October 29, 2023

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.

1-23-23

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

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

michigan municipal league

Liability & Property Pool

CERTIFICATE OF COVERAGE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED AS LISTED BELOW.

Name and Address of Participant:
City of Birmingham

151 Martin St., PO Box 3001
Birmingham, MI 48012-3001

Coverage Afforded:
Michigan Municipal League Liability and Property Pool
1675 Green Road
Ann Arbor, MI 48105-2530

Name and Address of Service Provider:
Meadowbrook, Inc.
P.O. Box 2054
Southfield, MI 48037-2054

This is to certify that the coverage listed below has been issued to the participant named above and is in-force at this time. 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 coverage afforded herein is subject to all the terms, exclusions and conditions of the Pool contract.

Coverage	Contract Number	Expiration Date	Limits of Liability
General Liability	MML001444021	7/1/2023	$10,000,000
Automobile Liability			Bodily Injury & Property Damage Combined Single Limit
Other			

Description of Operations/Locations/Vehicles:

Certificate Holder Additional Insured solely with respect to: Services provided on behalf of the City of Birmingham.

CANCELLATION: Should any of the above described coverages be canceled before the expiration date thereof, the administrator will endeavor to mail 60 days' written notice to the certificate holder named below, but failure to mail such notice shall impose no obligation or liability of any kind upon the Pool.

Name and Address of Certificate Holder:
Birmingham Principal Shopping District
151 Martin St.
Birmingham, MI 48009

Date Issued: 6/2/2022

By: Judith A. Thomas
Authorized Representative

MML-1(11/99)

RECEIVED JUN 09 2022

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FM signage
4-14-21
2x3 ft. Coroplast

BIRMINGHAM
FARMERS
MARKET

THANK YOU
for visiting
today!

BIRMINGHAM
FARMERS
MARKET

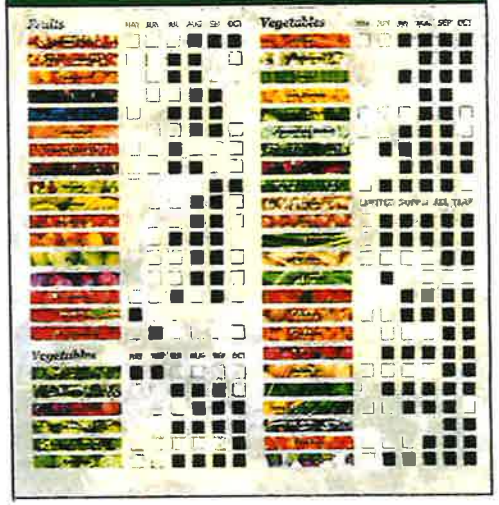
WELCOME

As always, NO Bikes, Skateboards,
Rollerblades or Hoverboards

THANK YOU

BIRMINGHAM
FARMERS
MARKET

PRODUCE GUIDE



BIRMINGHAM
FARMERS
MARKET

KIDS
ZONE

Sample
A-frame
Signs

5Q

Sample of previous sign

BIRMINGHAM

FARMERS MARKET

20TH SEASON

EVERY SUNDAY
9 A.M. - 2 P.M.
MAY 1 - OCT 30

660 N. OLD WOODWARD

ALLINBIRMINGHAM.COM/FARMERSMARKET

left side of sign

MICHIGAN-GROWN PRODUCE & PLANTS
ARTISAN BAKED GOODS • ORGANIC OPTIONS
FRESH FOOD • AND MORE!

PROUDLY OFFERING

bank of ann arbor · Luxe · PHOENICIA · SALVATORE SCALLOPINI · caruso caruso

SPONSORS

May 1:
Opening Day Celebration

June 26:
Super Farmer Day

August 7:
20th Season Celebration

September 11:
Harvest Festival

October 30:
End of Season Celebration

EVENTS

right side of sign

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Birmingham Shopping District
151 Martin Street
Birmingham, MI 48009

8 FEB 2023 PM 6

US POSTAGE PITNEY BOWES
ZIP 48009 $ 000.48⁰
02 1W
0001404691 FEB. 08. 2023

1925328001
Occupant
856 N OLD WOODWARD AVE
BIRMINGHAM, MI 48009

IA

IA

NOTIFICATION

February 8, 2023
TO: Birmingham Business Owner/Property Owner

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: Birmingham Farmers Market

LOCATION: **Parking Lot #6 on N. Old Woodward**

DATES/TIMES: **Sundays only, May 7 – October 29, 2023, 9:00 am – 2:00 pm**

BRIEF DESCRIPTION OF EVENT/ACTIVITY:

The market offers the community an opportunity to purchase fresh produce directly from growers. Throughout the season more than 70 booths feature a diverse array of Michigan-grown produce including vegetables, fruits, flowers and garden plants, plus prepared foods, baked goods, and soaps.

HOURS OF SET-UP **7:00 am to 9:00 am** HOURS OF TEAR-DOWN **2:00 pm to 3:00 pm**

DATE OF CITY COMMISSION MEETING: **February 27, 2023 at 7:30pm**

The City Commission will meet in the Municipal Building. 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: 655079760. 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.

EVENT ORGANIZER: Birmingham Shopping District

ADDRESS: 151 Martin Street, Birmingham, MI 48009

PHONE: 248-530-1200 day of cell—248-508-5518

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2/13/23 DEPARTMENT APPROVALS

EVENT NAME: Farmers Market

LICENSE NUMBER # 23-00012103

COMMISSION HEARING DATE: 02/27/23

NOTE TO STAFF: Please submit approval by 02/03/23

DATE OF EVENT: 5/7/23-10/29/23

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)
PLANNING **101.0-000.000-636.0005** 248.530.1855	TBC	No Cost No Comment		0	
BUILDING **101.0-000.000.636.0005** 248.530.1850	MJM	All tents must be weighted down. No stakes.	Permits needed for Tents over 400SQFT.	$885.22	
FIRE **101.0-000.000-636.0004** 248.530.1900	AS	Emergency response from station(s) Contact FD regarding participation as in past events 1 crowd manager for every 250 Food trucks and cooking areas require inspection and a fire extinguisher Provide cord bridges Tents require a flame retardant certification		$0	
POLICE **101.0-000.000.636.0003** 248.530.1870	RK 1/26/23	Barricades/meter bags. On duty personnel will provide extra patrols.		$500	$500
PUBLIC SERVICES **101.0-000.000-636.0002** 248.530.1642	Carrie Laird 1/25/2023	Estimate based on actual costs of DPS services requested by BSD for this event in previous years. Additional costs may apply should scope of work change.		$6,500	
ENGINEERING **101.0-000.000.636.0002** 248.530.1839	Kris Cameron 1/26/23		Obstruction Permit needed	$65	

SP+ PARKING	AF	No comments. Free parking is offered at all meter and off-street locations on weekends.		$0	$0
INSURANCE 248.530.1807		Need to submit COI no less than 2 weeks prior to event	None	$0	$0
CLERK **101.0-000.000-614.0000** 248.530.1803		Vendors will need Special Event Permit applications through the Clerk's office	Applications for vendors license must be submitted no later than 2 weeks prior to event	$165 SE Application	
				TOTAL DEPOSIT REQUIRED $8115.22	**ACTUAL COST**

FOR CLERK'S OFFICE USE

Deposit paid _____

Actual Cost _____

Due/Refund_____

Rev. 2/17/23
h:\shared\special events\- general information\approval page.doc

MEMORANDUM

City Clerk's Office

DATE: **February 27, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Alexandria Bingham, City Clerk**

SUBJECT: **Special Event Application: In The Park Concert Series**

INTRODUCTION:
Birmingham Department of Public Services has submitted a Special Event application to hold the In the Park Concert Series on Wednesdays from June 14, 2023 to August 16, 2023. Set up for the event is scheduled for day of the concert. The event times vary. Tear Down is scheduled for day after concert.

- BBC Youth Action Board's Teen Summer Concert: June 9, 2023 7-9 p.m.
- Summer Concert Wednesday Evenings, 7-9 p.m.: June 14, 21, 28; July 5, 12, 19, 26; August 2, 9, 16
- Summer Concert Wednesday Afternoons 12-2 p.m.: June 19, August 9

BACKGROUND:
The necessary departments reviewed the proposed event details submitted in the application, and departments provided feedback on requirements and estimated costs. DPS, Planning, Building, Engineering, Police and Fire have indicated their approval. SP+ Parking has been notified of the event for planning purposes.

The event will take place in the Shain Park Thomas M. Markus Pavilion.

The following events occur in June, July and August in Birmingham, and do not pose a conflict for this event:

• Art Birmingham	5/13-5/14	Shain Park & city streets
• Celebrate Birmingham Parade/Party	5/21	Shain Park & city streets
• Memorial Day Ceremony	5/29	Shain Park
• Village Fair	5/31 - 6/4	Shain Park & city streets
• Movie Nights	6/9, 7/14, 8/11, 9/8	Booth Park
• Yoga in the Park	6/24	Shain Park
• Day on the Town	7/29	City Streets
• Common Ground Art Fair	9/23 – 9/24	Shain Park & city streets

LEGAL REVIEW:
No legal review required.

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

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

SUMMARY:
The City Commission is being asked to approve a special event permit for the Birmingham Department of Public Services to be held Wednesdays from June 14, 2023 through August 16, 2023, with set up occurring the day of the event and tear down occurring the day following the event.

ATTACHMENTS:
1. Special Event application
2. Notification letter with map of event area distributed to residents/businesses within 300 feet of the event area dated February 9, 2023. Notification addresses are on file in the Clerk's Office.
3. 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 Birmingham Department of Public Services to hold the In the Park Concert Series on Wednesdays from June 14, 2023 to August 16, 2023 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.

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**

(Please print clearly or type)

Date of Application February 6, 2023

Name of Event 2023 City of Birmingham In The Park Concert Series

Detailed Description of Event (attach additional sheet if necessary) Summer Concert Series sponsored by the City of Birmingham.
BBCC Youth Action Board's Teen Summer Concert, June 9, 2023 7-9pm
Summer Concert Wednesday Evenings: 6/14, 6/21, 6/28, 7/5, 7/12, 7/19,7/26 8/2, 8/9, 8/16, 2023 7-9pm
Summer Concert Wednesday Afternoon: 7/19, 8/9, 2023 12-2pm

Location Shain Park (Thomas M. Markus Pavilion)

Date(s) of Event See Above Hours of Event See Above

Date(s) of Set-up Day of the concert Hours of Set-up Day of the concert

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

Date(s) of Tear-down Day after the concert Hours of Tear-down Day after the concert

Organization Sponsoring Event City of Birmingham Department of Public Services

Organization Address 851 South Eton, Birmingham, MI 48009

Organization Phone 248-530-1642

Contact Person Connie Folk, Recreation Coordinator

Contact Phone 248-530-1642

Contact Email Cfolk@bhamgov.org

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

4. First time event in Birmingham? YES ☐ NO ☑
If no, describe City of Birmingham Summer Concert Series has been occurring for many years.

5. Total number of people expected to attend per day 500 (approximate)

6. The event will be held on the following City property: (Please list)
☐ Street(s) _____
☐ Sidewalk(s) _____
☑ Park(s) Shain Park (Thomas M. Markus Pavilion)

7. Will street closures be required? YES ☐ NO ☑
(Police Department acknowledgement prior to submission of application is required) (initial here) _____

8. What parking arrangements will be necessary to accommodate attendance? parking structures, street parking

9. 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 City of Birmingham representative will be present for each concert.

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

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

Describe 2 officers on at 6- teen concert

11. 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.

12. Will music be provided? YES ☑ NO ☐

✓ Live ✓ Amplification _____ ✓ Loudspeakers

Recorded Time music will begin Afternoon concerts: 12pm/Evenings: 7pm

Time music will end Afternoon concerts: 2pm/Evenings: 9pm

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

13. 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 is required.**

14. 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.

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		6 for $500.00	A request for more than six tables will be evaluated based on availability.
Trash Receptacles		$10.00 each includes 1 bag For additional bags, the cost is $32/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		$350.00/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 120 square feet)		
Portable Toilets	2	(1) standard/(1) Handicap
Rides		
Displays		
Vendors		
Temporary Structure (must attach a photo)		
Other (describe)		

SIGNATURE OF APPLICANT REQUIRED

EVENT NAME City of Birmingham In The Park Concert Series

EVENT DATE June 9, 14, 21, 28, July 5, 12, 19, 26, August 2, 9, 16, 2023

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.

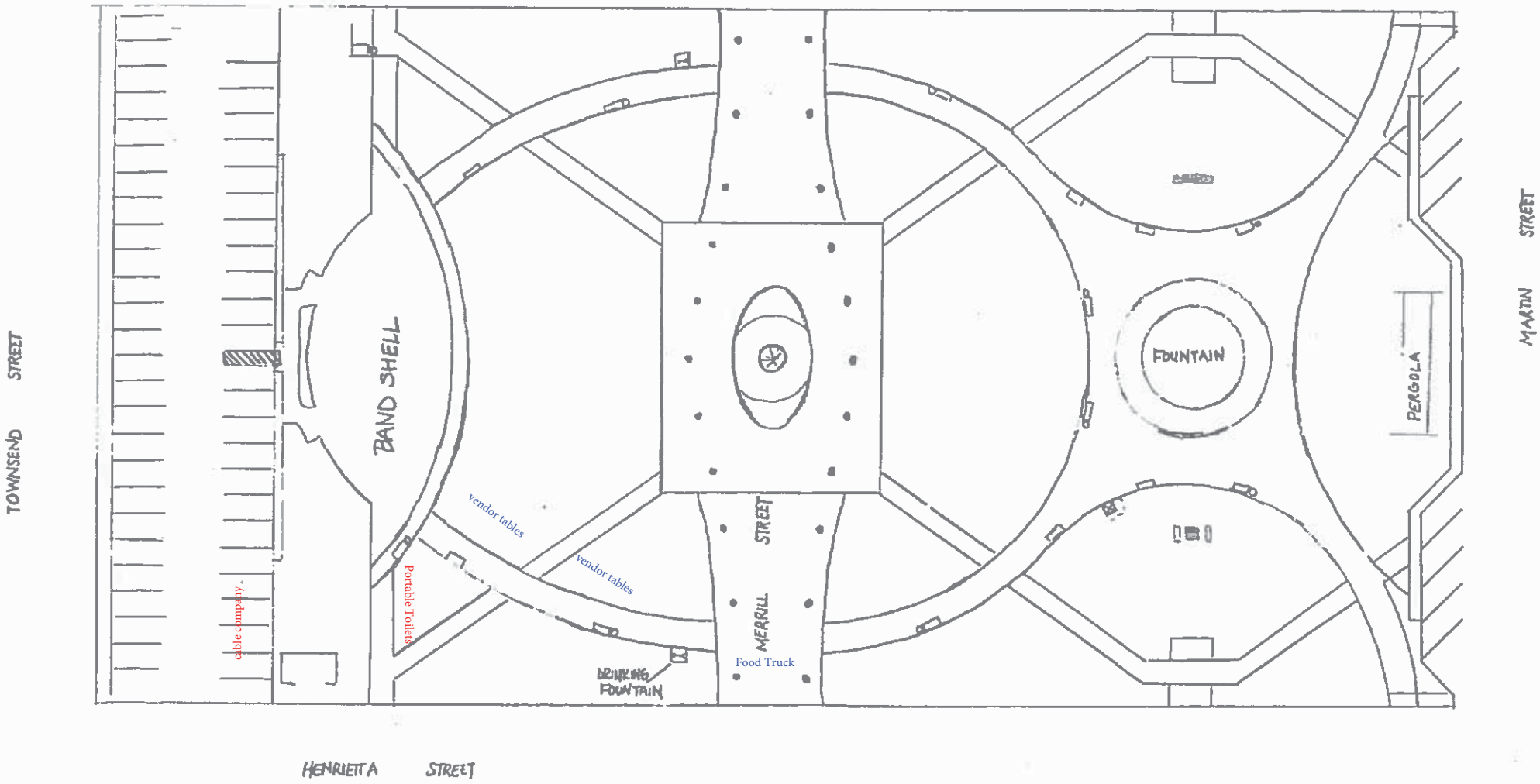
As the authorized agent of the sponsoring organization, I hereby agree that this organization shall abide by all conditions and restrictions specific to this special event as determined by the City administration and will comply with all local, state and federal rules, regulations and laws.

Connie Folk	2/6/2023
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

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


MARTIN STREET
PERGOLA
FOUNTAIN
FOUNTAIN
MERRILL STREET
Food Truck
vendor tables
vendor tables
Portable Toilets
cable company
BAND SHELL
TOWNSEND STREET
HENRIETTA STREET

5R

Birmingham Ice Sports Arena
2300 East Lincoln
Birmingham, MI 48009

METROPLEX MI 48

9 FEB 2023 PM 7

US POSTAGE PITNEY BOWES

ZIP 48009 $ 000.48[0]
02 1W
0001404691 FEB 09 2023

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

48009-336851

5R

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: **In The Park Summer Concerts**
LOCATION: Shain Park (Thomas M. Markus Pavilion)
DATES/TIMES: BBCC YAB's Teen Summer Concert, Friday, 6/9/23, 7pm-9pm
Wednesday afternoon: (7/19, 8/9, 2023) 12:00 pm -2:00 pm
Wednesday evenings: (6/14, 6/21, 6/28, 7/5, 7/12, 7/19, 7/26, 8/2, 8/9, 8/16, 2023) 7:00 pm -9:00 pm

DATE/TIME OF CITY COMMISSION MEETING:
Monday, February 27, 2023 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: Connie Folk, 248.530.1642, Cfolk@bhamgov.org

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

DEPARTMENT APPROVALS

BUSINESS NAME: CITY OF BIRMINGHAM-DPS
EVENT NAME: In The Park Concert Series
DATE OF EVENT: June 9, 14, 21, 28; July 5, 12, 19, 26; August 2, 9, 16
LICENSE NUMBER # 23-00012139
COMMISSION HEARING DATE: February 27, 2023
PLEASE SUBMIT STAFF APPROVAL BY: February 18, 2023

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)
PLANNING **101.0-000.000-636.0005** 248.530.1855	TBC	No Cost No Comment		0	
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	AS	Maintain 20' Fire Lane for surrounding streets Do not block hydrants Provide crowd managers 1 for every 250 persons No pyrotechnics or open flame entertainment props allowed. Food Trucks and Cooking tents require inspection prior to the event. Emergency response will be from the Fire stations.		$0	
POLICE **101.0-000.000.636.0003** 248.530.1870	SG	Two officers for teen concert. On duty extra patrols for all other concerts.		$600.00	

PUBLIC SERVICES **101.0-000.000-636.0002** 248.530.1642	CL 2/7/23	Includes set-up and take down for all concerts. And (1) staff member at each concert.		$2,500	
ENGINEERING **101.0-000.000.636.0002** 248.530.1839	KC	Right-of-Way permit required.	ROW	$65	
SP+ PARKING	AF	Standard parking rates in effect for all City 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	$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	
				TOTAL DEPOSIT REQUIRED **$3330**	**ACTUAL COST**

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Manager's Office

DATE: February 21, 2023

TO: Thomas M. Markus, City Manager

FROM: Melissa Fairbairn, Assistant City Manager

SUBJECT: 2022 Student Representative Certificates of Appreciation

INTRODUCTION:
In appreciation of their service as a student representative on City boards and committees throughout 2022, the following Birmingham Public School students will be sent a certificate for their civic involvement over the past year:

Student	**Board**
Meghan Murray	Historic District / Design Review Board
Charlie Vercellone	Historic District / Design Review Board
Isabela Betanzos	Multi-Modal Transportation Board
Ben Rosenfield	Multi-Modal Transportation Board
Jordan Snyder	Museum Board
MacKinzie Clein	Planning Board
Andrew Fuller	Planning Board
Zachary Miketa	Parks & Recreation Board
Matthew Windsor	Parks & Recreation Board

BACKGROUND:
In 1996, the City Commission approved a Birmingham Public Schools (BPS) program placing student representatives who are residents of the City on City boards and commissions. This program was designed to establish an educational partnership that has been very successful since its inception. Students wanting to serve as representatives to City boards and commissions complete an application and go through a selection process by a school district pre-screening committee. The committee membership reviews student applications

based on specific criteria and then forwards approved applications to the City for appointment consideration.

LEGAL REVIEW:
N/A

FISCAL IMPACT:
N/A

PUBLIC COMMUNICATIONS:
N/A

SUMMARY:
The nine Birmingham Public Schools students mentioned above have participated in monthly meetings of their respective advisory boards and engaged in public discussions that afforded them direct input into areas that affect their community. This program partnership with the Birmingham Public Schools has been successful for the City, the schools, and the students. The City congratulates the nine student representatives and looks forward to the student's continued interest in civic involvement. Each student will be sent a certificate of appreciation for their involvement in the program.

ATTACHMENTS:
N/A

SUGGESTED COMMISSION ACTION:
To recognize the following nine student representatives for their service in 2022 on Birmingham boards and committees and award each student a certificate in appreciation for their civic involvement:

HDC-DRB	Meghan Murray Charlie Vercellone
Multi-Modal Transportation Board	Isabela Betanzos Ben Rosenfield
Museum Board	Jordan Snyder
Planning Board	MacKinzie Clein Andrew Fuller
Parks & Recreation Board	Zachary Miketa Matthew Windsor

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Planning Division

DATE: February 27, 2023

TO: Thomas M. Markus, City Manager

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Public Hearing for 300 S. Old Woodward – RH – Special Land Use Permit Amendment, Final Site Plan & Design Review

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INTRODUCTION:
The applicant has submitted a Special Land Use Permit Amendment, Final Site Plan & Design Review for a revised site plan and building design on a building currently under construction in Downtown Birmingham. The subject site is located on the west side of S. Old Woodward, between Brown and Daines.

BACKGROUND:
On July 14, 2021 (Agenda – Minutes), the Planning Board moved to recommend approval to the City Commission of a Special Land Use, Final Site Plan and Design Review application for the original proposal, which was subsequently approved by the City Commission on August 9, 2021 (Agenda – Minutes).

Prior to the original site plan approval process, the applicant had also applied and was approved for a rezoning from D3 (Downtown Overlay) to D4 (Downtown Overlay). The Planning Board recommended approval to the City Commission on April 28, 2021 (Agenda – Minutes), and the City Commission formally approved the rezoning on July 12, 2021 (Agenda – Minutes).

On December 14, 2022 (Agenda – Minutes), the Planning Board moved to recommend approval to the City Commission of a Special Land Use Permit Amendment, Final Site Plan and Design Review application for a revised building design and minimal changes to the site. The approval conditions were as follows:

1. The Planning Board approves the projection of the canopy into the right-of-way;
2. The applicant must still adhere to the principles accepted by the Planning Board in the Community Impact Study review and provide ample space for the separation of recycling in the trash area;
3. The Planning Board approves the use of arborvitae and masonry screen wall with metal gates to screen the proposed electrical equipment;

4. The applicant must submit revised plans demonstrating 70% clear glazing on the storefront facades or obtain a variance from the Board of Zoning Appeals;
5. The Planning Board approves the use of non-cutoff light fixtures;
6. The applicant must submit detailed and dimensioned sign plans that meet the requirements of the Sign Ordinance, or obtain a variance from the Board of Zoning Appeals; and
7. The applicant must comply with the requests of all City Departments.

On January 10, 2023 (Agenda – Minutes), the applicant was granted the four variances required to proceed with the design of the building as proposed. Three variances were for storefront glazing. Article 3, Section 3.04 (E)(4) of the Zoning Ordinance requires all buildings in the Downtown Overlay District to contain storefronts transparent areas equal to 70% of its portion of the facade between one and eight feet from the ground. The proposed RH design contains 62%, 60%, and 58% glazing on the Daines, S. Old Woodward, and Brown facades, respectively. The final variance was granted to permit RH to have building identification signage that is illuminated.

On February 13, 2023, (Agenda), the City Commission moved to postpone the public hearing for 300 S. Old Woodward per the request of the applicant, who indicated that the additional time was needed to provide complete and final plans to the City Commission for consideration.

At this time, the applicant has submitted plans that address the requirements of the Planning Board and City Departments.

LEGAL REVIEW:
The City Attorney has reviewed this request and has no objections as to form and content.

FISCAL IMPACT:
There are no fiscal impacts for this agenda item.

PUBLIC COMMUNICATIONS:
As required for Special Land Use Permit and Final Site Plan Reviews, a legal ad was placed in a newspaper of local circulation to advertise the nature of the request in advance of the December 14, 2022 Planning Board meeting, and notices were sent out to all property owners and tenants within 300 ft. of the property. In addition, a second round of notices was sent out to advertise the public hearing at the City Commission meeting on February 13, 2023.

SUMMARY:
The Planning Division requests that the City Commission consider approval of the Special Land Use Permit Amendment, Final Site Plan and Design Review application for 300 S. Old Woodward – RH.

ATTACHMENTS:
Please see attached the following documents:

- Special Land Use Permit Resolution
- Amended Contract for an Economic Development Liquor License
- Site/Design Plans
- Planning Board Report

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to APPROVE the Special Land Use Permit Amendment, Final Site Plan and Design Review application for 300 S. Old Woodward – RH. In addition, to authorize the Mayor and City Clerk to sign the Amended Contract for an Economic Development Liquor License on behalf of the City.

RH
300 S. Old Woodward
Special Land Use Permit Amendment 2023

WHEREAS, A Special Land Use Permit Amendment, Final Site Plan & Design Review application was filed in November 2022 for approval of a new 4-story commercial building with a revised design and minor site changes to a property that was approved for an Economic Development Liquor License to be used for alcoholic beverage sales for on premise consumption at 300 S. Old Woodward;

WHEREAS, The land for which the Special Land Use Permit Amendment is sought is located on the west side of S. Old Woodward, between Brown and Daines;

WHEREAS, The land is zoned B2 and D4, which permits alcoholic beverage sales for on premise consumption with a Special Land Use Permit;

WHEREAS, Article 7, section 7.34 of Chapter 126, Zoning requires a Special Land Use Permit to be considered and acted upon by the Birmingham City Commission, after receiving recommendations on the site plan and design from the Planning Board for the proposed Special Land Use;

WHEREAS, The Planning Board on April 28, 2021 accepted the Community Impact Study and approved the Preliminary Site Plan Review for a new 4-story commercial building;

WHEREAS, The City Commission on July 12, 2021 approved a rezoning from D3 to D4 conditional upon the building being done pursuant to the site plan, as voluntarily given by the applicant, pursuant to a letter dated and accepted July 12, 2021 by attorney Richard Rattner;

WHEREAS, The City Commission on August 9, 2021 approved an application for a Special Land Use Permit Amendment, Final Site Plan and Design Review;

WHEREAS, The Planning Board on December 14, 2022 reviewed the application for a Special Land Use Permit Amendment, Final Site Plan and Design Review and recommended approval to the City Commission with the following conditions:

1. The Planning Board approves the projection of the canopy into the right-of-way;
2. The applicant must still adhere to the principles accepted by the Planning Board in the Community Impact Study review and provide ample space for the separation of recycling in the trash area;
3. The Planning Board approves the use of arborvitae and masonry screen wall with metal gates to screen the proposed electrical equipment;
4. The applicant must submit revised plans demonstrating 70% clear glazing on the storefront facades or obtain a variance from the Board of Zoning Appeals;
5. The Planning Board approves the use of non-cutoff light fixtures;
6. The applicant must submit detailed and dimensioned sign plans that meet the requirements of the Sign Ordinance, or obtain a variance from the Board of Zoning Appeals; and
7. The applicant must comply with the requests of all City Departments.

WHEREAS, The Board of Zoning Appeals on January 10, 2023 reviewed the plans for a revised building design and minor site changes and granted the following variances:

1. Dimensional variance of 48 sq. ft. of clear glazing on the Daines storefront;
2. Dimensional variance of 112 sq. ft. of clear glazing on the S. Old Woodward storefront;
3. Dimensional variance of 76 sq. ft. of clear glazing on the Brown storefront;
4. Dimensional variance of 66 sq. ft. of illuminated building identification signage.

WHEREAS, The applicant has complied with the conditions of approval required by the Planning Board and all City Departments;

WHEREAS, The Birmingham City Commission has conducted a public hearing on February 27, 2023, and has reviewed RH's Special Land Use Permit Amendment application and the standards for such review as set forth in Article 7, section 7.36 of Chapter 126, Zoning, of the City Code;

NOW, THEREFORE, BE IT RESOLVED, The Birmingham City Commission finds the standards imposed under the City Code have been met, subject to the conditions below, and that RH's application for a Special Land Use Permit Amendment, Final Site Plan and Design Review at 300 S. Old Woodward is hereby approved;

BE IT FURTHER RESOLVED, That the City Commission determines that to ensure continued compliance with Code standards and to protect public health, safety, and welfare, this Special Land Use Permit Amendment is granted subject to the following conditions:

1. RH shall abide by all provisions of the Birmingham City Code;
2. RH shall comply with the conditions of approval assigned by the Planning Board and City Commission; and
3. The Special Land Use Permit may be canceled by the City Commission upon finding that the continued use is not in the public interest.

BE IT FURTHER RESOLVED, That failure to comply with any of the above conditions may result in termination of the Special Land Use Permit after the licensee has been given notice and a hearing.

BE IT FURTHER RESOLVED, Except as herein specifically provided, RH and its heirs, successors, and assigns shall be bound by all ordinances of the City of Birmingham in effect at the time of the issuance of this permit, and as they may be subsequently amended. Failure of RH to comply with all the ordinances of the City may result in the Commission revoking this Special Land Use Permit.

BE FURTHER RESOLVED that RH is recommended for a new 4-story commercial building with a revised design and minor site changes with alcoholic beverage sales for on premise consumption, above all others, subject to final inspection.

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 February 27, 2023.

_____

Alexandria Bingham
City Clerk

AMENDED CONTRACT FOR AN
ECONOMIC DEVELOPMENT LIQUOR LICENSE

This Contract, originally entered into on October 8, 2021 is now amended as of this _____day of _____, 2023 by and between **RH F & B MICHIGAN, LLC**., whose address is 15 Koch Road, Corte Madera, CA 94925, (Licensee), and the **CITY OF BIRMINGHAM**, a Michigan Municipal Corporation, whose address is 151 Martin Street, Birmingham, Michigan 48009 (City).

R E C I T A L S:

WHEREAS, a Special Land Use Permit Application was filed in November 2022 for approval of a business serving alcoholic liquors for on premise consumption and associated interior/exterior renovations; and,

WHEREAS, the land for which the Special Land Use Permit Agreement is sought is located on the west side of S. Old Woodward, south of Brown St.; and,

WHEREAS, the land is zoned B2 (General Business) and D4 (Downtown Overlay) which permits the sale of alcoholic liquors for on premise consumption with a Special Land Use Permit; and,

WHEREAS, Article 7, Section 7.34 of Chapter 126 Zoning requires a Special Land Use Permit to be considered and acted upon by the Birmingham City Commission after reviewing recommendations on the site plan and design from the Planning Board for the proposed Special Land Use; and,

WHEREAS, the City of Birmingham Commission is approving this agreement in granting a contract to RH F & B Michigan, LLC. for the approval of the use of an on-premises liquor license, Special Land Use Permit.

NOW, THEREFORE, the parties agree as follows:

1. Licensee has a state issued liquor license for use solely at the Property. Any transfer of the aforementioned license from the Property to any other location in the CITY OF BIRMINGHAM shall require the approval of the Birmingham City Commission in accordance with Section 10-83 of the City of Birmingham Code of Ordinances. In addition, any expansion of the Property shall also require the approval of the Birmingham City Commission.

2. Licensee further acknowledges that it must maintain a Special Land Use Permit for the sale of alcoholic liquors for on premise consumption as required by the Birmingham City Code of Ordinances. It is agreed that RH F & B Michigan, LLC shall comply with all provisions of the Special Land Use Permit, or any amendments thereto, as a condition of this contract. Licensee further acknowledges and agrees that a violation of any provision of the Special Land Use Permit or the Michigan Liquor Control Code is a violation of the terms of this contract entitling the City to exercise any or all of the remedies provided herein.

3. Licensee acknowledges that no modifications to the site plan, floor plan, elevations

or operation of the establishment may be made unless approved by the City Commission through a Special Land Use Permit Amendment as required in the Zoning Ordinance. Modifications include, but are not limited to, name changes, ownership changes, remodeling, changes in the number of interior or exterior seats, etc.

4. Licensee acknowledges that outdoor dining is permitted with a valid Outdoor Dining License which is applied for and granted annually.

5. Licensee agrees that it shall not apply or seek from the Michigan Liquor Control Commission any permit endorsements to its liquor license whether available in the current Michigan Liquor Control Code or in future Michigan Liquor Control Codes, or amendments thereto, without the prior approval of the Birmingham City Commission.

6. Licensee further agrees that it shall not seek any change in its license status/class whether such changes are available now in the current Michigan Liquor Control Code or in future Michigan Liquor Control Codes, or amendments thereto, without prior approval of the Birmingham City Commission.

7. Licensee agrees that it shall adhere to all Federal, State and Local ordinances currently in effect or as subsequently amended or enacted.

8. Licensee agrees that its failure to follow any of the provisions herein may be grounds for the Michigan Liquor Control Commission to suspend, revoke or not renew its liquor license and/or for the Birmingham City Commission to revoke the Special Land Use Permit, either of which would prohibit Licensee from operating the establishment. Licensee agrees that in addition to the City of Birmingham's right to seek suspension, revocation or non-renewal of its liquor license and/or revocation of the Special Land Use Permit, the City retains any and all rights to enforce this Contract that may be available to it in law or in equity. Licensee further agrees that it shall reimburse the City all of its costs and actual attorney fees incurred by the City in seeking the suspension, revocation or non-renewal of its liquor license and revocation of the Special Land Use Permit, as well as enforcing such other rights as may be available at law and/or in equity.

9. To the fullest extent permitted by law, Licensee and any entity or person for whom Licensee is legally liable, agrees to be responsible for any liability, defend, pay on behalf of, indemnify, and hold harmless the City, its elected and appointed officials, employees and volunteers and others working on behalf of the City against any and all claims, demands, suits, or loss, including all costs connected therewith, including all costs and actual attorney fees, and for any damages which may be asserted, claimed or recovered against or from 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, death and/or property damage, including loss of use thereof, which arises out of or is in any way connected or associated with Licensee's operation of an establishment at the Property. The Licensee is not liable if the act or omission is the City's.

10. In the event Licensee fails to reimburse the City the costs and/or attorney fees as required herein, or any part thereof, then said amount could be transferred to the tax roll in accordance with Section 1-14 of the Birmingham City Code as acknowledged by the Property Owner, Woodward Development, LLC, whose address is 15 Koch Road, Corte Madera, CA 94925

11. Any disputes arising under this Contract, not within the jurisdiction of the Michigan Liquor Control Commission, shall be settled either by commencement of a suit in Oakland County Circuit Court or by compulsory arbitration, at the election of the City. 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 a federal or state court with jurisdiction over Oakland County, Michigan...

12. This Contract shall be governed by and performed, interpreted and enforced in accordance with the laws of the State of Michigan.

13. If any provision of this contract is declared invalid, illegal or unenforceable, such provision shall be severed from this contract and all other provisions shall remain in full force and effect.

14. The City Commission determines that to ensure continued compliance with Code standards and to protect public health, safety, and welfare, this Special Land Use Permit is granted subject to the following conditions:

a. RH F & B Michigan, LLC shall abide by all provisions of the Birmingham City Code; and
b. The Special Land Use Permit may be canceled by the City Commission upon finding, after proper notice and a hearing, that the continued use is not in the public interest.

15. Failure to comply with any of the above conditions may result in termination of the Special Land Use Permit after the licensee has been given notice and a hearing.

16. Except as herein specifically provided, RH F & B Michigan, LLC and its heirs, successors, and assigns shall be bound by all ordinances of the City of Birmingham in effect at the time of the issuance of this permit, and as they may be subsequently amended. Failure of RH F & B Michigan, LLC to comply with all the ordinances of the City may result in the Commission revoking this Special Land Use Permit, after notice and a hearing.

17. RH F & B Michigan, LLC is recommended for the operation of an establishment serving alcoholic beverages for on premise consumption and associated interior/exterior renovations, above all others, subject to final inspection.

18. This Contract shall be binding upon and apply and inure to the benefit of the parties hereto and their respective successors or assigns. The covenants, conditions, and the agreements herein contained are hereby declared binding on the CITY OF BIRMINGHAM and Licensee. It is further agreed that there shall be no change, modification, or alteration hereof, except in

writing, signed by all of the parties hereto. Neither party shall assign any of the rights under this contract without prior approval, in writing, of the other. Any attempt at assignment without prior written consent shall be void and of no effect.

(This space intentionally left blank)

IN WITNESS WHEREOF, the parties hereby have executed this Contract as of the date set forth above.

RH F & B Michigan, LLC (Licensee)

By: _____
Edward T. Lee
Its: Manager
Date: _____

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

On this _____day of _____, 2023, before me personally appeared Edward T. Lee who acknowledged that with authority on behalf RH F & B Michigan, LLC to do so he signed this Agreement.

_____
Notary Public
_____County, Michigan
Acting in _____ County, Michigan
My commission expires: _____

WOODWARD DEVELOPMENT, LLC (Property Owner)
(as to paragraph 10 only)

By: _____
Its: _____

STATE OF MICHIGAN)
) ss:
COUNTY OF OAKLAND)

On this _____day of _____, 2023, before me personally appeared _____, who acknowledged that with authority on behalf of Woodward Development, LLC to do so he/she signed this Agreement.

_____
Notary Public
_____County, Michigan
Acting in _____ County, Michigan
My commission expires: _____

CITY OF BIRMINGHAM

By: _____
Therese Longe, Mayor

By:_____
Alexandria D. Bingham, City Clerk

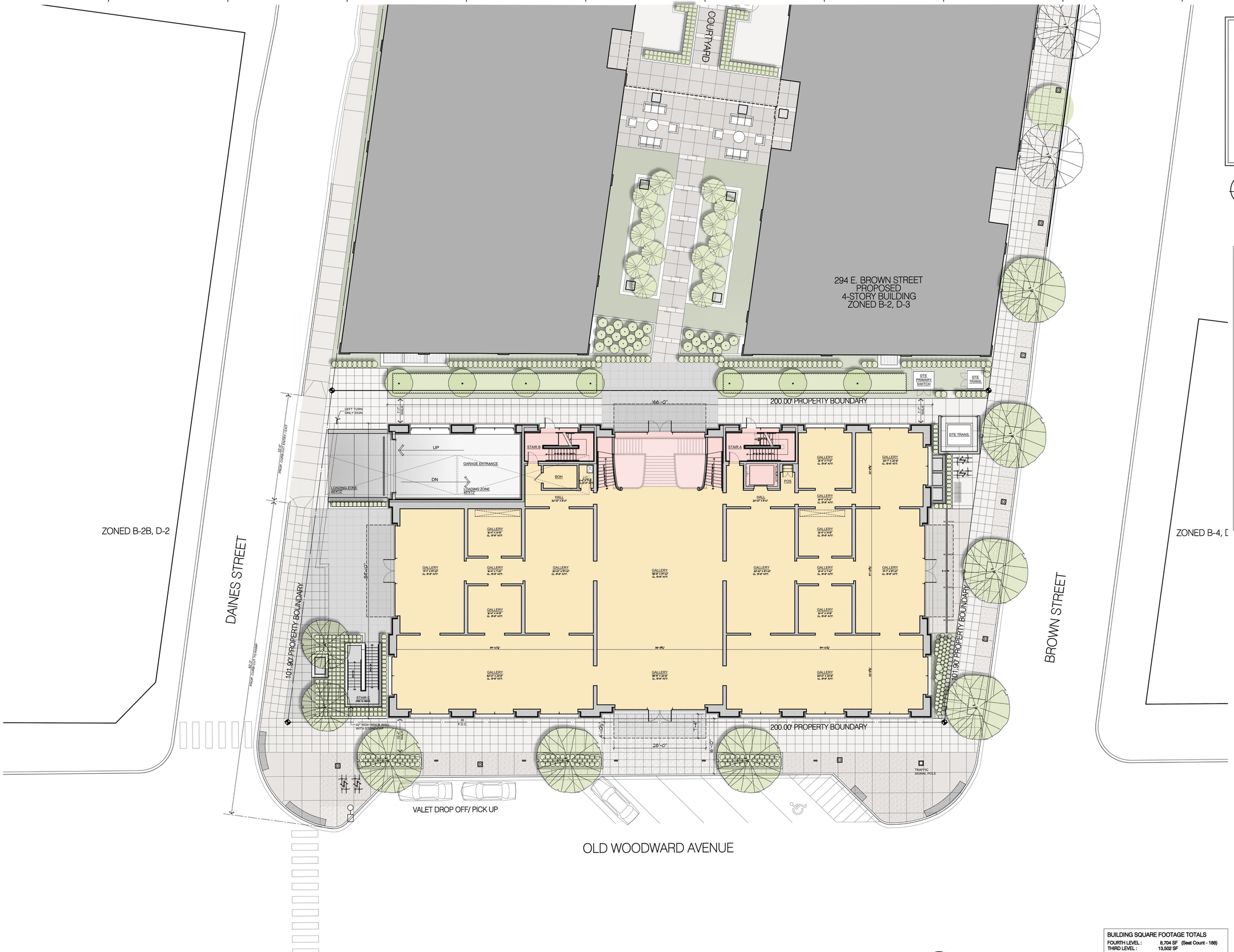
APPROVED:

_____
Thomas M. Markus, City Manager
(Approved as to substance)

_____
Nicholas Dupuis, Planning Director
(Approved as to substance)

_____
Mary M. Kucharek, City Attorney
(Approved as to form)

RH



Site Location Map:
Not To Scale

LEGAL DESCRIPTION - SWAP PARCEL 1
LAND SITUATED IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MI, DESCRIBED AS FOLLOWS:
PART OF LOT 12 OF BROWN'S ADDITION SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS; BEING DESCRIBED AS: BEGINNING AT A POINT DISTANT S.62°00'00"W. 119.37 FEET FROM THE NORTHEAST CORNER OF LOT 13 OF SAID BROWN'S ADDITION SUBDIVISION; THENCE S.35°35'52"E. 100.00 FEET; THENCE S.62°00'00"W. 30.76 FEET; THENCE N.36°14'00"W. 100.15 FEET; THENCE N.62°00'00"E. 31.88 FEET TO THE POINT OF BEGINNING. CONTAINING: 3,104 SQUARE FEET OR 0.07 ACRES OF LAND

LEGAL DESCRIPTION - SWAP PARCEL 2
LAND SITUATED IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MI, DESCRIBED AS FOLLOWS:
PART OF LOT 15 OF ADDITION TO WILLIAM BROWN'S ADDITION NO. 1 ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS, BEING DESCRIBED AS: BEGINNING AT A POINT DISTANT S.62°00'00"W. 119.37 FEET AND S.35°35'52"E. 100.00 FEET FROM THE NORTHEAST CORNER OF LOT 13 OF BROWN'S ADDITION SUBDIVISION AS RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS; THENCE N.62°00'00"E. 19.24 FEET; THENCE S.35°14'00"E. 100.15 FEET; THENCE S.62°00'00"W. 20.36 FEET; THENCE N.35°35'52"W. 100.00 FEET TO THE POINT OF BEGINNING. CONTAINING: 1,963 SQUARE FEET OR 0.04 ACRES OF LAND

SAROKI ARCHITECTURE
430 N. OLD WOODWARD
BIRMINGHAM, MI 48009
P. 248.258.5707
F. 248.258.5515
SarokiArchitecture.com

Project:
RH / Mixed-Use
300 S Old Woodward
Birmingham, MI 48009

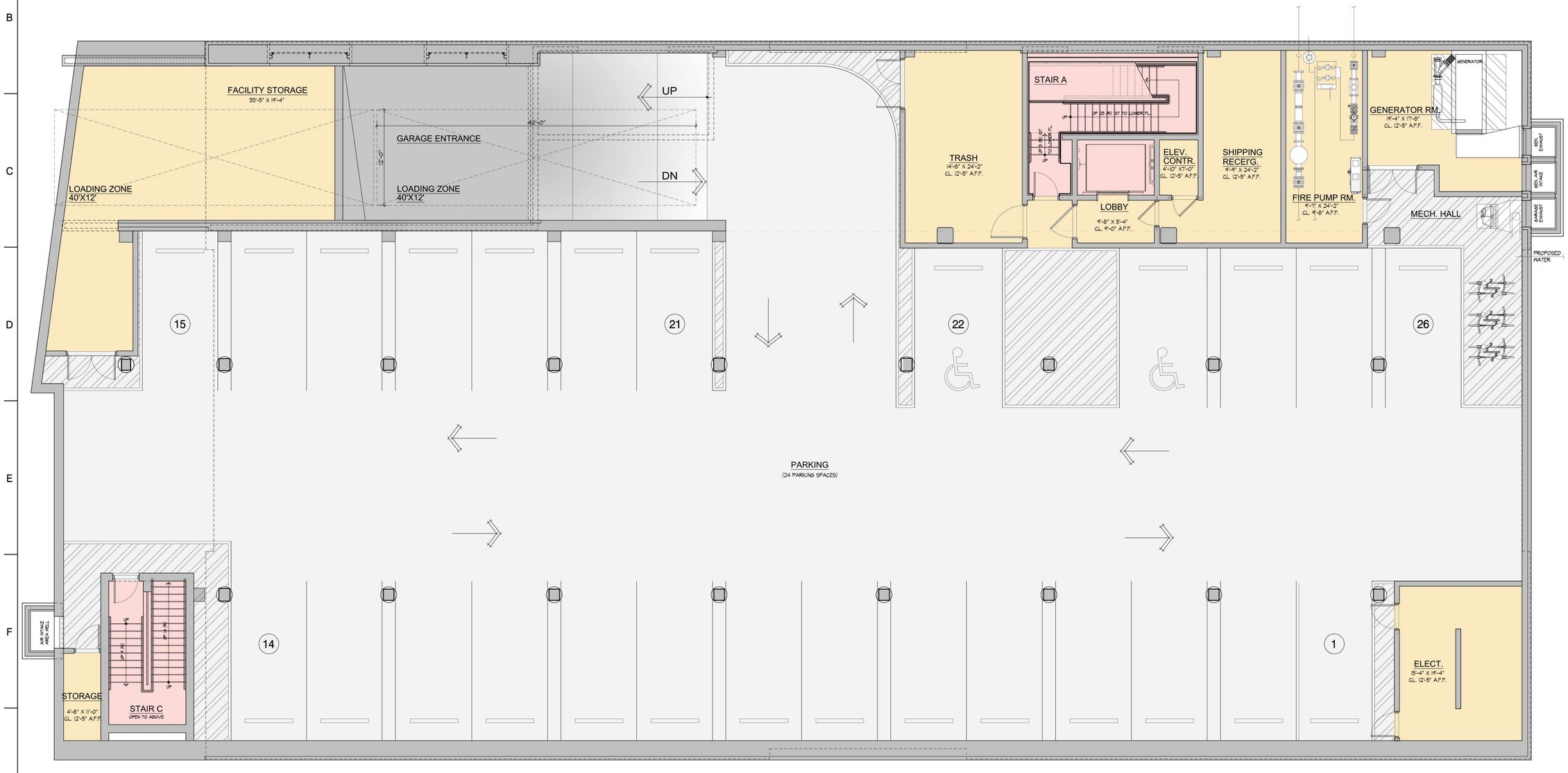
Date:	Issued For:
11-09-2022	Pre-App.
11-18-2022	Final Site Plan Application
02-27-2023	City Commission

Architectural Site Plan
SCALE: 3/32" = 1'-0"

BUILDING SQUARE FOOTAGE TOTALS

FOURTH LEVEL :	8,704 SF	(Seat Count - 188)
THIRD LEVEL :	13,502 SF	
SECOND LEVEL :	13,592 SF	
FIRST LEVEL :	13,817 SF	
TOTAL:	49,615 SF	
LOWER LEVEL:	16,531 SF	(26 Parking Spaces)

SP01
Architectural Site Plan



NORTH

H9 A100 Lower Level Parking Garage Floor Plan

SCALE: 3/16"= 1'-0"

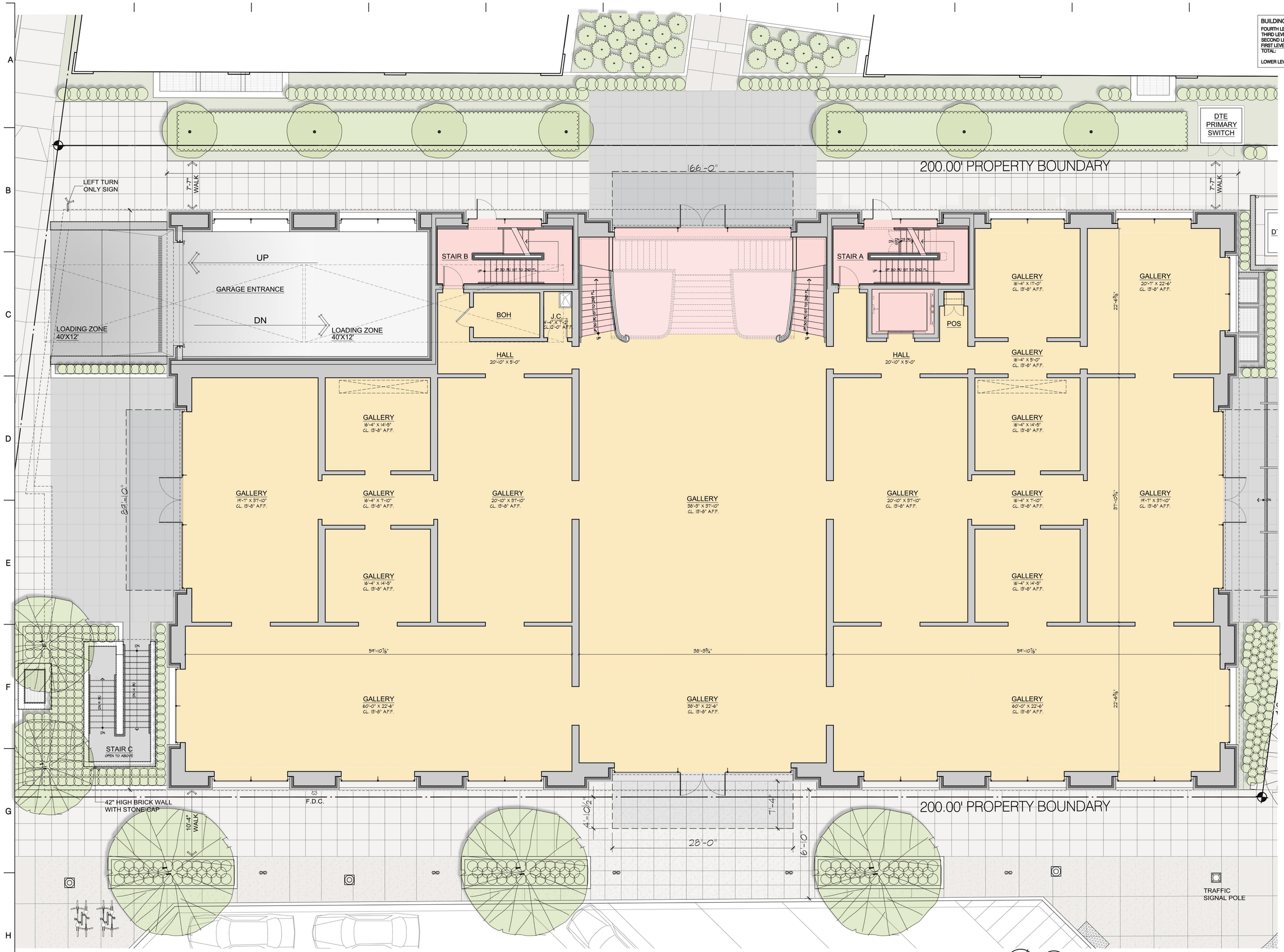
SAROKI ARCHITECTURE
430 N. OLD WOODWARD
BIRMINGHAM, MI 48009
P. 248.258.5707
F. 248.258.5515
SarokiArchitecture.com

Project:
RH / Mixed-Use
300 S Old Woodward
Birmingham, MI 48009

Date:	Issued For:
11-09-2022	Pre-App.
11-18-2022	Final Site Plan Application
02-27-2023	City Commission

A100

Lower Level Parking Garage Floor Plan



BUILDING SQUARE FOOTAGE TOTALS

FOURTH LEVEL :	8,704 SF	(Seat Count - 188)
THIRD LEVEL :	13,502 SF	
SECOND LEVEL :	13,592 SF	
FIRST LEVEL :	13,817 SF	
TOTAL:	49,615 SF	
LOWER LEVEL:	16,531 SF	(26 Parking Spaces)

H9 / A110 First Level Floor Plan
SCALE: 3/16"= 1'-0"

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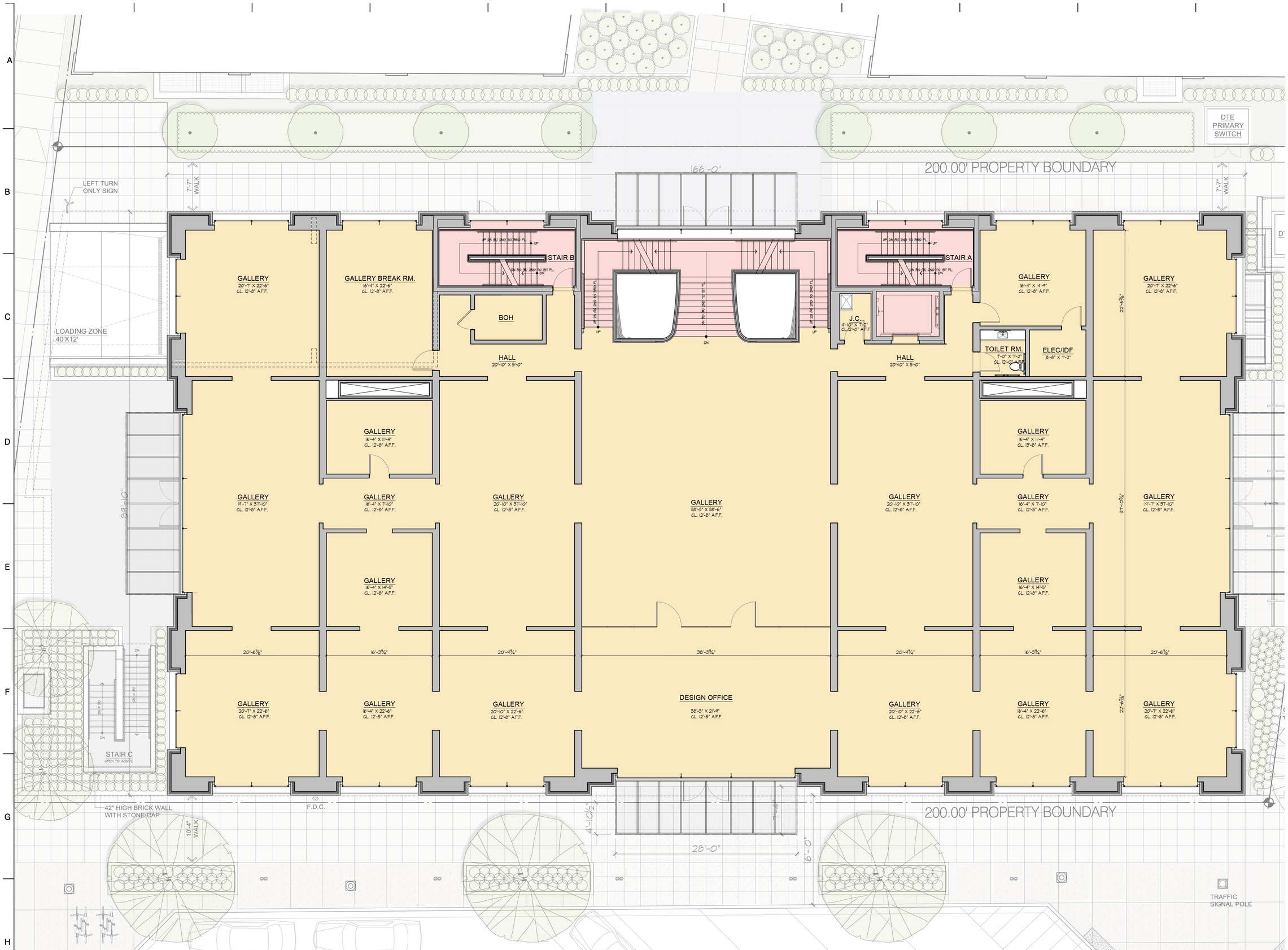
A110
First Level Floor Plan



Second Level Floor Plan

SCALE: 3/16" = 1'-0"

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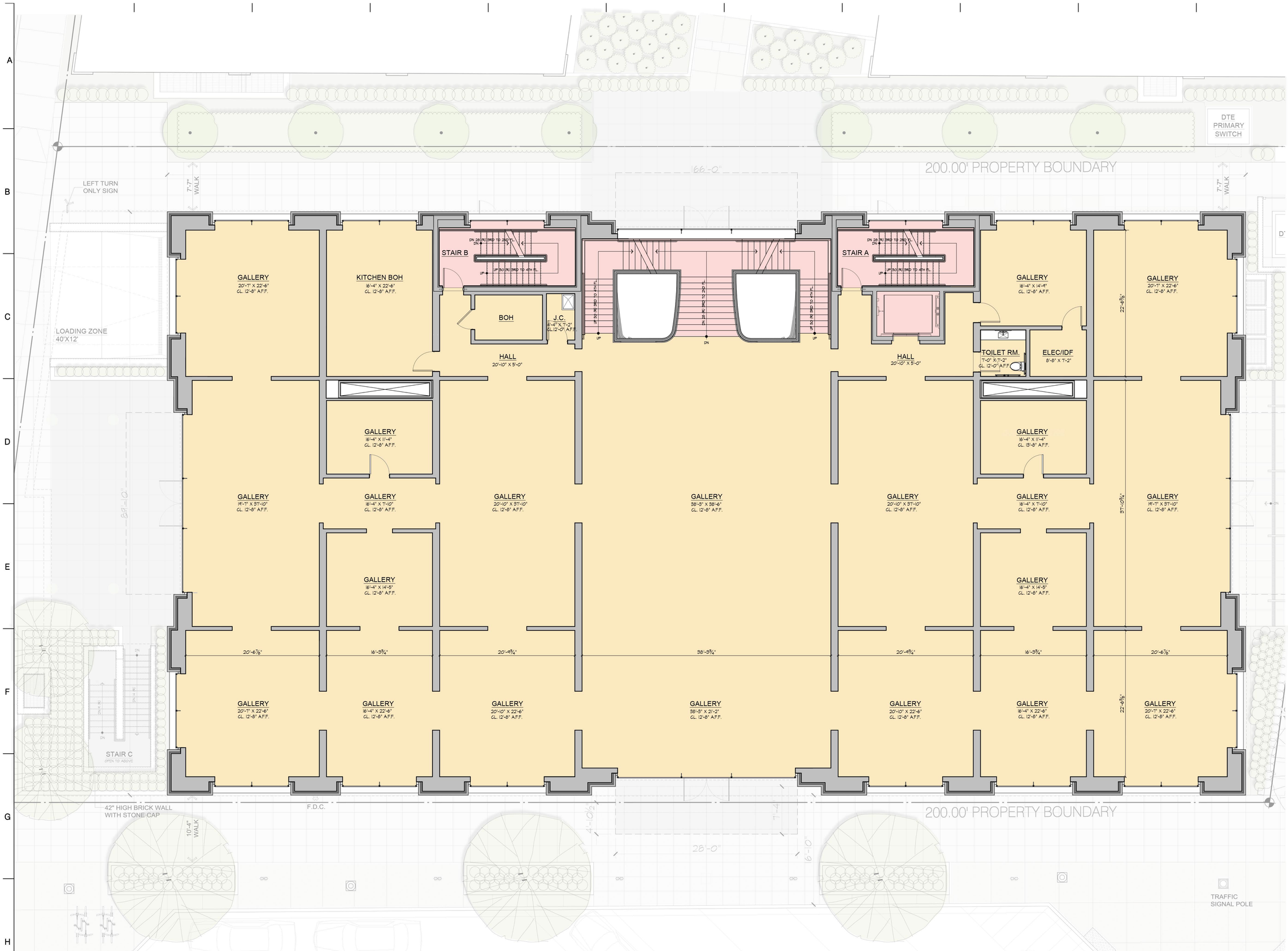
A210

Second Level Floor Plan



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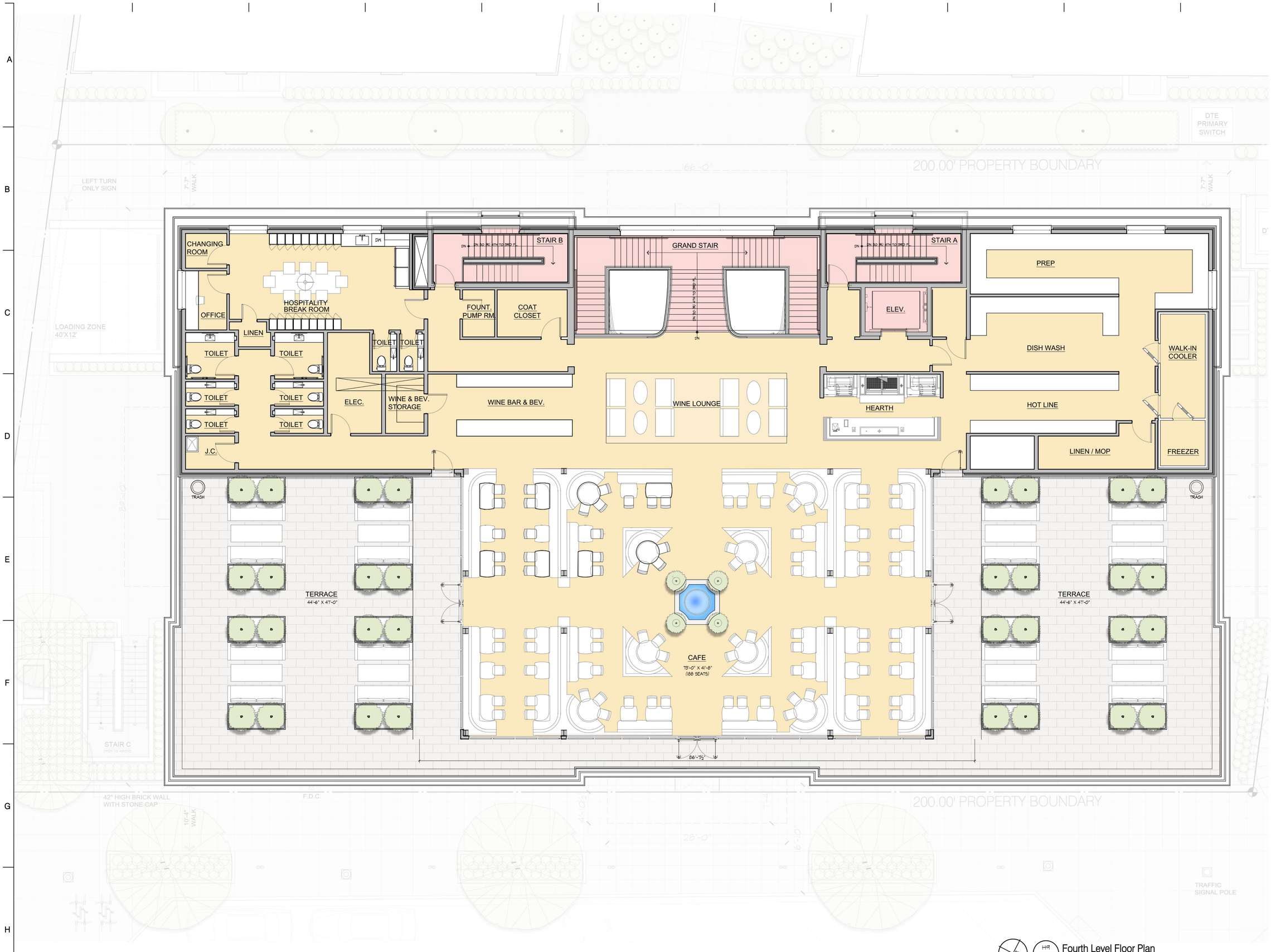
H9 / A310 — Third Level Floor Plan
SCALE: 3/16" = 1'-0"

A310
Third Level Floor Plan



Fourth Level Floor Plan

SCALE: 3/16"= 1'-0"

SAROKI ARCHITECTURE

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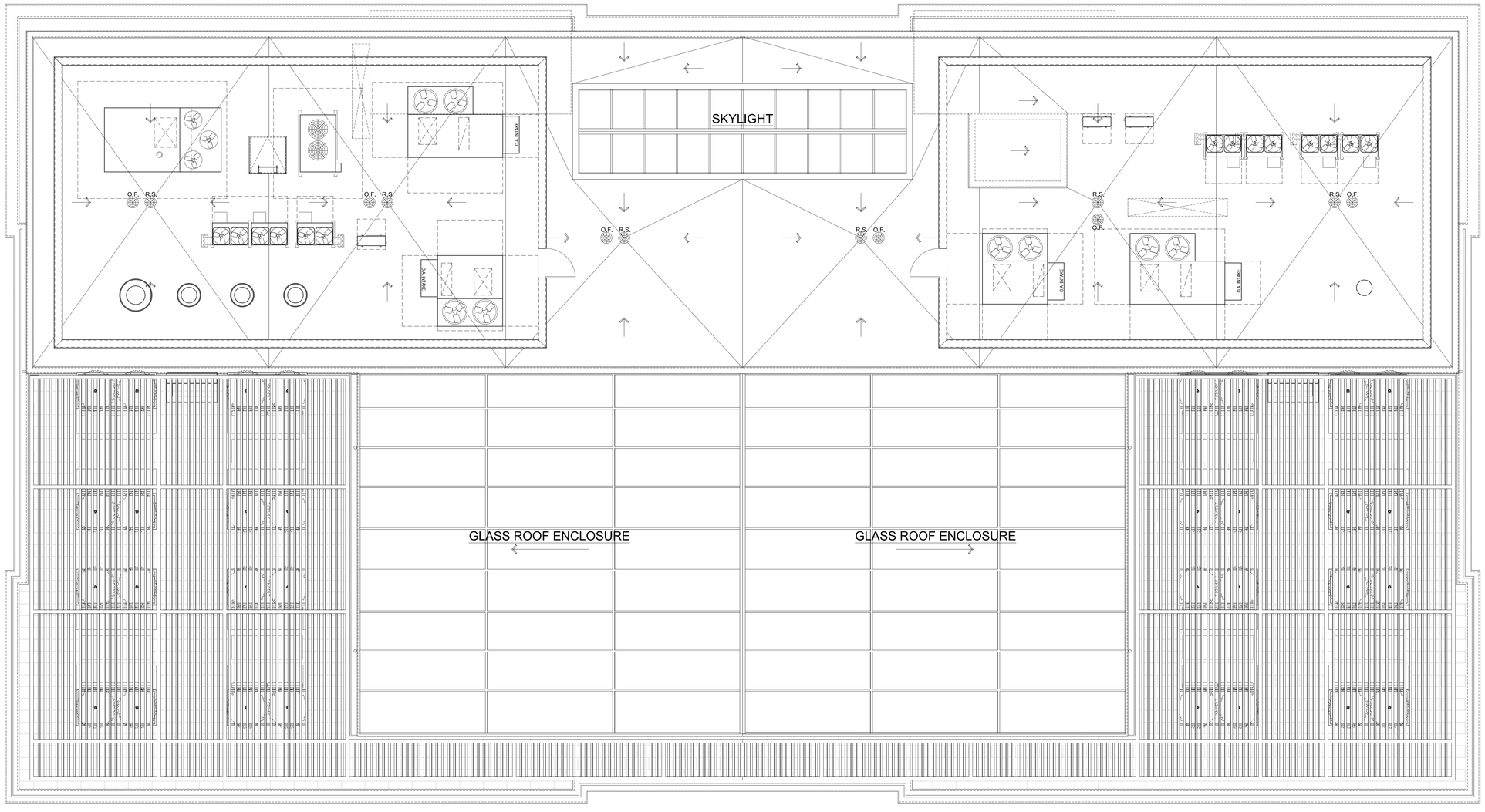
A410

Fourth Level Floor Plan



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NORTH

H9 A510

Roof Level Floor Plan

SCALE: 3/16" = 1'-0"

A510

Roof Plan

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HIO A200

East Exterior Elevation (Old Woodward Ave.)

SCALE: 1/8"= 1'-0"

A200

EAST EXTERIOR ELEVATION

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H10 / A201
North Exterior Elevation (Brown Street)
SCALE: 1/8" = 1'-0"

A201
NORTH EXTERIOR ELEVATION

HIO A202 West Exterior Elevation
SCALE: 1/8"= 1'-0"

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A202
WEST EXTERIOR ELEVATION

HIO A203 South Exterior Elevation
SCALE: 1/8"= 1'-0"

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A203
SOUTH EXTERIOR ELEVATION

H9 A204 StreetView Elevation
SCALE: 1/16"= 1'-0"

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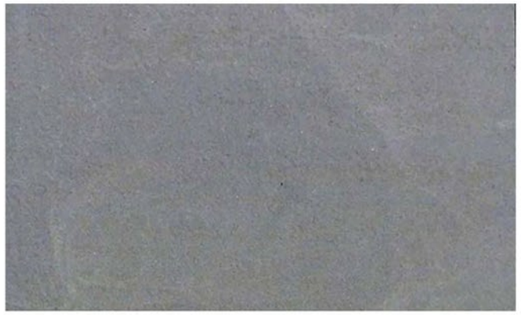
Sheet No.:
A204
EXTERIOR ELEVATION



BLUESTONE PAVER

STEEL AND GLASS ROOFTOP RESTAURANT

ARCHITECTURAL BRICK

DECOMPOSED GRANITE

STEEL CANOPY, PERGOLA AND CONSERVATORY

OUTDOOR FURNITURE

OUTDOOR FURNITURE

RH

RH DETROIT

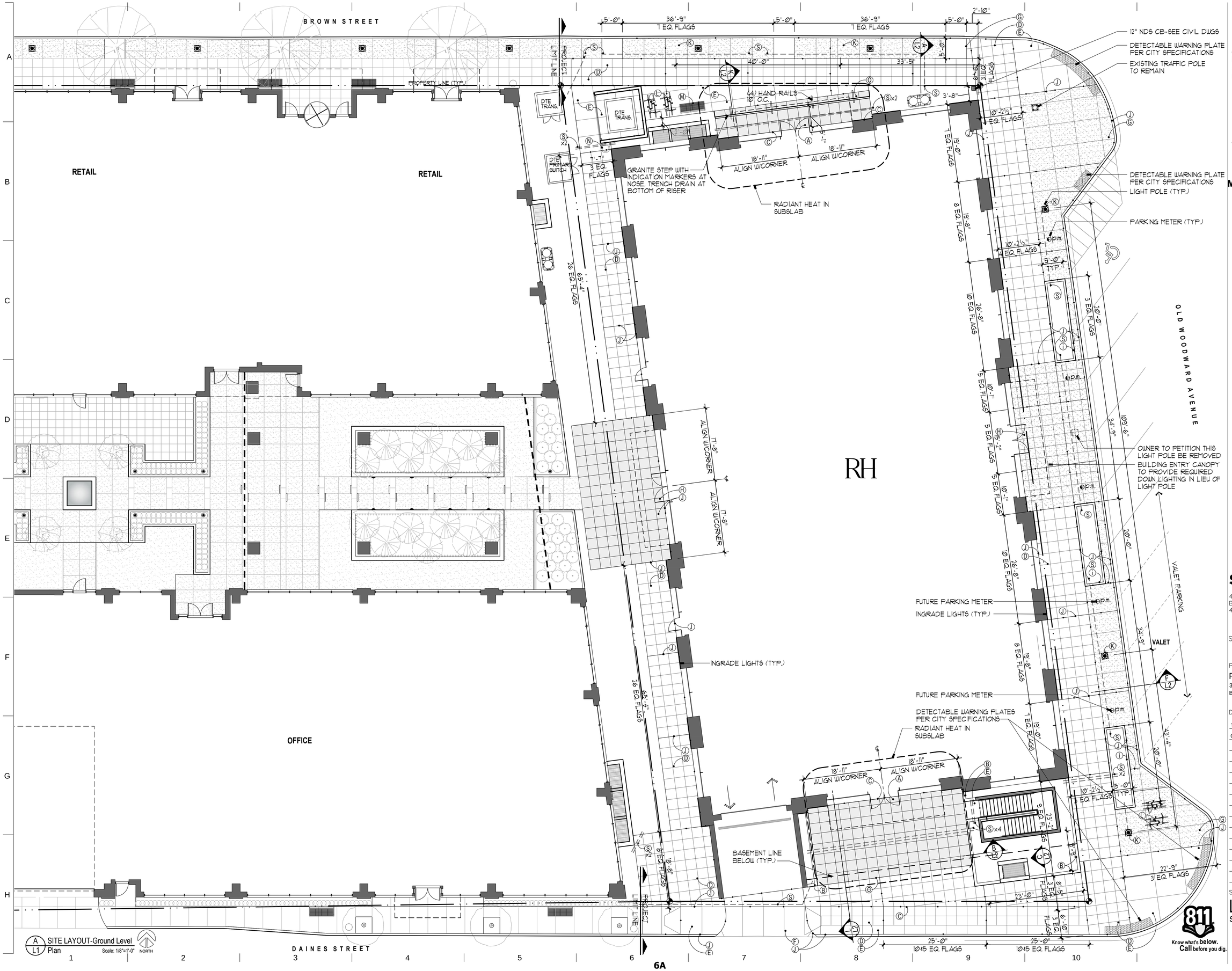
300 S Old Woodward
Birmingham, MI 48009

MATERIAL BOARD

6A

6A

6A



A L1 SITE LAYOUT-Ground Level Plan

Scale: 1/8"=1'-0"

Know what's below. Call before you dig.

RH

RH DETROIT
300 S Old Woodward
Birmingham, MI 48009

LANDSCAPE ARCHITECTURE

MICHAEL J. DUL & ASSOCIATES, INC

212 DAINES STREET
BIRMINGHAM
MICHIGAN 48009

P 248 644 3410
F 248 644 0819

MICHAEL J. DUL
LANDSCAPE ARCHITECT
NO. 781
REGISTERED LANDSCAPE ARCHITECT
STATE OF MICHIGAN

SAROKI ARCHITECTURE
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Sheet No.:
L1
SITE LAYOUT-Ground Level

MATERIAL SCHEDULE

SYM.	QTY.	ITEM/DESCRIPTION	PATTERN	COLOR
MASONRY CONSTRUCTION: ALL BASE CONCRETE FLATWORK SHALL BE MEDIUM BROOM FINISHED, MIN. 4000 P.S.I. AFTER 28 DAYS, WITH 5-8% AIR ENTRANMENT, REINFORCED WITH W2.9 X W2.9 (6 X 6.) WWM. ALL MASONRY FLATWORK AND CURBS SHALL BE SET ON A MIN. 1" LATEX MODIFIED MORTAR SETTING BED, APPLY LATICRETE 254 PLATINUM THIN-SET TO BOTTOM OF EACH STONE , 3/8" WIDE GROUT JOINTS ACID WASH UPON COMPLETION.			
(A)	910 S.F. 910 S.F. conc	2" THICK x 30" SQUARE COLD SPRING GRANITE FLATWORK ¼" W.D. GROUT JOINTS, SET ON 1" MORTAR SETTING BED OVER MIN. 4" THICK REIN. CONCRETE BASE ON MIN. 6" COMPACTED 21AA LIMESTONE AGGREGATE. INCLUDE 2" RIGID FOAM INSULATION AND REBAR CHAIRS TO SUSPEND W.W.M. & CONNECT RADIANT HEAT TUBES	STACKED BOND	SIERRA WHITE THERMAL FINISH
(B)	88 L.F. 88 L.F. conc	6" THICK x 8" WIDE x 36" LONG COLD SPRING GRANITE SOLID STONE CURB, SET ON 1" MORTAR SETTING BED OVER MIN. 12" WIDE x 12" DEEP REIN. CONCRETE FLOATING FOOTING-COMPLETE WITH CONT. CONCRETE RETAINING EDGE	RUNNING CURB	SIERRA WHITTE THERMAL FINISH
(D)	37 L.F.	2" THICK x 18" WIDE x 30" LONG COLD SPRING GRANITE TREADS WITH (2) ANTI-SLIP GROOVES x 3⅜" HIGH COLD SPRING GRANITE RISERS ON MIN. 1" MORTAR SETTING BED-ALIGN RISER/TREAD JOINTS (¼" W.D.)	STACKED BOND	SIERRA WHITE THERMAL FINISH INCL. EXPOSED EDGES
(C)	214 L.F.	½" WIDE PREMOULDED EXPANSION JOINT COMPLETE WITH SNAP CAP AND DOW CORNING 790 CAULK (SANDED TO MATCH MORTAR)		GRAY
(S)	160 L.F.	4" SCH. 40 P.V.C. SLEEVES (4)-BURY A MIN. 12", EXTEND A MIN. 12" BEYOND PAVING EDGES, CAP ENDS, STAKE LOCATIONS		
CONCRETE: ALL FLATWORK SHALL BE A MIN. 4000 P.S.I. AFTER 28 DAYS, WITH 5-8% AIR ENTRANMENT, REINFORCED WITH 6"x6" W2.9 X W2.9 W.W.F. INSTALLED ON COMPACTED SAND OR AGGREGATE (SEE DETAILS). POWERWASH AND SEAL ALL EXPOSED AGGREGATE WITH EUCLID CHEMICAL CO. SUPER DIAMOND CLEAR 350 SEALER. SAWCUT CONTROL JOINTS PER PLAN.			
(D)	4,653 S.F.	R.O.W. WALKS & SITE WALKS: MIN. 4" THICK REIN. CONCRETE FLATWORK, AVE. 30" SAWCUT CONTROL JOINTS, MEDIUM BROOM FINISH, ON A MIN. 4" M.D.O.T. CLASS II SAND		
(E)	1,222 S.F.	R.O.W. WALKS & SITE WALKS: MIN. 4" THICK REIN. CONCRETE FLATWORK, SAWCUT CONTROL JOINTS PER PLAN, MEDIUM BROOM FINISH, ON A MIN. 4" M.D.O.T. CLASS II SAND		
(F)	215 S.F.	DRIVE APPROACH: MIN. 8" THICK MDOT P1 REIN. CONCRETE FLATWORK, SAWCUT CONTROL JOINTS, MEDIUM BROOM FINISH, ON A MIN. 6" COMPACTED 21AA LIMESTONE AGGREGATE		
(G)	1,681 S.F.	MIN. 4" THICK REIN. EXPOSED AGGREGATE CONCRETE FLATWORK (CITY STANDARD SPECIFICATION)-SAWCUT CONTROL JOINTS PER PLAN ON MIN. 4" COMPACTED M.D.O.T. CLASS II SAND		
(H)	640 S.F.	MIN. 4" THICK REIN. EXPOSED AGGREGATE CONCRETE FLATWORK (CITY STANDARD SPECIFICATION)-AVE. 32" SQ. SAWCUT CONTROL JOINTS PER PLAN ON MIN. 4 "COMPACTED M.D.O.T. CLASS II SAND		
(I)	150 L.F.	6" WIDE x 6" HIGH (1" REVEAL) x18" DEEP REIN. EXPOSED AGGREGATE CONCRETE CURB (CITY STANDARD SPECIFICATION)-SAWCUT CONTROL JOINTS		
(J)	1,826 L.F.	½" WIDE PREMOULDED EXPANSION JOINT COMPLETE WITH SNAP CAP AND DOW CORNING 790 CAULK		GRAY
(S)	285 L.F.	4" SCH. 40 P.V.C. SLEEVES (13)-BURY A MIN. 12", EXTEND A MIN. 12" BEYOND PAVING EDGES, CAP ENDS, STAKE LOCATIONS		
SITE AMENITIES: INSTALL PER MANUFACTURER'S SPECIFICATIONS.				
(K)	7 EA.	STREETLIGHT STANDARD: HADCO ST002A: LUMINARIE W/PHOTCELL HADCO SP1002: 8'-8" HIGH POLE W/OUTLETS COMPLETE WITH MONARCH HANGING PLANTER (1 PER POLE)-INCLUDE CITY STANDARD MOUNTING BRACKET & IRRIGATION PIPING		SW INDUSTRIAL & MARINE COATING #SW4072
(L)	4 EA.	BIKE RACK STANDARD: CYCLESAFE MODEL U/2 SURFACE MOUNT WITH S.S. HARDWARE		JOHN W. HUNTER GREEN DUPONT CHROMAONE
(M)	1 EA.	BENCH STANDARD: DUMOR, INC. 19-50-Q30 WITH CUSTOM LETTERING-SURFACE MOUNT WITH S.S. HARDWARE		BIRMINGHAM GREEN (CUSTOM)
(N)	1 EA.	TRASH RECEPTACLE STANDARD: DUMOR, INC. 0-3947-30-01: STL. RECEPTACLE BODY, 0-3947-30-BT-1: 30 GAL BONNET TOP WITH OLD FLAT COVER, 49-32 32 PL. LINER W/HANDLE, BLACK		BIRMINGHAM GREEN (CUSTOM)

GENERAL NOTES

GENERAL CONDITIONS:

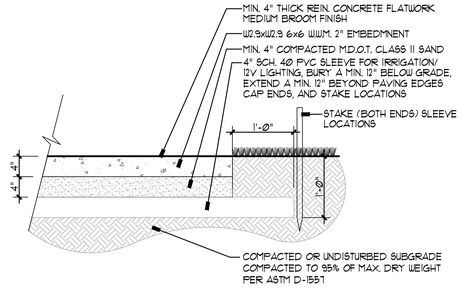
1.) CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT AND GENERAL CONTRACTOR PRIOR TO SUBMITTING BID PROPOSAL OR BEGINNING ANY WORK.
2.) EXCEPT AS OTHERWISE SHOWN OR STIPULATED, THIS CONTRACT SHALL INCLUDE THE DEMOLITION OF EVERY DESCRIPTION NECESSARY TO SUCCESSFULLY COMPLETE THE WORK UNDER THIS CONTRACT TO THE LINES AND GRADES SHOWN ON THESE PLANS WITHIN THE LIMIT OF WORK.
3.) THE CONTRACTOR SHALL LEGALLY DISPOSE OF ALL ITEMS TO BE REMOVED THAT ARE NOT TURNED OVER TO THE OWNER OR STOCKPILED FOR REUSE.
4.) THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE INSIDE AND OUTSIDE LIMIT OF WORK DUE TO CONTRACT OPERATIONS.
5.) DO NOT DISTURB EXISTING UTILITIES THAT SERVE AREAS SURROUNDING LIMIT OF WORK. IF SUCH UTILITIES ARE ENCOUNTERED NOTIFY PROPER UTILITY COMPANY BEFORE PROCEEDING.
6.) THE CONTRACTOR SHALL CONTACT THE PROPER LOCAL AUTHORITIES TO CONFIRM THE LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE TO CONTACT THE PROPER AUTHORITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7.) THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL THE DRAWINGS AND SPECIFICATIONS FOR SPECIFIC COORDINATION REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION.
8.) CONTRACTOR SHALL PROVIDE UNIT PRICING FOR ALL AREAS OF WORK.
9.) PLANS ARE NOT VALID WITH APPROVAL AND PERMIT BY THE CITY OF BIRMINGHAM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS. THE CONTRACTOR SHALL SCHEDULE ALL REQUIRED INSPECTIONS.

MASONRY CONSTRUCTION:

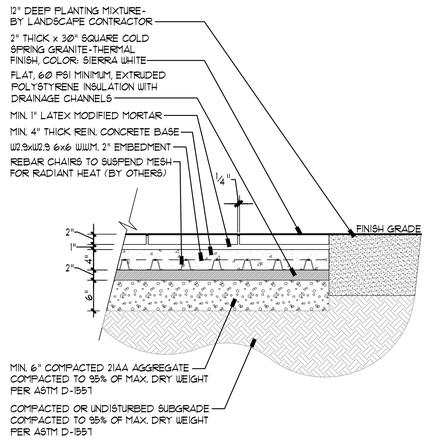
1.) ALL PROPOSED AND FINISHED MASONRY ELEMENTS SHALL BE THOROUGHLY WASHED WITH AN ACID BASED CLEANER (SURE-CLEAN 600) PER MANUFACTURERS SPECIFICATIONS. NO ACID BASED CHEMICALS SHOULD CONTACT INDIANA LIMESTONE.
2.) THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED EARTHWORK AND EXCAVATIONS TO PERFORM SCHEDULED WORK. ALL EXCAVATED MATERIALS SHALL BE LEGALLY DISPOSED (OFF-SITE) INCLUDED IN THE SUBMITTED PROPOSAL & UNIT PRICES.
3.) THE CONTRACTOR SHALL INSTALL ALL PROPOSED WORK ON COMPACTED OR UNDISTURBED SUBGRADE.
4.) ALL GRANITE FLATWORK JOINTS SHALL BE ALIGNED (STACKRED BOND PATTERN). CONTRACTOR SHALL SQUARE EACH PIECE OF STONE PRIOR TO INSTALLATION TO MAINTAIN A CONSISTENT AND MAX. JOINT WIDTH OF ¼" WIDE.
5.) ALL PROPOSED STONE FLATWORK SHALL BE SET ON A MIN. 1" THICK LATEX MODIFIED MORTAR SETTING BED, APPLY LATICRETE 254 PLATINUM THIN-SET TO THE BOTTOM OF EACH STONE AND TO THE CONCRETE BASE.

CONCRETE CONSTRUCTION:

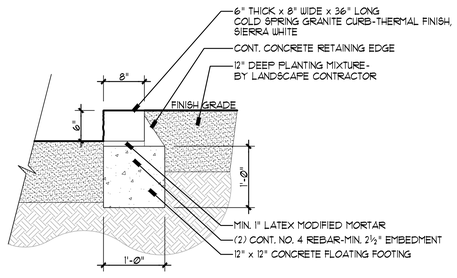
1.) THE CONTRACTOR SHALL LAYOUT PROPOSED EXPANSION FOR THE LANDSCAPE ARCHITECT'S OR CONSTRUCTION MANAGER'S APPROVAL PRIOR TO INSTALLATION.
2.) THE LANDSCAPE ARCHITECT OR CONSTRUCTION MANAGER SHALL APPROVE FINAL CONTRACTOR FORM WORK IN THE FIELD PRIOR TO POURING CONCRETE.
3.) ALL EXPANSION JOINTS SHALL BE PREMOULDED ½" WIDE AND INCLUDE EXPANSION JOINT MATERIAL. INCLUDE PREFABRICATED SNAP CAP. PROVIDE EXPANSION JOINTS EVERY 400 S.F. MAX.
4.) EXPANSION JOINT MATERIAL: RESILIENT, NON-EXTRUDING TYPE PREMOULDED BITUMINOUS IMPREGNATED FIBERBOARD.
5.) ALL EXPANSION JOINTS SHALL BE CAULKED WITH DOW CORNING 790 SILICONE SEALANT (COLOR: LIGHT GRAY). CONTRACTOR SHALL REMOVE AND DISPOSE SNAP CAP PRIOR TO CAULKING AND PROTECT/BARRACADE ALL CAULK JOINTS FROM TRAFFIC DURING CURING TIME.
6.) "MEDIUM BROOM FINISH ALL BROOM-FINISH CONCRETE-PULL BROOM ACROSS FRESHLY FLOATED CONCRETE TO PRODUCE MEDIUM TEXTURE IN STRAIGHT LINES PERPENDICULAR TO MAIN LINE OF TRAFFIC. DO NOT DAMPEN BROOMS. BROOMING DIRECTION SHOULD BE MAINTAINED IN THE SAME DIRECTION FOR EACH CONCRETE POUR.
7.) ALL CONTROL JOINTS SHALL BE MACHINE SAWCUT MIN. 1" DEEP, 2" DEEP EVERY 100 S.F. (NO HAND SAW PERMITTED). CONTROL JOINT LAYOUT SHALL BE EQUAL FLAGS, DIVIDE LENGTH EQUALLY BETWEEN EXPANSION JOINTS-SEE DRAWINGS FOR LAYOUT.
8.) CONCRETE STRENGTH FOR ALL PROPOSED CONCRETE FLATWORK SHALL BE MIN. 4000 PSI AND MIN. 3500 P.S.I. CONCRETE FOR ALL BROOM FINISH CONCRETE AT 28 DAYS, WITH A +/-6% AIR ENTRANMENT MIX DESIGN SHALL NOT HAVE LESS THAN 6.25 SACKS OF CEMENT PER CUBIC YARD.
9.) ALL PROPOSED SLEEVES SHALL BE SCHEDULE 40 PVC, EXTEND A MIN. 12" BEYOND PROPOSED PAVING EDGES, BURY A MIN. 12" BELOW PROPOSED FINISH GRADE, CAP ENDS, AND STAKE LOCATIONS (BOTH ENDS). CONTRACTOR SHALL SUPPLY LANDSCAPE ARCHITECT WITH AN AS-BUILT DRAWING ILLUSTRATING LOCATION OF ALL SLEEVES.
10.) ALL CONCRETE FLATWORK SHALL BE REINFORCED AS SPECIFIED, MIN. 2" EMBEDMENT.
11.) THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED EARTHWORK AND EXCAVATIONS TO PERFORM SCHEDULED WORK. ALL EXCAVATED MATERIALS SHALL BE GRADED IN PLACE (ON-SITE) IN PARK AS DIRECTED BY LANDSCAPE ARCHITECT, INCLUDED IN THE SUBMITTED BID PROPOSAL.
12.) THE CONTRACTOR SHALL INSTALL ALL PROPOSED WORK ON COMPACTED OR UNDISTURBED SUBGRADE.
13.) THE CONTRACTOR SHALL FORM ALL PROPOSED CONCRETE BASE WORK AND FOOTINGS TO MINIMIZE OVERPOURS. ALL FORMS SHALL BE REMOVED AND LEGALLY DISPOSED OFF-SITE.
14.) THE CONTRACTOR SHALL PROTECT AND COVER ALL STORM CATCH BASINS WITH 8 OZ. NON-WOVEN GEOTEXTILE FILTER FABRIC PRIOR TO WASHING EXPOSED AGGREGATE CONCRETE TO INSURE CEMENT CREAM AND SAND DO NOT ENTER BASINS.
15.) ALL EXPOSED AGGREGATE CONCRETE SHALL BE POWERWASHED AFTER INITIAL CURE TO REMOVE ANY 'HAZE' AND SEAL WITH EUCLID CHEMICAL CO. SUPER DIAMOND CLEAR 350 SEALER PER MANUFACTURERS SPECIFICATION. CONTRACTOR SHALL PROTECT/BARRACADE ALL SEALED AREAS FROM PEDESTRIAN AND VEHICULAR TRAFFIC DURING CURE TIME.
16.) CONCRETE MIX DESIGNS
  A.) BROOM FINISH CONCRETE:
    SAND: 2NS SAND, ASTM C-33 1350 LBS
    COURSE AGGREGATE: 6AA LIMESTONE PRESQUE ISLE ASTM C-33 1680 LBS
    CEMENT: TYPE I, ASTM C150 588 LBS
    WATER: CITY TAP WATER 31.5 GALS.
    ADMIXTURE: ASTM C260, DAREX AEA BY W.R. GRACE CO. 1.30Z/CU YD.
  B.) EXPOSED AGGREGATE CONCRETE:
    SAND: 2NS SAND, ASTM C-33 1080 LBS
    COURSE AGGREGATE: 17A ASTM C-33 1380 LBS
    CEMENT: TYPE I, ASTM C150 588 LBS
    WATER: CITY TAP WATER 31.5 GALS.
    ADMIXTURE: ASTM C260, DAREX AEA BY W.R. GRACE CO. 1.30Z/CU YD.
    *PEBBLE, WASHED, SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL
17.) FOR ALL EXPOSED AGGREGATE CONCRETE SURFACE SHALL BE EXPOSED BY USE OF SURFACE RETARDANT "PRECO EAC-9" OR APPROVED EQUAL; CONCRETE SHALL BE PLACED, LEVELED AND FLOATED IN A NORMAL FASHION (SEEDING WILL NOT BE PERMITTED.) IMMEDIATELY AFTER THE SLAB HAS BEEN SCREENED AND DARBLED, THE AGGREGATE SHALL BE WASHED IN A UNIFORM MANNER UNTIL ALL AGGREGATE IS LEFT JUST ABOVE THE SURFACE, LEAVING NO HOLES OR OPENINGS IN THE SURFACE. THE SURFACE SHALL THEN BE BRUSHED AND WASHED UNTIL ALL AGGREGATE IS EXPOSED AND FREE OF CEMENT FILM. AFTER INITIAL CURING APPLY SPECIFIED SEALER.



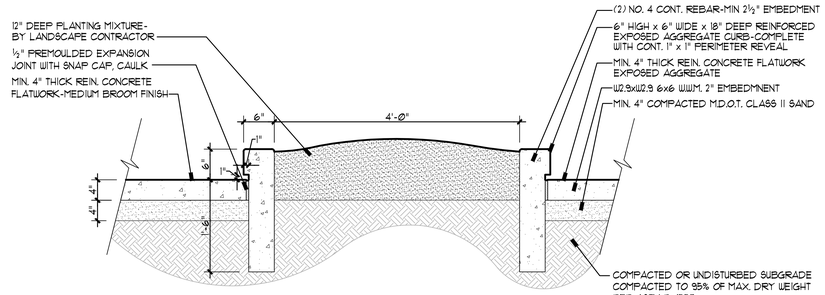
A / L2 PEDESTRIAN WALK/SLEEVE DETAIL
Section — Scale: 1"=1'-0"



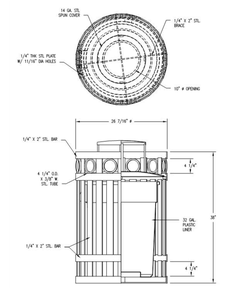
B / L2 BLUESTONE ENTRANCE DETAILS
Section — Scale: 1"=1'-0"



C / L2 GRANITE CURB DETAIL
Section — Scale: 1"=1'-0"

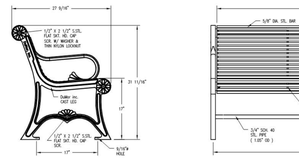


F / L2 PLANTER CURB DETAIL
Section — Scale: 1"=1'-0"

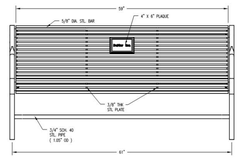


NOTES:
1.) ALL STEEL MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED WITH POLYESTER POWDER COATING: CUSTOM 'BIRMINGHAM GREEN'
2.) ½" x 3¾" EXPANSION ANCHOR BOLTS PROVIDED

G / L2 DUMOR TRASH RECPTACLE
CITY STD. 63-947-32 W/0-3947-30-BT-1
Details — No Scale

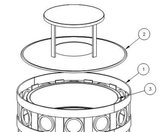


H / L2 DUMOR BENCH
CITY STD. 19-50-Q30
Details — No Scale



NOTES:
1.) ALL STEEL MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED WITH POLYESTER POWDER COATING: CUSTOM 'BIRMINGHAM GREEN'
2.) ½" x 3¾" EXPANSION ANCHOR BOLTS PROVIDED

i / L2 CUSTOM BENCH LETTERING
Details — No Scale



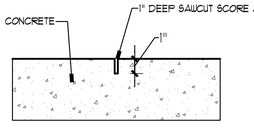
1. 0-3947-30-01: 30 GAL. STL. RECEPTACLE BODY
2. 0-3947-30-BT-1: 30 GAL. BONNET TOP W/OLD FLAT COVER
3. 49-32 32 PL. LINER W/HANDLE, BLACK

J / L2 TRASH BONNET TOP
Details — No Scale

MACHINE CUT ALL JOINTS, HAND SAW MILL WILL NOT BE PERMITTED

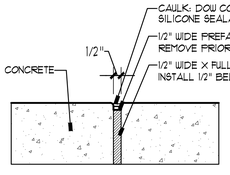
SAWCUT CONTROL JOINTS AT 2" DEPTH EVERY 200 S.F. MAX.

CONTROL JOINTS SHALL BE SPACED AS SHOWN ON PLANS SEE SHT. L1: CONSTRUCTION SITE PLAN



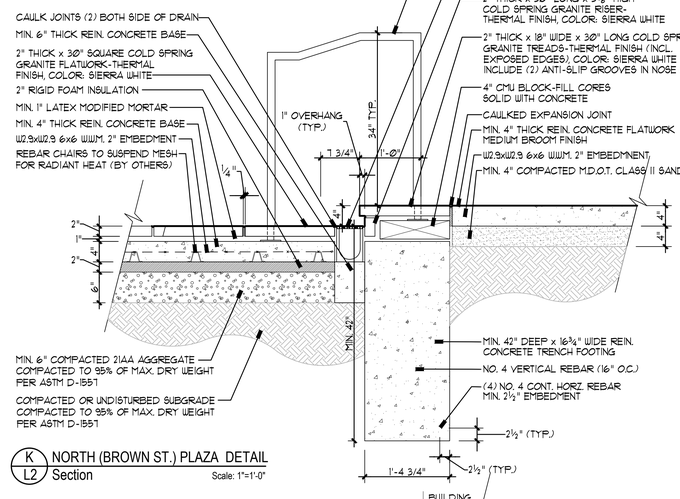
D / L2 CONTROL JOINT DETAIL
Section — Scale: 3"=1'-0"

EXPANSION JOINTS SHALL BE INSTALLED WHERE CONCRETE ABUTS A STRUCTURE, SPACED A MAX. 400 S.F.

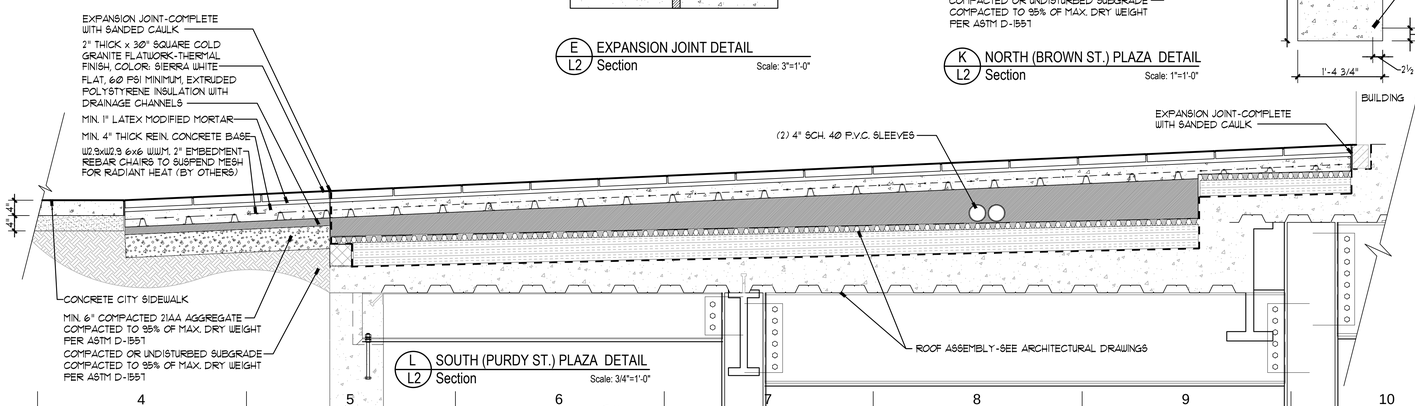


E / L2 EXPANSION JOINT DETAIL
Section — Scale: 3"=1'-0"

NOTE: ENTIRE NORTH (BROWN ST.) PLAZA FLATWORK AND STAIRCASE TREAD SHALL HAVE RADIANT HEAT SYSTEM EMBEDDED IN CONCRETE-INCLUDE UNDER TRENCH DRAIN



K / L2 NORTH (BROWN ST.) PLAZA DETAIL
Section — Scale: 1"=1'-0"



L / L2 SOUTH (PURDY ST.) PLAZA DETAIL
Section — Scale: 3/4"=1'-0"

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TAKE-OFFS AND NO ADJUSTMENTS WILL BE MADE TO THE CONTRACT PRICE BASED ON ACTUAL QUANTITIES USED (SUBJECT TO CHANGES APPROVED BY THE LANDSCAPE ARCHITECT AND UNIT PRICE SCHEDULE).

Know what's below. Call before you dig.

RH

RH DETROIT
300 S Old Woodward
Birmingham, MI 48009

LANDSCAPE ARCHITECTURE

MICHAEL J. DUL & ASSOCIATES, INC

212 DAINES STREET
BIRMINGHAM
MICHIGAN 48009

P 248 644 3410
F 248 644 0819

MICHAEL J. DUL
LANDSCAPE ARCHITECT
NO. 781
REGISTERED LANDSCAPE ARCHITECT

SAROKI ARCHITECTURE
430 N. OLD WOODWARD
BIRMINGHAM, MI
48009
P. 248.258.5707
F. 248.258.5515
SarokiArchitecture.com

Project:
RH / Mixed-Use
300 S Old Woodward
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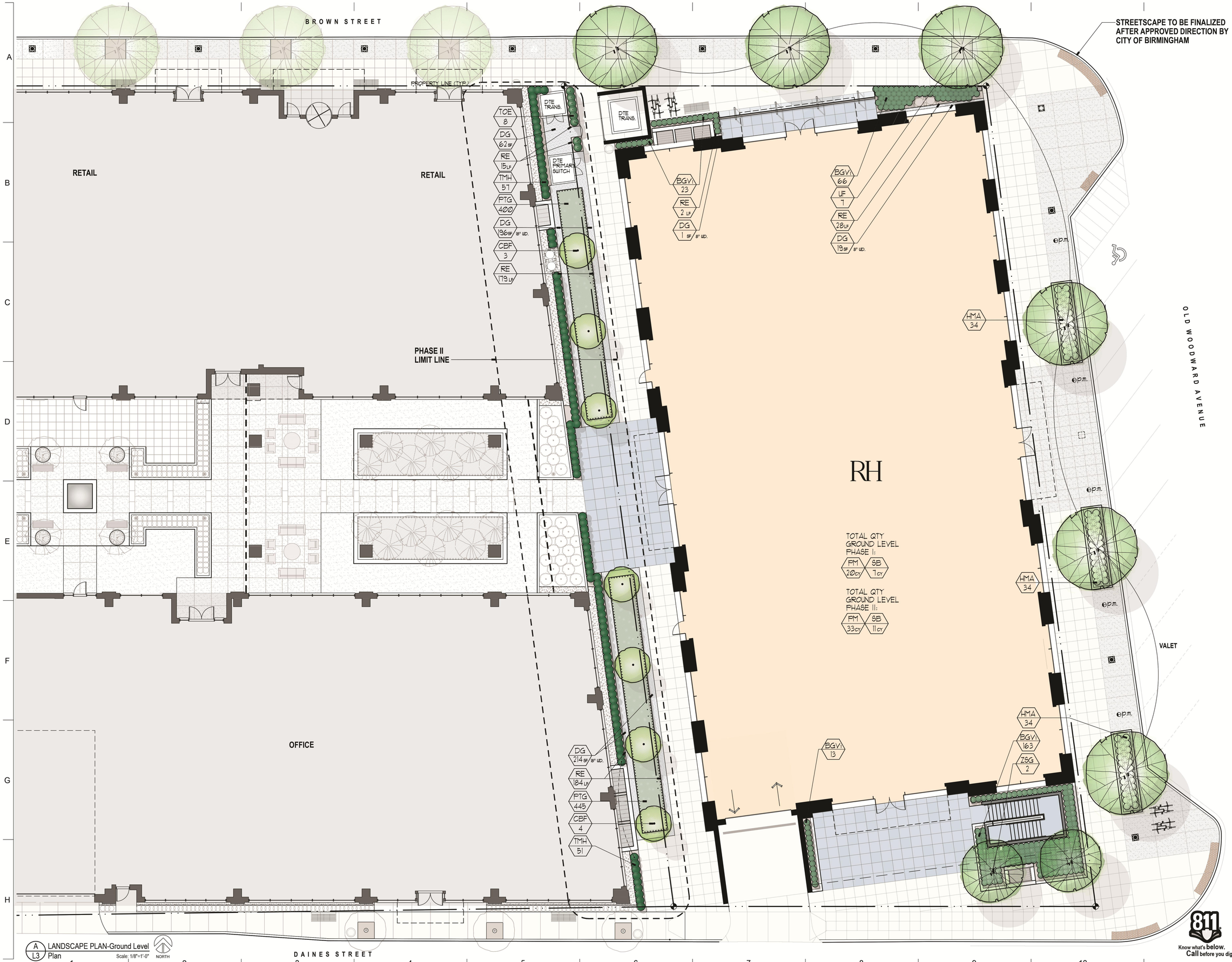
11-18-2022	Final Site Plan Submittal
02-27-2023	City Commission

Sheet No.:
L2
SITE DETAILS & SPECIFICATIONS



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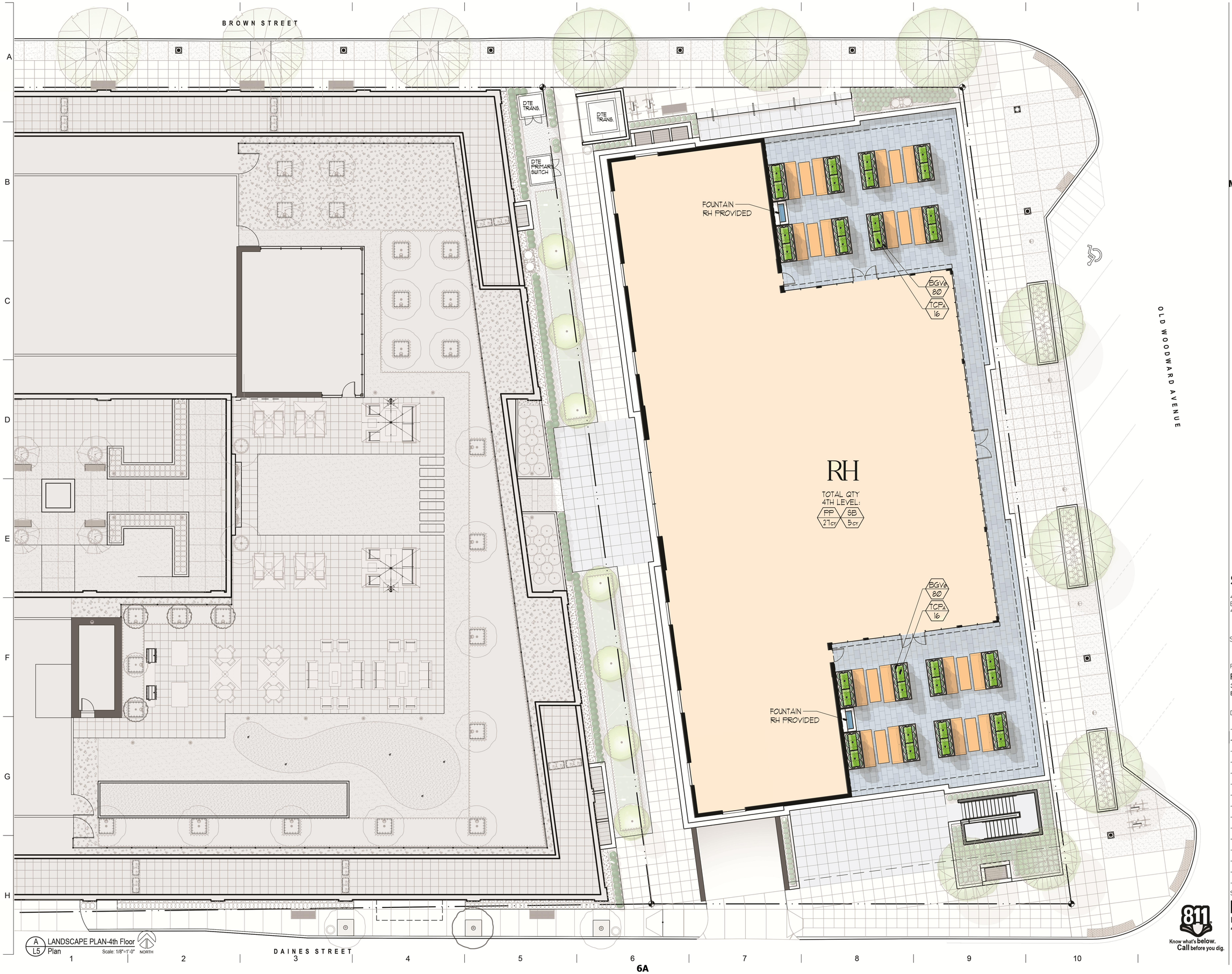
Sheet No.:
L3
LANDSCAPE PLAN-Ground Level



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Sheet No.:
L4.1
LANDSCAPE PLAN-4th Floor

PLANT & MATERIAL SCHEDULE

Sym.	Qty.	Botanical Name	Common Name	Size	Root	Comments
GROUND LEVEL-PHASE I						
		Deciduous Trees				
UF	7	Ulmus carpinifolia x parvifolia 'Frontier'	Frontier Hybrid Elm	3½-4" cal.	B&B	MATCHED SPECIMENS-Full heads
ZSG	2	Zelkovia serrata 'Green Vase'	Green Vase Japanese Zelkovia	3½-4" cal.	B&B	MATCHED SPECIMENS-Full heads
		Shrubs				
BGV1	267	Buxus x microphylla 'Green Velvet'	Green Velvet Boxwood	18-24"	B&B	Space 15" o.c., maintain as clipped mass
		Perennials/Groundcovers				
HMA	102	Hakonecholoa macra 'All Gold'	All Gold Japanese Forest Grass	1 gal.	Can	Space 15" o.c.
		Materials				
DG	20 sf	¼" minus Decomposed Granite-2" compacted depth and washed on a min. 6" deep 21AA Limestone aggregate on 4 oz. non-woven filter fabric				
RE	30 lf	3/16" x 4" J.D. Russell Steel Edging (BLACK)-install per manufacturer's specifications				
SB	7 cy	Shredded hardwood bark mulch (seasoned, dark brown), 3" deep in perennial and groundcover beds, 4" depth in shrub/tree beds.				
PM	20 cy	Planting mix - 3 parts well drained screened imported topsoil, to 1 part clean sand, to 1 part Canadian sphagnum peat moss, to 1 part natural compost (weed-free), and 10% poultry manure, install 12" deep in all planting beds				
GROUND LEVEL-PHASE II						
		Deciduous Trees				
CBF	7	Carpinus betulus 'Frans Fontaine'	Frans Fontaine Hornbeam	3-3½" cal.	B&B	MATCHED SPECIMENS-Single stem
		Shrubs				
TMH	108	Taxus x media 'Hatfield' or 'Moon'	Hatfield or Moon Yew	30-36"	B&B	Space 18" o.c., clip into hedge
TOE	8	Thuja occidentalis 'Emerald'	Emerald Green Arborvitae	6-7' ht.	B&B	Space 18" o.c., clip into hedge
		Perennials/Groundcovers				
PTG	845	Pachysandra terminalis 'Green Carpet'	Green Carpet Pachysandra	1 gal.	Can	Space 12" o.c., acidify soil
		Materials				
DG	472 sf	¼" minus Decomposed Granite-2" compacted depth and washed on a min. 6" deep 21AA Limestone aggregate on 4 oz. non-woven filter fabric				
RE	378 lf	3/16" x 4" J.D. Russell Steel Edging (BLACK)-install per manufacturer's specifications				
SB	11 cy	Shredded hardwood bark mulch (seasoned, dark brown), 3" deep in perennial and groundcover beds, 4" depth in shrub/tree beds.				
PM	33 cy	Planting mix - 3 parts well drained screened imported topsoil, to 1 part clean sand, to 1 part Canadian sphagnum peat moss, to 1 part natural compost (weed-free), and 10% poultry manure, install 12" deep in all planting beds				
4TH LEVEL						
		Deciduous Trees (All Pleached Trees shall be contract grown William F Hammell Nurseries 610-942-8733. All Pleached Trees tagged by RH)				
TCPA	32	Tilia cordata-PLEACHED	PLEACHED Littleleaf Linden	3-4" cal.	B&B	MATCHED SPECIMENS-Single stem Consistent60" branch height, 24" wd. x 48" lg. x 78" high canopies, Space 48" o.c.
		Shrubs				
BGVe	160	Buxus x microphylla 'Green Velvet'	Green Velvet Boxwood	18-24"	B&B	Cubed at 18" x 20" plants-space 18" o.c. east to west and 20" north to south
		Materials				
SB	5 cy	Shredded hardwood bark mulch (seasoned, dark brown), 3" deep in perennial and groundcover beds, 4" depth in shrub/tree beds.				
PP	27 cy	Planter mix - PRO-MIX 'BRK' Planter Soil Mix-install full depth in all planters (ave. 26" deep). 9.67 bags (2.8 c.f.) per c.y. (262 bags required) Include 4 oz. non-woven filter fabric soil separator-wrap sides of planter and irrigation sleeves,				
	5 cy	Include min. 3" deep 6A Limestone drainage aggregate at base				

LANDSCAPE DEVELOPMENT NOTES

1.) ALL EXISTING AND/OR PROPOSED SITE UTILITIES SHALL BE FIELD LOCATED, FLAGGED, AND VERIFIED PRIOR TO ANY LANDSCAPE OR IRRIGATION CONSTRUCTION.

2.) ALL SPECIFIED AND INSTALLED PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH AMERICAN NURSERYMAN STANDARDS (LATEST EDITION) AND BE:

A.) NURSERY GROWN.
B.) STATE DEPARTMENT OF AGRICULTURE INSPECTED AND APPROVED.
C.) NO. 1 GRADE WITH STRAIGHT, UNSCARRED TRUNKS & WELL-DEVELOPED UNIFORM CROWNS ON TREES.
D.) WARRANTED FOR A MIN. 1 YEAR FROM DATE OF ACCEPTANCE

3.) SPECIFIED PLANTING SOIL MIXTURE FOR ALL SPECIFIED BEDS & PLANTS SHALL BE THREE (3) PARTS IMPORTED WELL-DRAINED, SCREENED ORGANIC TOPSOIL, TO ONE (1) PART IMPORTED CLEAN SAND, TO ONE (1) PART CANADIAN SPHAGNUM PEAT MOSS, TO ONE (1) PART NATURAL COMPOST (WEED-FREE)-COMPLETE WITH 10% NATURAL POULTRY MANURE. INSTALL 12" MINIMUM DEPTH IN ALL PERENNIAL, GROUNDCOVER, ANNUAL, AND SHRUB BEDS. ALL BEDS MUST BE EXCAVATED, REMOVE AND DISPOSE (OFF-SITE) EXISTING EARTH/SOIL TO ACCEPT PROPOSED PLANT MIXTURE.

4.) PROPOSED SHREDDED HARDWOOD BARK MULCH SHALL BE SEASONED FOR A MINIMUM 6 MONTHS, DARK BROWN IN COLOR, AND INSTALLED 4" DEEP UNDER ALL PROPOSED TREES (INCLUDED IN UNIT COST), 4" DEEP IN ALL SHRUB AND TREE BEDS, AND 3" DEEP IN ALL PERENNIAL AND GROUNDCOVER BEDS.

5.) ALL PROPOSED LAWN AND LANDSCAPE AREAS SHALL BE WATERED BY AN AUTOMATICALLY OPERATED SPRINKLER IRRIGATION SYSTEM, SEE IRRIGATION PLAN(S).

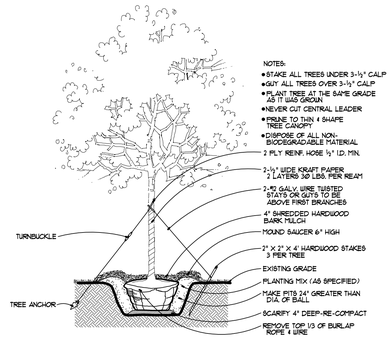
6.) ALL PROPOSED "SPECIMEN" PLANT MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION AND/OR DELIVERY TO THE SITE.

7.) THE LANDSCAPE CONTRACTOR SHALL KEEP THE STREET AND DRIVE CLEAN AND FREE OF DIRT AND DEBRIS AT ALL TIMES, AND SHALL THOROUGHLY SWEEP AND/OR WASH THE DRIVE AT THE END OF EACH WORK DAY.

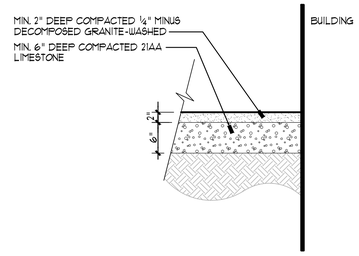
8.) THE LANDSCAPE CONTRACTOR SHALL STAKE THE LOCATION OF ALL PROPOSED TREES FOR THE LANDSCAPE ARCHITECT TO APPROVE PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ALSO SET ON-SITE ALL SHRUBS, PERENNIALS, ORNAMENTAL GRASSES, VINES, AND GROUNDCOVERS AS PER PLAN FOR THE LANDSCAPE ARCHITECT TO APPROVE PRIOR TO PLANTING.

9.) ALL DEAD AND UNACCEPTABLE PLANT MATERIALS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR DURING THE WARRANTY PERIOD. THE WARRANTY PERIOD SHALL BE ONE (1) YEAR FROM THE ACCEPTANCE OF INSTALLATION ISSUED BY THE LANDSCAPE ARCHITECT.

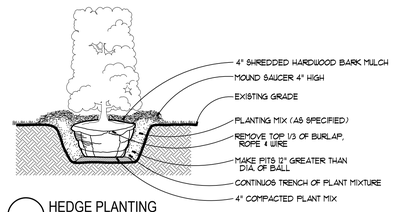
10.) PROPOSED SOD LAWN AREAS: FINE GRADE EXISTING TOPSOIL, REMOVE AND DISPOSE (OFF-SITE) EXISTING ROOTS, ROCKS, AND DEBRIS, INCLUDE IMPORTING A MIN. 3" (AVE.) IMPORTED SCREENED TOPSOIL TO FINE GRADE ALL AREAS
FERTILIZE-MIN. 1 APPLICATION: STARTER FERTILIZER (13-26-12) WITH 50% SLOW RELEASE NITROGEN AT INITIAL INSTALLATION OF SOD RATE OF 5 LBS. PER 1,000 SF. OR 218 LBS. PER ACRE



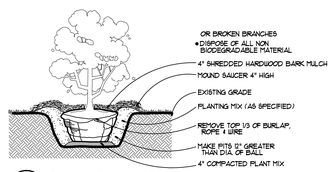
DECIDUOUS TREE PLANTING
Section — No Scale



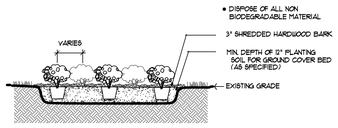
A / L5 DECOMPOSED GRANITE DETAIL
Section — Scale 1"=1'-0"



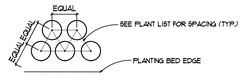
HEDGE PLANTING
Section — No Scale



SHRUB PLANTING
Section — No Scale



GROUNDCOVER/PERENNIAL PLANTING
Section — No Scale



GROUNDCOVER/PERENNIAL PLANTING
Plan — No Scale

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TAKE-OFFS AND NO ADJUSTMENTS WILL BE MADE TO THE CONTRACT PRICE BASED ON ACTUAL QUANTITIES USED (SUBJECT TO CHANGES APPROVED BY THE LANDSCAPE ARCHITECT AND UNIT PRICE SCHEDULE).

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Birmingham, MI 48009

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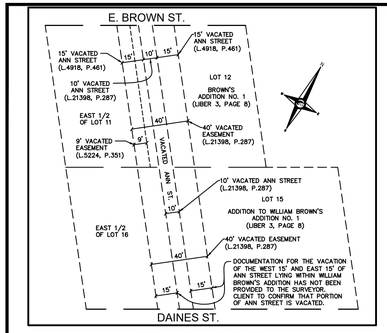
L5
LANDSCAPE DETAILS & SPECIFICATIONS



ANN STREET SKETCH

1" = 50'

FLOOD HAZARD NOTE

THE PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE PROPERTY LIES WITHIN ZONE X OF THE FLOOD INSURANCE RATE MAP IDENTIFIED AS MAP NO. 26125C0537F BEARING AN EFFECTIVE DATE OF 09–29–2006.

MISS DIG / UTILITY DISCLAIMER NOTE

A MISS DIG TICKET NUMBER A003240501, PURSUANT TO MICHIGAN PUBLIC ACT 174 WAS ENTERED FOR THE SURVEYED PROPERTY. DUE TO THE EXTENDED REPORTING PERIOD FOR UNDERGROUND FACILITY OWNERS TO PROVIDE THEIR RECORDS, THE SURVEY MAY NOT REFLECT ALL THE UTILITIES AT THE TIME THE SURVEY WAS ISSUED ON DECEMBER 29, 2020. THE SURVEY ONLY REFLECTS THOSE UTILITIES WHICH COULD BE OBSERVED BY THE SURVEYOR IN THE FIELD OR AS DEPICTED BY THE UTILITY COMPANY RECORDS FURNISH PRIOR TO THE DATE THIS SURVEY WAS ISSUED. THE CLIENT AND/OR THEIR AUTHORIZED AGENT SHALL VERIFY WITH THE FACILITY OWNERS AND/OR THEIR AUTHORIZED AGENTS, THE COMPLETENESS AND EXACTNESS OF THE UTILITIES LOCATION.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

ALTA SURVEY NOTES

THERE IS NO VISIBLE EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

THERE IS NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES AND THERE IS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIR.

THERE IS NO VISIBLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.

THERE IS NO VISIBLE EVIDENCE OF ANY WETLAND AREAS.

LOCATION OF UTILITIES EXISTING ON OR SERVING THE PROPERTY AS DETERMINED BY: OBSERVED EVIDENCE OR EVIDENCE FROM PLANS REQUESTED BY THE SURVEYOR AND OBTAINED FROM UTILITY COMPANIES.

THE SUBJECT PROPERTY HAS ACCESS TO S. OLD WOODWARD AVENUE, E. BROWN STREET AND DAINES STREET, ALL BEING A PUBLICLY DEDICATED ROAD.

BASIS OF BEARING NOTE

ALL BEARINGS ARE IN RELATION TO THE PREVIOUSLY ESTABLISHED SOUTH RIGHT–OF–WAY LINE OF STREET (60' WIDE) (NOW KNOWN AS BROWN STREET) OF BROWN'S ADDITION AS RECORDED IN LIBER 3 OF PLATS, PAGE 8, OAKLAND COUNTY RECORDS. (N.62°E.)

DATUM NOTE

ALL ELEVATIONS SHOWN HEREON ARE ON THE CITY OF BIRMINGHAM'S VERTICAL DATUM, REFERENCED HEREON, IS ONE (1.00) FOOT HIGHER THAN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D. 88).

SURVEY DATA

SITE AREA:

PARCEL I:	13,818.22 SQUARE FEET OR 0.317 ACRES
PARCEL II:	18,892.06 SQUARE FEET OR 0.433 ACRES
PARCEL 2:	13,204.93 SQUARE FEET OR 0.303 ACRES
PARCEL 3:	8,137.75 SQUARE FEET OR 0.187 ACRES
TOTAL:	54,052.96 SQUARE FEET OR 1.24 ACRES

ZONED:
B2, GENERAL BUSINESS DISTRICT

PARKING SPACES:

PARCEL I:	9 REGULAR SPACES
PARCEL II:	46 REGULAR SPACES AND 3 BARRIER–FREE SPACES
PARCEL 2:	20 REGULAR SPACES AND 1 BARRIER–FREE SPACE
PARCEL 3:	NO ON–SITE PARKING SPACES

A SURVEYOR CANNOT MAKE A CERTIFICATION ON THE BASIS OF AN INTERPRETATION OR OPINION OF ANOTHER PARTY. A ZONING ENDORSEMENT LETTER SHOULD BE OBTAINED FROM THE CITY OF BIRMINGHAM TO INSURE CONFORMITY AS WELL AS MAKE A FINAL DETERMINATION OF THE REQUIRED BUILDING SETBACK REQUIREMENTS.

DTE DISCLAIMER NOTE

PLEASE NOTE THAT DTE HAS NEW REGULATIONS THAT MAY IMPACT DEVELOPMENT OUTSIDE THEIR EASEMENT OR THE PUBLIC RIGHT OF WAY. CLIENT SHALL CONTACT DTE TO DETERMINE THE "NEW STRUCTURES AND POWER LINE" REQUIREMENTS AS THEY MAY APPLY TO ANY FUTURE BUILDING OR RENOVATION OF A STRUCTURE. DTE ENERGY CAN BE CONTACTED AT 800–477–4747

LEGAL DESCRIPTION - PARCEL 2 (PER TITLE COMMITMENT)

LAND IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MI, DESCRIBED AS FOLLOWS:

THE EASTERLY 50 FEET OF LOT 12, AND THE WESTERLY PART OF LOT 13, MEASURING 82.45 FEET ON THE NORTH LOT LINE AND 82.48 FEET ON THE SOUTH LOT LINE OF BROWN'S ADDITION SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS.

ADDRESS: 300 S. OLD WOODWARD AVENUE, BIRMINGHAM, MI 48009

TAX ID NUMBER: 19–36–204–006

TITLE REPORT NOTES - PARCEL 2

REFERENCE FIRST AMERICAN TITLE INSURANCE COMPANY FILE NUMBER: 910055, COMMITMENT DATE: DECEMBER 21, 2020, REVISION B.

SCHEDULE B, PART II, EXCEPTIONS:

EXCEPTIONS: 1, 4, 5, 6, 7, 8, 10, 11, 14 AND 15 REFER TO THE OWNERSHIP OF THE PROPERTY AND/OR ARE NOT PLOTTABLE.

2. ANY FACTS, RIGHTS, INTERESTS OR CLAIMS NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY MAKING INQUIRY OF PERSONS IN POSSESSION THEREOF OF THE LAND.

3. EASEMENTS, ENCUMBRANCES, OR CLAIMS THEREOF, NOT SHOWN BY THE PUBLIC RECORDS.

9. TERMS AND CONDITIONS CONTAINED IN RESOLUTION AS DISCLOSED BY INSTRUMENT RECORDED IN LIBER 8715, PAGE 137. (NO EASEMENTS OR RESTRICTIONS WITHIN SAID DOCUMENT, NOT PLOTTED)

12. INTEREST, IF ANY, OF THE UNITED STATES, STATE OF MICHIGAN, OR ANY POLITICAL SUBDIVISION THEREOF, IN THE OIL, GAS AND MINERALS IN AND UNDER AND THAT MAY BE PRODUCED FROM THE CAPTIONED LAND.

13. RIGHTS OF TENANTS, IF ANY, UNDER ANY UNRECORDED LEASES.

LEGAL DESCRIPTION - PARCEL 3 (PER TITLE COMMITMENT)

LAND IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MI, DESCRIBED AS FOLLOWS:

LOT(S) 14, EXCEPT THAT PART TAKEN FOR WIDENING WOODWARD AVENUE OF ADDITION TO WILLIAM BROWN'S ADDITION NO. 1 ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS.

ADDRESS: 394 S. OLD WOODWARD AVENUE, BIRMINGHAM, MI 48009

TAX ID NUMBER: 19–36–204–014

TITLE REPORT NOTES - PARCEL 3

REFERENCE FIRST AMERICAN TITLE INSURANCE COMPANY FILE NUMBER: 910145, COMMITMENT DATE: DECEMBER 21, 2020, REVISION: A.

SCHEDULE B, PART II, EXCEPTIONS:

EXCEPTIONS: 1, 4, 5, 6, 7, 9, 10, 13 AND 14 REFER TO THE OWNERSHIP OF THE PROPERTY AND/OR ARE NOT PLOTTABLE.

2. ANY FACTS, RIGHTS, INTERESTS OR CLAIMS NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY MAKING INQUIRY OF PERSONS IN POSSESSION THEREOF OF THE LAND.

3. EASEMENTS, ENCUMBRANCES, OR CLAIMS THEREOF, NOT SHOWN BY THE PUBLIC RECORDS.

8. TERMS AND CONDITIONS CONTAINED IN RESOLUTION AS DISCLOSED BY INSTRUMENT RECORDED IN LIBER 8715, PAGE 137. (NO EASEMENTS OR RESTRICTIONS WITHIN SAID DOCUMENT, NOT PLOTTED)

11. INTEREST, IF ANY, OF THE UNITED STATES, STATE OF MICHIGAN, OR ANY POLITICAL SUBDIVISION THEREOF, IN THE OIL, GAS AND MINERALS IN AND UNDER AND THAT MAY BE PRODUCED FROM THE CAPTIONED LAND.

12. RIGHTS OF TENANTS, IF ANY, UNDER ANY UNRECORDED LEASES.

CERTIFICATE OF SURVEY

CERTIFIED TO:

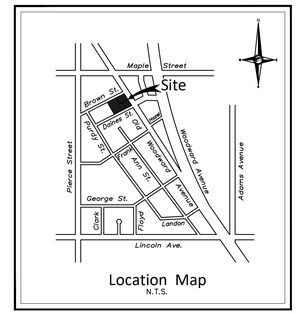
–PURCHASER'S ASSIGNEE
–TROTT PROPERTIES 294, LLC, A MICHIGAN LIMITED LIABILITY COMPANY, AS TO PARCEL 1
–BRB EQUITIES, L.L.C., AS TO PARCEL 2
–FRANK T. KONJAREVICH OR LOIS H. KONJAREVICH (OR SUCCESSOR TRUSTEE) AS THE TRUSTEE FOR THE FRANK T. KONJAREVICH REVOCABLE LIVING TRUST DATED MAY 22, 1995, AS TO PARCEL 3
–FIRST AMERICAN TITLE INSURANCE COMPANY AND EACH OF THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS AS THEIR INTERESTS MAY APPEAR

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDE ITEMS 1, 2, 3, 4, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 11, 13, 14, 16, 17, 18 AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON DECEMBER 16, 2020.

1–24–2021

KEVIN NAVAROLI, P.S. NO. 4001053503 DATE

STATE OF MICHIGAN
KEVIN CHRISTOPHER NAVAROLI
License No. 4001053503
LICENSED PROFESSIONAL SURVEYOR



Location Map
N.T.S.

LEGAL DESCRIPTION - PARCELS I & II (PER TITLE COMMITMENT)

LAND IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MI, DESCRIBED AS FOLLOWS:

PARCEL I:
THE EAST 1/2 OF LOT(S) 11 OF BROWN'S ADDITION TO THE CITY OF BIRMINGHAM AND THE EAST 1/2 OF LOT 16 OF BROWN'S ADDITION NO. 1, IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS, INCLUDING THE VACATED WEST 20 FEET OF ANN STREET ADJOINING LOT 11 AND THE VACATED WEST 19 FEET OF ANN STREET ADJOINING LOT 16.

PARCEL II:
THE WEST 1/2 OF LOT(S) 12 OF BROWN'S ADDITION TO THE VILLAGE (NOW CITY) OF BIRMINGHAM, OF PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 36, TOWN 2 NORTH, RANGE 10 EAST, TOWNSHIP OF BLOOMFIELD (NOW CITY OF BIRMINGHAM), OAKLAND COUNTY, MICHIGAN ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS, ALSO LOT 15, ADDITION TO WILLIAM BROWN'S ADDITION NO. 1, BEING A PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 36, TOWN 2 NORTH, RANGE 10 EAST ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 3 OF PLATS, PAGE 8 OF OAKLAND COUNTY RECORDS, INCLUDING VACATED 20 FEET OF ANN STREET, ADJOINING THE WESTERLY SIDE OF LOT 12 AND VACATED 21 FEET OF ANN STREET ADJOINING THE WESTERLY SIDE OF LOT 15.

ADDRESS: 294 E. BROWN STREET, BIRMINGHAM, MI 48009

TAX ID NUMBER: 19–36–204–021

TITLE REPORT NOTES - PARCELS I & II

REFERENCE FIRST AMERICAN TITLE INSURANCE COMPANY FILE NUMBER: 915853, COMMITMENT DATE: DECEMBER 8, 2020.

SCHEDULE B, PART II, EXCEPTIONS:

EXCEPTIONS: 1, 4, 5, 6, 7, 8 AND 16 REFER TO THE OWNERSHIP OF THE PROPERTY AND/OR ARE NOT PLOTTABLE.

2. ANY FACTS, RIGHTS, INTERESTS OR CLAIMS NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY MAKING INQUIRY OF PERSONS IN POSSESSION THEREOF OF THE LAND.

3. EASEMENTS, ENCUMBRANCES, OR CLAIMS THEREOF, NOT SHOWN BY THE PUBLIC RECORDS.

9. TERMS AND CONDITIONS CONTAINED IN RESOLUTION AS DISCLOSED BY INSTRUMENT RECORDED IN LIBER 8715, PAGE 137. (NO EASEMENTS OR RESTRICTIONS WITHIN SAID DOCUMENT, NOT PLOTTED)

10. TERMS AND CONDITIONS CONTAINED IN RESOLUTION AS DISCLOSED BY INSTRUMENT RECORDED IN LIBER 5224, PAGE 351. (SAID VACATED EASEMENT IS PLOTTED HEREON)

11. EASEMENT FOR UTILITIES OVER THAT PORTION OF LAND INCLUDED IN THE VACATED ANN STREET AS EVIDENCED BY INSTRUMENT RECORDED IN LIBER 4918, PAGE 461 (SAID VACATED ANN STREET & RETAINED EASEMENT ARE PLOTTED HEREON) AND LIBER 21398, PAGE 287 (SIZE AND LOCATION OF DETROIT EDISON EASEMENT IS UNKNOWN. NOT PLOTTED.).

12. EASEMENT(S), RESTRICTIONS AND/OR SETBACK LINES, IF ANY, AS DISCLOSED BY THE RECORDED PLAT.

13. INTEREST OF OTHERS IN OIL, GAS AND MINERAL RIGHTS, IF ANY, WHETHER OR NOT RECORDED IN THE PUBLIC RECORDS.

14. INTEREST, IF ANY, OF THE UNITED STATES, STATE OF MICHIGAN, OR ANY POLITICAL SUBDIVISION THEREOF, IN THE OIL, GAS AND MINERALS IN AND UNDER AND THAT MAY BE PRODUCED FROM THE CAPTIONED LAND.

15. RIGHTS OF TENANTS, IF ANY, UNDER ANY UNRECORDED LEASES.

NOTE: DOCUMENTATION FOR THE VACATION OF THE WEST 15 FEET AND EAST 15 FEET OF ANN STREET LYING WITHIN WILLIAMS BROWN'S ADDITION HAS NOT BEEN PROVIDED TO THE SURVEYOR. CLIENT TO CONFIRM THAT PORTION OF ANN STREET IS VACATED.

LEGEND

MANHOLE(MH)	EXISTING SANITARY SEWER
CO	EXISTING SAN. CLEAN OUT
HYDRANT(HYD) / GATE VALVE(GVW)	EXISTING WATER MAIN
MANHOLE(MH) / CATCH BASIN(CB)	EXISTING STORM SEWER
CBB	EX. BEEHIVE CATCH BASIN
	EX. UNDERGROUND (UG.) CABLE
UTILITY POLE / GUY POLE / GUY WIRE / UP	OVERHEAD (OH.) LINES
LP	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
ASPH.	ASPHALT
CONC.	CONCRETE
FD. / FND.	FOUND
RET. WALL	RETAINING WALL
R.O.W.	RIGHT–OF–WAY
SPK	SET PK NAIL
(TYP)	TYPICAL
(R)	RECORD
(M)	MEASURED
C/L	CENTERLINE
P/L	PROPERTY LINE
GM	GAS METER
EM	ELECTRIC METER
PM	PARKING METER
AC	AIR CONDITIONING UNIT
LS	LANDSCAPE

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

PROJECT
Restoration Hardware
Birmingham, MI

CLIENT
Saroki Architecture
430 N. Old Woodward Ave.
Birmingham, MI 48009

Contact: Victor Saroki
Phone: 248.258.5707

PROJECT LOCATION
Part of the NE 1/4
of Section 36
T.2N., R.10E.,
City of Birmingham,
Oakland County, Michigan

SHEET
ALTA/NSPS Land Title /
Topographic Survey

811
Know what's below
Call before you dig.

DATE	ISSUED/REVISED
11-18-2022	FINAL SITE PLAN SUBMITTAL

DRAWN BY:
M. Carnaghi

DESIGNED BY:

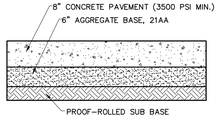
APPROVED BY:
K. Navaroli

DATE:
November 18, 2022

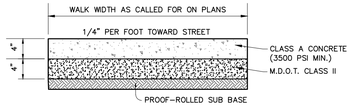
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. M106

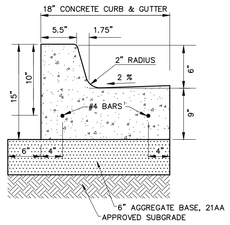
SHEET NO. SP-1



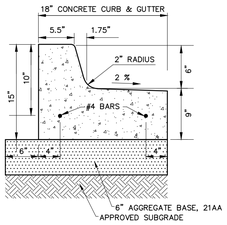
CONCRETE PAVEMENT SECTION
N.T.S.



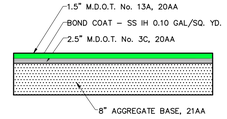
CONCRETE SIDEWALK SECTION
N.T.S.



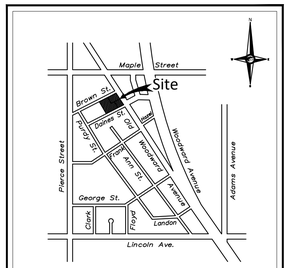
CONCRETE CURB DETAIL 'A'
N.T.S.



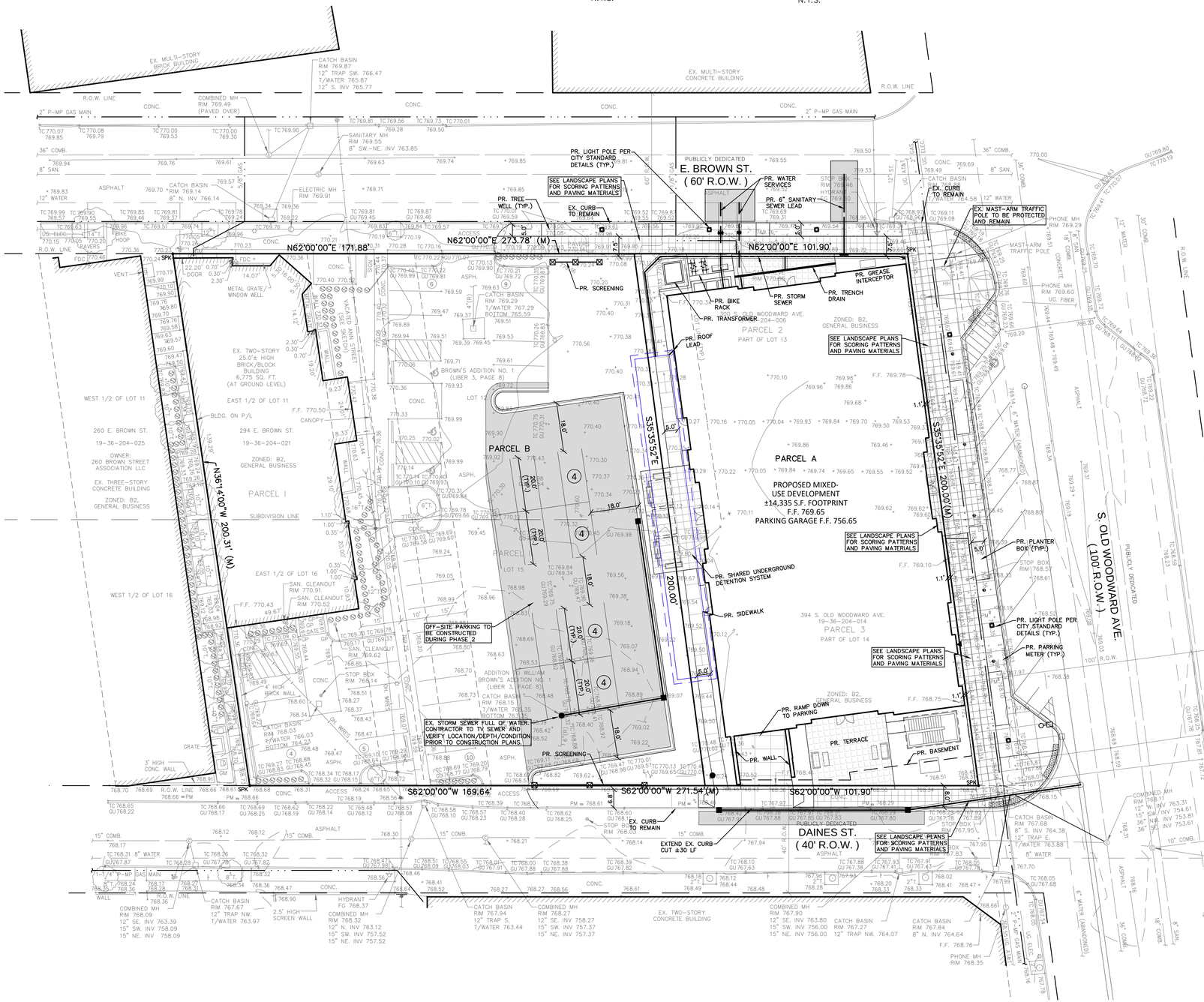
CONCRETE CURB DETAIL 'B'
N.T.S.



ASPHALT PAVEMENT SECTION
(DRIVE AND PARKING)



Location Map
N.T.S.



GENERAL PAVING NOTES

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

CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE NO. 1100L, 20AA; SURFACE COURSE – MDOT BITUMINOUS MIXTURE NO. 1100T, 20AA; ASPHALT CEMENT PENETRATION GRADE 85–100, BOND COAT – MDOT SS–1H EMULSION AT 0.10 GALLON PER SQUARE YARD; MAXIMUM 2 INCH LIFT.

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS–S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT–OF–WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF–ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

COVID-19 PANDEMIC CONDITION

DUE TO THE UNPRECEDENTED COVID–19 PANDEMIC CONDITION AND RESTRICTIONS THE STANDARD DATA WHICH IS OBTAINED FROM MISS DIG / CALL 811 HAS BEEN RESTRICTED TO CRITICAL INFRASTRUCTURE ONLY. NFE WILL MAKE EVERY EFFORT TO OBTAIN CURRENT REFERENCE DATA FROM THE GOVERNING AGENCIES; HOWEVER, THIS DATA MAY BE PARTIAL OR INCOMPLETE. NFE WILL ISSUE THIS SURVEY WITH THE BEST AVAILABLE INFORMATION FROM OUR FIELD SURVEY AND OTHER AVAILABLE REFERENCE DATA. NFE WILL NOT BE RESPONSIBLE FOR INCOMPLETE OR PARTIAL DATA PROVIDED BY THIRD PARTY FACILITY OWNERS. NFE IS NOT RESPONSIBLE FOR BURIED UTILITIES FOR WHICH PLANS WERE NOT FURNISHED OR CANNOT BE OBSERVED IN THE FIELD.

ALL CONSTRUCTION DOCUMENTS WILL BE UPDATED WHEN THE UTILITY INFORMATION IS PROVIDED BY THE FACILITY OWNER UP UNTIL THE TIME OF SUBMITTAL. ONCE THE PLANS HAVE BEEN SUBMITTED AND APPROVED IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN A MISS DIG TICKET PRIOR TO COMMENCING ANY CONSTRUCTION REQUIRING EXCAVATION. CONTRACTOR SHALL IMMEDIATELY NOTIFY NFE OF ANY UTILITIES FLAGGED BY MISS DIG THAT WERE NOT SHOWN ON THE PLANS OR UTILITIES UNCOVERED DURING THEIR WORK.

PAVING LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- SAN. CLEAN OUT
- HYDRANT, GATE VALVE — EXISTING WATERMAIN
- MANHOLE, CATCH BASIN — EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- UTILITY POLE, GUY POLE, GUY WIRE — OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O., MANHOLE — PR. SANITARY SEWER
- HYDRANT, GATE VALVE — PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE

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
PATRICK J. WILLIAMS
ENGINEER NO. 44351
LICENSED PROFESSIONAL ENGINEER

PROJECT
Restoration Hardware
Birmingham, MI

CLIENT
Saroki Architecture
430 N. Old Woodward Ave.
Birmingham, MI 48009

Contact: Victor Saroki
Phone: 248.258.5707

PROJECT LOCATION
Part of the NE 1/4
of Section 36
T.2N., R.10E.,
City of Birmingham,
Oakland County, Michigan

SHEET
Engineering Site Plan

811 Know what's below Call before you dig.

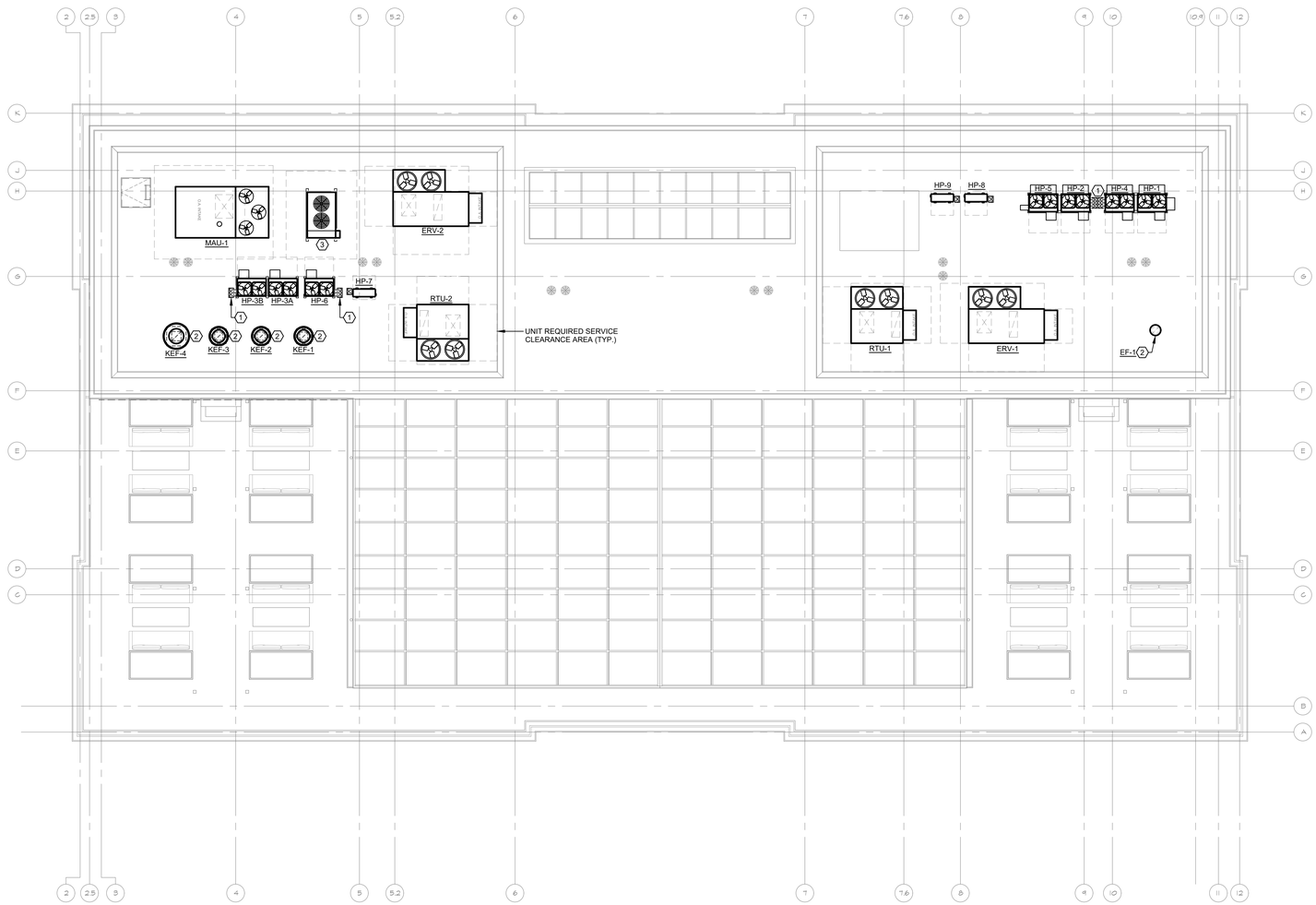
DATE	ISSUED/REVISED
11-18-2022	FINAL SITE PLAN SUBMITTAL

DRAWN BY: A. Eizember
DESIGNED BY: A. Eizember
APPROVED BY: P. Williams
DATE: November 18, 2022
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. M106
SHEET NO. SP-2

KEYED NOTES: #

1. ROUTE REFRIGERANT PIPING DOWN TROUGH ROOF.
2. INSTALL EXHAUST FAN A MINIMUM OF 10'-0" AWAY FROM ANY HVAC UNITS' OUTDOOR AIR INTAKE OPENING.
3. KITCHEN REFRIGERATION SYSTEM CONDENSING UNIT. UNIT PROVIDED BY KITCHEN EQUIPMENT CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. MOUNT ON PATE EQUIPMENT RAILS A MINIMUM OF 12" ABOVE THE ROOF LEVEL.



1 M115 Roof - Mechanical HVAC Plan
SCALE: 1/8"= 1'-0"

RH

RH DETROIT

300 S OLD WOODWARD
BIRMINGHAM, MI 48009

RH Architecture & Design
15 Koch Road
Corte Madera, California 94925

mechanical electrical engineering consultants pc
14496 Sheldon Rd. Ste. 260
Plymouth, MI 48170
P 734-454-5516
F 734-454-5517

MEEC JOB # 21-0146

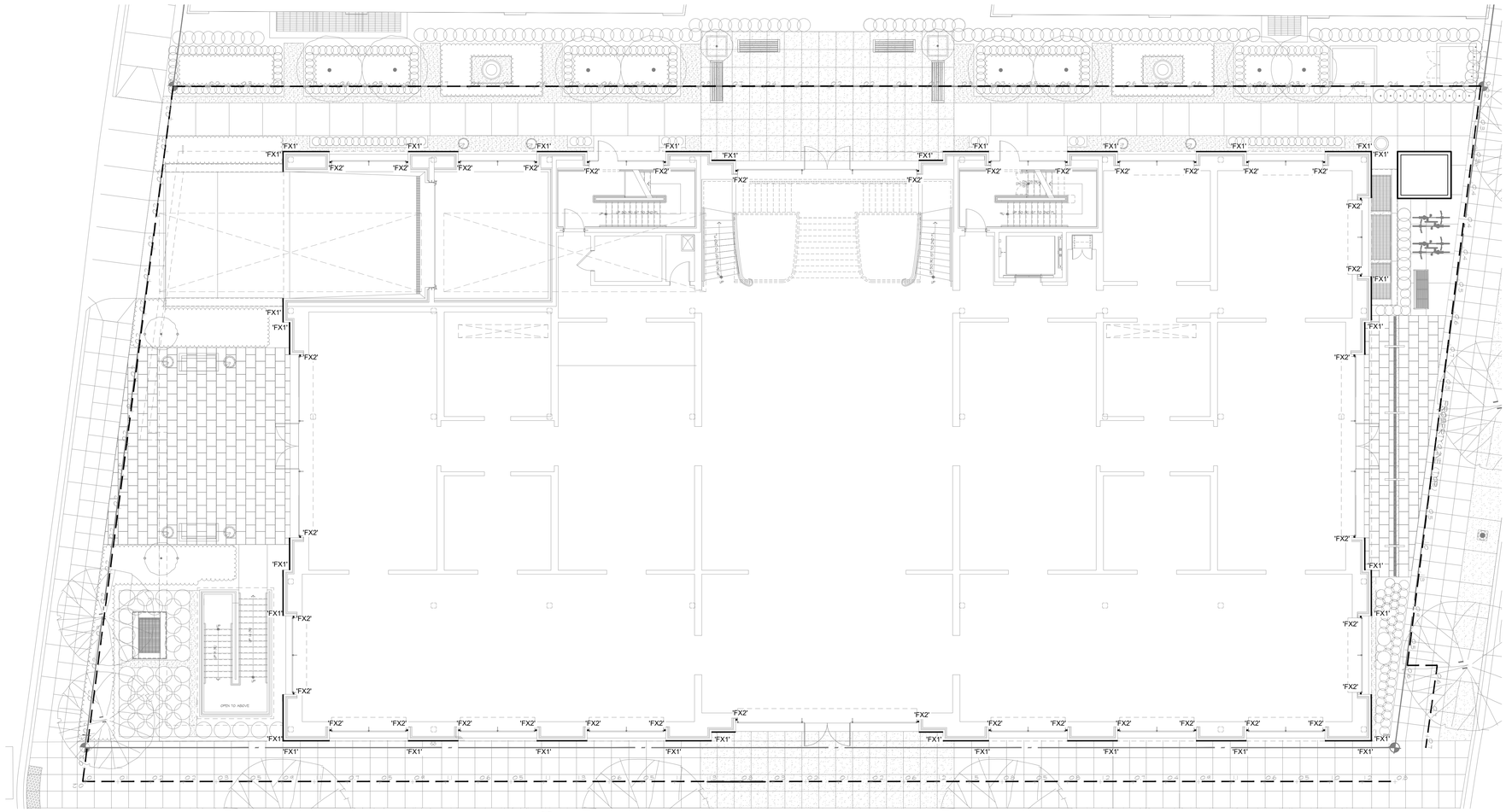
THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES. NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC AND NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED UNLESS WRITTEN APPROVAL IS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC.

SAROKI ARCHITECTURE
430 N. OLD WOODWARD
BIRMINGHAM, MI 48009
P. 248.258.5707
F. 248.258.5515
SarokiArchitecture.com

Project:
RH / Mixed-Use
300 S Old Woodward
Birmingham, MI 48009

Date:	Issued For:
03-28-22	Core&Shell Building Permit
05-02-22	Bid / Construction
11-18-22	Final Site Plan Submittal

Sheet No.:
M115
ROOF - MECHANICAL HVAC PLAN



1 ESLP111 Exteriors - Electrical Site Lighting Photometric Plan
SCALE: 1/8"= 1'-0"

GENERAL NOTES:

1. THE INTENSITY OF LIGHT ON THE SITE DOES NOT EXCEED ONE AND ONE HALF (1.5) MAINTAINED FOOT-CANDLES AT ANY PROPERTY LINE FOR ANY NON-RESIDENTIAL ZONED PROPERTY. THE LIGHT INTENSITY IS MEASURED AT 6FT ABOVE THE GROUND LEVEL ON A VERTICAL PLANE, NOTED ALONG THE BOLD DASHED LINE.
2. THE INTENSITY OF LIGHT ON A SITE WHICH PROVIDES A FRONT SETBACK OF LESS THAN 5FT SHALL BE MEASURED FROM 5FT BEYOND THE FRONT PROPERTY LINE, NOTED ALONG THE BOLD DASHED LINE.
3. THE PROPOSED FX1 FIXTURES HAVE BEEN CALCULATED AT A DIMMED LUMEN INTENSITY OF 50% WITH A LIGHT LOSS FACTOR OF 0.85.
4. THE PROPOSED FX2 FIXTURE INTENT IS TO PROVIDE A DECORATIVE GLOW EFFECT AROUND THE WINDOWS WITH NO LUMEN OUTPUT EXTENDING BEYOND THE WINDOWS AND THEREFORE DO NOT PROVIDE A PHOTOMETRIC CONTRIBUTION TO THE PROPERTY LINE.

RH

RH DETROIT

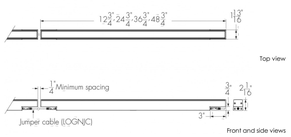
300 S OLD WOODWARD
BIRMINGHAM, MI 48009

RH Architecture & Design
15 Koch Road
Corte Madera, California 94925

Specification Sheet

lumenfacade nano
LOGN
WHITE AND STATIC COLORS

Project Name _____ Qty _____
Type _____ Catalog / Part Number _____

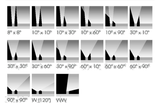


Photometric Summary (7 W/ft)

	Delivered output (lm)	Intensity (peak cd)
8"x8"	2,173	58,720
10"x10"	2,102	45,812
10"x30"	2,038	12,959
10"x60"	2,026	6,911
10"x90"	2,031	3,622
30"x10"	2,043	12,919
30"x30"	2,986	6,894
30"x60"	2,895	4,362
30"x90"	2,917	3,152
60"x10"	2,025	8,019
60"x60"	2,924	2,162
60"x90"	2,905	2,603
90"x90"	2,856	1,766
W (120°)	1,225	602
WW	2,164	10,498

Based on 4000K, CRI 80+, 48 (1219mm), NO control. Photometric performance is measured in compliance with IESNA LM79-08.

Optics



Description

The Lumenfacade Nano White and Static Colors is a high-efficiency linear LED luminaire that goes where no facade lighting has gone before. Available in 12 in, 24 in, 36 in or 48 in sections, the Lumenfacade Nano is the right fit for general urban structures, historical buildings and those hardest to reach places. The Lumenfacade Nano packs all the bells and whistles of the larger members of the Lumenfacade family and can be configured with a wide number of options, including: optics for grazing, floodlighting or wall washing; a choice of outputs; various color temperatures or static colors; various mounting options, finishes, accessories and controls. Now with 3G vibration-rating options, this little fixture can really go anywhere.

Features

Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Optics	8" x 8", 10" x 10", 10" x 30", 10" x 60", 10" x 90", 30" x 10", 30" x 30", 30" x 60", 30" x 90", 60" x 10", 60" x 60", 60" x 90", 90" x 90", Wide 120°, Asymmetric Wallwash
Options	Corrosion-resistant coating for hostile environments, 3G ANSI C136.31-2010 Vibration Rating for bridge applications
Power Consumption	2 W/ft, 4 W/ft, 7 W/ft
Warranty	5-year limited warranty

Performance

Maximum Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K CRI 80+, 30" x 30", NO control), 1,767 lm (4 W/ft, 48 in fixture, 4000K CRI 80+, 30" x 30", NO control), 2,986 lm (7 W/ft, 48 in fixture, 4000K CRI 80+, 30" x 30", NO control)
Maximum Delivered Intensity	20,676 cd at nadir (2 W/ft, 48 in fixture, 4000K CRI 80+, 8" x 8", NO control), 41,352 cd at nadir (4 W/ft, 48 in fixture, 4000K CRI 80+, 8" x 8", NO control), 58,720 cd at nadir (7 W/ft, 48 in fixture, 4000K CRI 80+, 8" x 8", NO control)

lumenpulse
1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9, CA info@lumenpulse.com www.lumenpulse.com
T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 F 514.937.6289
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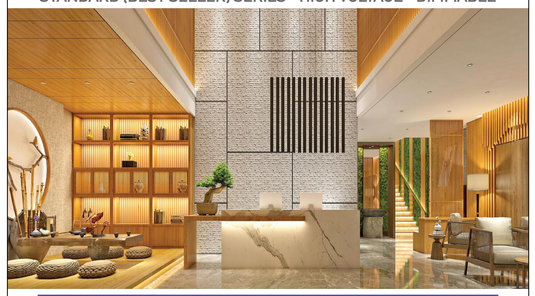
Dx - 813
1 / 16

2 ESLP114 FIXTURE TYPE 'FX1' CUTSHEET
SCALE: N.T.S.

lumilum 120V LED STRIP LIGHT

STANDARD (BEST SELLER) SERIES - HIGH VOLTAGE - DIMMABLE



MODEL: LUM-120505-XXXXK

Lumilum® Standard Series Line Voltage (120V) Single Color LED Strip Light requires no power adapters or drivers, instead it uses a power plug rectifier that converts AC into DC current. The light source in the LED strip consists of 3,300 equally distributed high brightness SMD 5050 chips per reel, which comes in 164ft. with cut marks every 12 inches (1ft.). The light output is incredibly bright with a CRI › 90 (Color Rendering Index) and available in multiple color temperatures. This Single Color LED Strip Light is ETL Listed and dimmable, using conventional dimmers. The entire 164ft. of high voltage strip can be used without the risk of voltage drop. This product is IP65 rated for indoor and outdoor use. This strip can be installed using various methods.

3 ESLP114 FIXTURE TYPE 'FX2' CUTSHEET
SCALE: N.T.S.

mechanical electrical engineering consultants pc
14496 Sheldon Rd. Ste. 260
Plymouth, MI 48170
P 734-454-5516
F 734-454-5517

MEEC JOB # 21-0146

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SAROKI ARCHITECTURE
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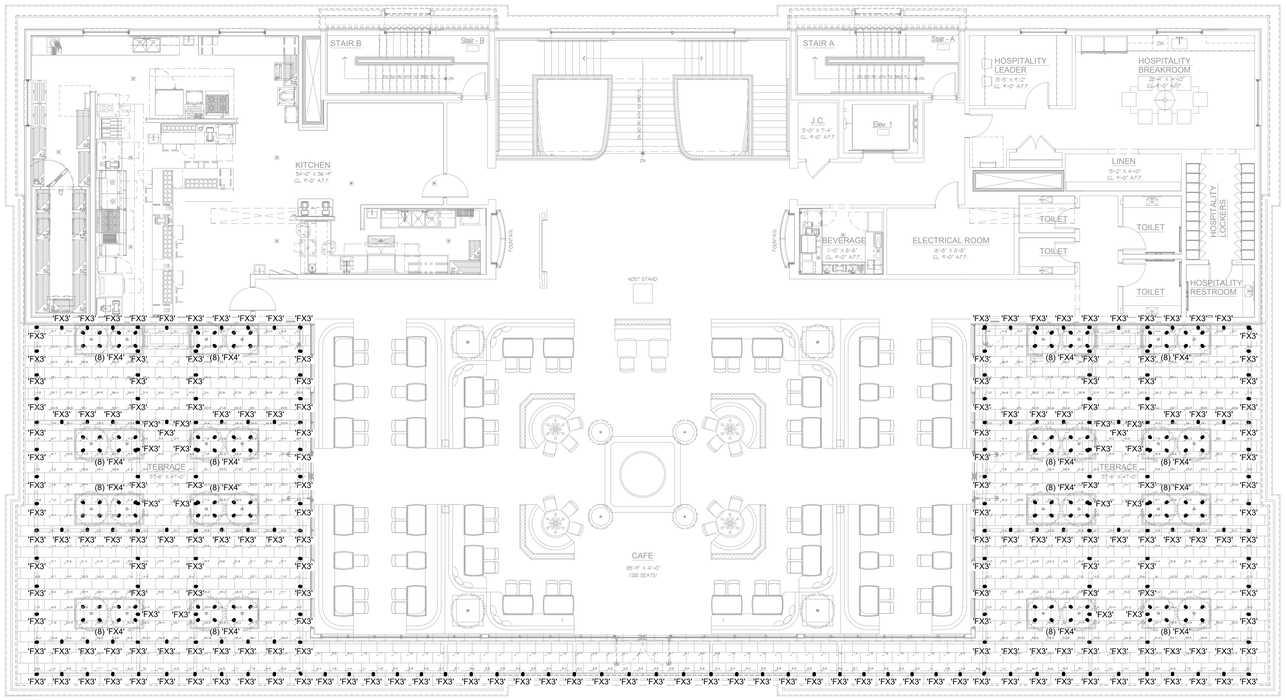
SarokiArchitecture.com

Project:
RH / Mixed-Use
300 S Old Woodward
Birmingham, MI 48009

Date:	Issued For:
11-18-2022	Final Site Plan Submittal

Sheet No.:
ESLP111
ELECTRICAL SITE LIGHTING PHOTOMETRIC PLAN



Exteriors - Electrical 4th Level Lighting Photometric Plan

1 ESLP114 SCALE: 1/8" = 1'-0"

GENERAL NOTES:

1. THE PROPOSED PHOTOMETRICS ARE BASED ON LIGHT FIXTURE FX3 TO BE MOUNTED AT THE UNDERSIDE OF THE PROPOSED PERGOLA AIMING TOWARDS THE GROUND AND FX4, TREE LIGHTING, THAT IS TO BE STAKE MOUNTED WITH GLARE SHIELD AT EACH PLANTER. THESE FIXTURES DOES NOT EXPEL UNDUE AMBIENT LIGHT INTO THE NIGHTTIME ENVIRONMENT.
2. THE AVERAGE FOOTCANDLE, AT 0 FEET, FOR THE EXTERIOR TERRACE IS 20.1FC. THE MAXIMUM FOOTCANDLE IS 41.7FC.
3. THE PROPOSED FX3 FIXTURES HAVE BEEN CALCULATED AT A DIMMED LUMEN INTENSITY OF 80% WITH A LIGHT LOSS FACTOR OF 0.9.
4. THE PROPOSED FX4 FIXTURES HAVE BEEN CALCULATED AT A DIMMED LUMEN INTENSITY OF 80% WITH A LIGHT LOSS FACTOR OF 0.9.

RH

RH DETROIT

300 S OLD WOODWARD
BIRMINGHAM, MI 48009

RH Architecture & Design
15 Koch Road
Corte Madera, California 94925

ARTISTAR LED (REMOTE DRIVER) — IP66 RATED

DATE: | PROJECT: | TYPE:

CATALOG NUMBER LOGIC:

*Base height limited to 6" max. with Brass and Stainless Steel Canopy.

CATALOG NUMBER LOGIC
Example: B - AR - LED - RM - x54 - FL - POL - 12 - 11 - B - 6 - WM
MATERIAL
(Blank) - Aluminum B - Brass S - Stainless Steel
SERIES
AR - ArtStar
SOURCE
LED - Chip on Board Technology
HOUSING
RM - Remote Driver
LED TYPE
x52 - 10W LED/2700K x54 - 10W LED/4000K x53 - 10W LED/3000K
OPTICS
SP - Spot (20°) FL -Flood (40°) WFL - Wide Flood (60°)
FINISH (See page 2 for full-color swatches)
Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)
Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRI, CRM, HUG, MDS, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)
Also available in RAL Finishes
Brass Finishes (MAC, POL, MIT)
Stainless Steel Finishes (MAC, POL)
LENS TYPE
9 - Clear (Standard) 12 - Soft Focus 13 - Rectilinear
SHIELDING
11 - Honeycomb Baffle
CAP STYLE
A - 45°
B - 90°
C - Flush
D - 45° Less Weephole (Interior use only)
E - 90° Less Weephole (Interior use only)
F - 90° with Flush Lens
BASE HEIGHT
3" (Standard), 6", 12", 18", & 24" with Anchor Base
MOUNTING OPTIONS
PP - 18" Power Pipe Stake Mount
SF - Stability Flange (For use with Power Pipe)
WM - Wall or Ceiling Mount with 5" dia. Machined Canopy**

B-K LIGHTING | MADE IN THE USA | 559.438.5800 | INFO@BKLIGHTING.COM | BKLIGHTING.COM

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01/15/2020 SKU-1015
SUB-2126-00

2 ESLP114 SCALE: N.T.S.

FIXTURE TYPE 'FX3' CUTSHEET

MICRO NITE STAR LED — IP66 RATED

DATE: | PROJECT: | TYPE:

CATALOG NUMBER LOGIC:

*Designed for use with LED transformer. Requires magnetic low voltage dimmer.

**The 360SL cost is already included in the price of UPM, UPM dual, and Power Canopy.

CATALOG NUMBER LOGIC
Example: B - MN - LED - e68 - SP - WHP - 12 - 11 - A - 360SL
MATERIAL
(Blank) - Aluminum B - Brass
SERIES
MN - Micro Nite Star
SOURCE
LED - with Integral Dimming Driver (25W min. load when dimmed)*
LED TYPE
e67 - 7W LED/2700K e69 - 7W LED/4000K
e68 - 7W LED/3000K e75 - 7W LED/Amber
OPTICS
SP - Spot (17°) MFL - Medium Flood (25°) FL - Flood (30°)
FINISH (See page 2 for full-color swatches)
Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)
Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRI, CRM, HUG, MDS, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)
Also available in RAL Finishes
Brass Finishes (MAC, POL, MIT)
LENS TYPE
12 - Soft Focus 13 - Rectilinear
SHIELDING
11 - Honeycomb Baffle
CAP STYLE
A - 45°
B - 90°
C - Flush Lens
D - 45° Less Weephole (Interior use only)
E - 90° Less Weephole (Interior use only)
OPTIONS
360SL - Knuckle Mounting System**

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01/15/2020 SKU-737
SUB000927

3 ESLP114 SCALE: N.T.S.

FIXTURE TYPE 'FX4' CUTSHEET

mechanical electrical engineering consultants pc
14496 Sheldon Rd. Ste. 260
Plymouth, MI 48170
P 734-454-5516
F 734-454-5517

MEEC JOB # 21-0146

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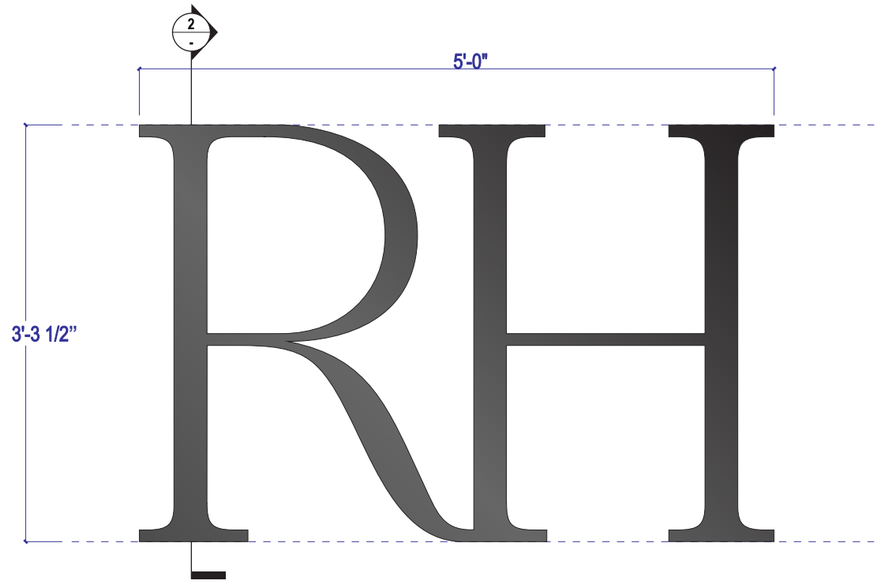
Project:
RH / Mixed-Use
300 S Old Woodward
Birmingham, MI 48009

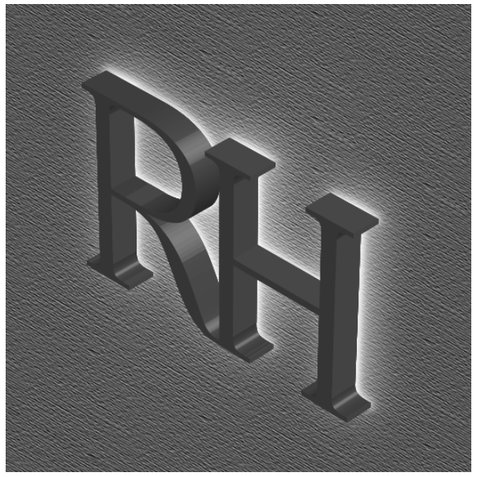
Date:	Issued For:
11-18-2022	Final Site Plan Submittal

Sheet No.:
ESLP114
ELECTRICAL EXTERIOR 4TH LEVEL PHOTOMETRIC PLAN



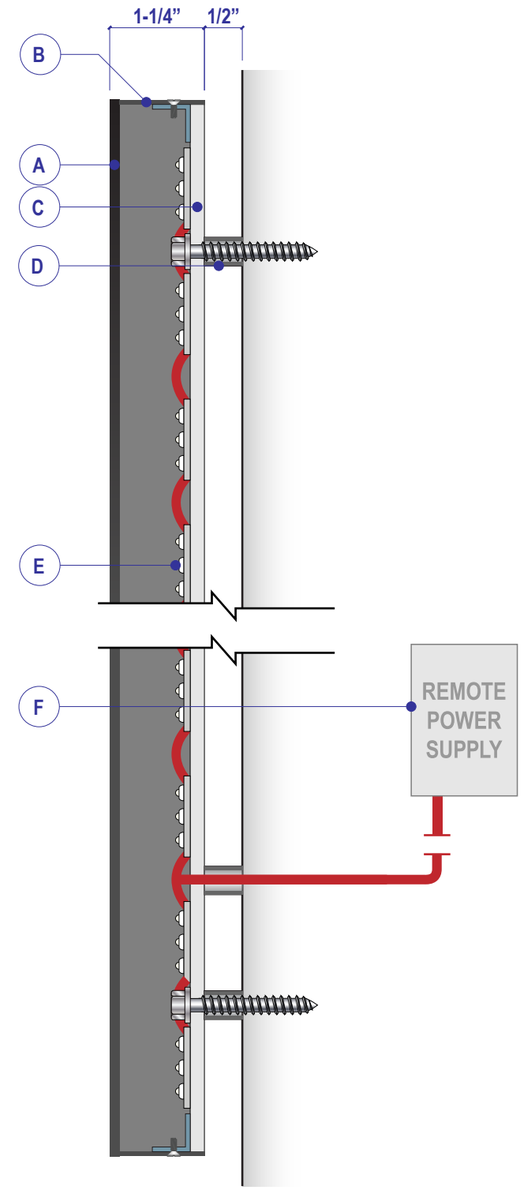
1 22-IN RH LOGO HALO-LIT - DETAIL

Scale 1/8: 1"



3 ILLUMINATION SAMPLE

NTS



2 SECTION

Scale 1/4: 1"

SPECIFICATIONS:

A. 1/8" THICK ALUMINUM FACE PAINTED CHAMPAGNE BRASS TO MATCH STEEL CANOPY, PERGOLA, AND ALL FRAMES
NOTE: SOME STROKE ADJUSTED TO ACCOMODATE LED LIGHT LAYOUT REQUIREMENTS

B. .050" THICK ALUMINUM RETURNS PAINTED CHAMPAGNE BRASS MOUNTED TO "C" VIA ANGLE BRACKETS AND SCREWS

C. 3/16" POLYCARBONATE BACK WITH SINGLE LAYER OF WHITE FROSTED CRYSTAL 7725E-324 DIFFUSER RIVETED TO ALUMINUM ANGLE BRACKETS MOUNTED TO FINISH WALL VIA 1/4"-20 SCREWS AND ANCHOR IN 7 PLACES

D. 1/2" DIA. ALUMINUM SPACERS

E. PRINCIPAL STREET FIGHTER MINI 5000K LED LIGHTING

F. MAGNITUDE M150L12DC-AR LED DRIVER

ALL ELECTRICAL COMPONENTS ARE **UL** APPROVED AND FOLLOW 600 GROUNDING AND BONDED GUIDELINES

THOMAS-SWAN SIGN COMPANY, INC.
2717 GOODRICK AVENUE, RICHMOND, CA 94801
510-232-9610 • CALIFORNIA LICENSE #269069

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PROJECT NAME & ADDRESS
RESTORATION HARDWARE
Typical Sign Detail

Birmingham, MI

SIGN TYPE
RH HALO-LIT BUILDING LOGO

FILE NAME

APPROVED FOR CONSTRUCTION - INCLUDE NAME & DATE

DATE / REVISIONS

CLIENT
Restoration Hardware

SALES

DRAWN BY

JOB NUMBER

QUANTITY
4

SHEET NUMBER
1.00

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Planning Division

DATE: December 14, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: 300 S. Old Woodward – Revised Special Land Use Permit, Final Site Plan & Design Review

---

The applicant has submitted an application for Revised Special Land Use Permit, Final Site Plan and Design Review for the construction of a new 4-story commercial building in the B2 (General Business) and D4 (Downtown Overlay) zoning districts. The proposed development is located On S. Old Woodward between Brown and Daines. The subject site is currently under construction, which was paused to accommodate the change in design that will be presented herein. The new, revised development would introduce a new 4-story commercial building oriented towards Old. Woodward, internal parking, and landscaping improvements to the site.

As for prior approvals, on July 14, 2021 (Agenda – Minutes), the Planning Board moved to recommend approval to the City Commission a Special Land Use, Final Site Plan and Design Review application for the original proposal, which was subsequently approved by the City Commission on August 9, 2021 (Agenda – Minutes).

Prior to the site plan approval process, the applicant had also applied and was approved for a rezoning from D3 (Downtown Overlay) to D4 (Downtown Overlay). The Planning Board recommended approval to the City Commission on April 28, 2021 (Agenda – Minutes), and the City Commission formally approved the rezoning on July 12, 2021 (Agenda – Minutes). Importantly, the motion from the City Commission was as follows:

> "To approve the rezoning of the new parcel encompassing 300 – 394 S. Old Woodward and portions of 294 E. Brown from B-2 (General Business) and D-3 (Downtown Overlay) to B-2 (General Business) and D-4 (Downtown Overlay) conditional upon the building being done pursuant to the site plan, as voluntarily given by the applicant, pursuant to a letter dated and accepted July 12, 2021 by attorney Richard Rattner."

The Planning Division is reviewing the motion with the City Attorney to determine the next steps in regards to the rezoning and its approval, and will report the determination to the Planning Board.

Overall, the plans submitted for the proposed Revised Special Land Use Permit, Final Site Plan and Design Review application demonstrate minor changes to the site. In general, the site circulation, bulk, area and height considerations, and parking is not proposed to change. The bulk of the changes are in the layout of the floor plans and the exterior of the building (materials/design). In the forthcoming report, the Planning Division will provide general summaries for those items that are not proposed to change, and will follow those summaries with "**(No changes proposed)**" for emphasis. For all new elements, the Planning Division has provided a full review.

1.0 Land Use & Zoning

1.1 **Existing Land Use –** The existing land use on the site was commercial. The site is currently under construction, which has been paused to accommodate a redesign of the building.

1.2 **Zoning –** The subject site is zoned B2 (General Business) and D4 (Downtown Overlay).

1.3 **Summary of Adjacent Land Use & Zoning –** The following chart summarizes existing land use and zoning classifications of the adjacent and/or nearby properties:

	North	South	East	West
Existing Land Use	Mixed-Use	Mixed-Use	Commercial	Commercial
Existing Zoning District	B4	B2B	B3	B2
Overlay Zoning District	D4	D2	D3 & D5	D3

2.0 Setback & Height Requirements

The attached zoning compliance summary analysis provides the required and proposed bulk, area, and placement regulations for the proposed project. The applicant appears to meet the bulk, area and placement requirements of the B2 and D4 zones. **(No changes proposed)**

In addition to the general placement and height standards, the applicant is also subject to the encroachment into right-of-way standards outlined in Article 4, Section 4.74 (D)(4)(c)(i), which states that removable architectural elements such as awnings, canopies, marquees may be approved by the Planning Board to project into the right of way provided that they are constructed to support applicable loads without any ground mounted supports on public property. Encroachments with less than 15 ft. of clearance above the sidewalk shall not extend into or occupy more than two-thirds of the width of the sidewalk or 5 ft., whichever is less, and must not interfere with any existing or planned

streetscape elements or infrastructure. The applicant is proposing a canopy at the entrance along S. Old Woodward which projects 4 ft. 10.5 in. into the right-of-way, and measures 13 ft. 8 in. above grade. The proposed meets the requirements of Article 4, Section 4.74 and may be approved by the Planning Board.

3.0 Screening & Landscaping

3.1 Dumpster Screening – Although the placement of the trash area has changed with the reconfiguration of the floor layout, the trash receptacles are within the building envelope and are fully screened by the building façade. The applicant had previously proposed a trash area on the first floor, but has revised the plans to include a larger trash area in the lower level. **The applicant must still adhere to the principles accepted by the Planning Board in the Community Impact Study review and provide ample space for the separation of recycling in this area.**

3.2 Parking Lot Screening – The entirety of the parking proposed on site will be in the lower level, thus fully screened by the building. **(No changes proposed)**

3.3 Mechanical Equipment Screening – There are several mechanical units proposed on the roof of the development, which will be screened by a 6 ft. brick screen wall. The proposed units are located in enclosures that flank the greenhouse roof, as was approved in the previous design. The RTU's proposed consist of exhaust fans, heat pumps, make up air, and other units that all measure within the extent of the 6 ft. screen wall.

In addition to the units on the rooftop, there are three pieces of ground-mounted electrical equipment proposed at the northwest corner of the site. The pieces of equipment are labeled as DTE transformers and a DTE primary switch box. One smaller transformer and the primary switch box are proposed to be screened by 6 ft. arborvitae, while the larger transformer is proposed to be screened by a 5 ft. 2 in. capped masonry screen wall with metal gates. Article 4, Section 4.54 of the Zoning Ordinance requires ground-mounted mechanical or electrical equipment to be screened by a masonry screen wall with wood gates. The screen wall shall match the material of the principal building.

However, the same section states that flexibility in the materials, size, height and placement of walls is permitted in order to allow architectural harmony and usable open space and to accomplish a unified design. **The Planning Board should discuss the proposed arborvitae screening and metal gate and determine if the materials provide an appropriate screen wall.**

3.4 Landscaping – The proposed landscaping plan shows landscaping in the same general areas as was approved in 2021. However, the planting materials and quantities have changed. The following plantings are proposed:

Planting Type	Location
Green Vase Japanese Zelkovia	Southeast corner, near egress stairs
Green Velvet Boxwood	North side of building, southeast planting area
Franz Fontaine Hornbeam	West side along pedestrian passage
Hatfield or Moon Yew	West side along pedestrian passage
Emerald Green Arborvitae	Northwest corner adjacent to ground units
Green Carpet Pachysandra	Planter boxes along pedestrian passage
Pleached Little Leaf Linden	4th floor planters
Green Velvet Boxwood	4th floor planters

Although the applicant is proposing the above plantings, the Zoning Ordinance does not require the proposed planting materials on the site. It is worth noting that the proposed plantings do not appear to contain many native species, nor is there much in terms of variety (colors or species). The proposed plantings will provide some benefits, but do not offer much for pollinators, storm water retention, or aesthetics.

3.5 Streetscape Elements – The applicant is proposing to build the streetscape as agreed to in the streetscape agreement approved by the City Commission on April 25, 2022 (Agenda – Minutes). The streetscape consists of 6 street trees, planter boxes, bike racks, and street lights.

4.0 Parking, Loading & Circulation

4.1 Parking – The subject site is located within the former Parking Assessment District, thus no parking is required for the commercial use proposed. The lower level plan demonstrates a proposed 26 off-street parking spaces, including 2 accessible spaces, which is an increase from the 24 that were approved in 2021.

4.2 Loading – The applicant is proposing two loading zones as required for commercial uses in between 20,001and 50,000 sq. ft. The loading spaces measure the minimum 40 x 12 x 14, and are located along the entry ramp to the lower level parking facility. **(No changes proposed)**

4.3 Vehicle Circulation & Access – The primary entrance for vehicles remains on the southwest corner of the property along Daines. Access will be provided through an overhead garage door, and will be used by valet and public alike. **(No changes proposed)**

4.4 Pedestrian Circulation & Access **–** Pedestrian circulation and access will remain on all four sides of the building with entry doors centered on each façade. In addition, the pedestrian passage behind the building is maintained. **(No changes proposed)**

It is worth noting that the area on the south side of the building that was formerly a pedestrian plaza with seating and other amenities has been changed to an exterior staircase to accommodate an additional means of egress for the lower level parking facility. This does not dramatically change the pedestrian circulation

on the site however, as the previous form of egress from the lower level was also stairs, which were located inside of the building.

5.0 Lighting

The applicant is proposing to install several in-ground LED fixtures around the entire building that are intended to wash the brick with soft lighting to accentuate the buildings vertical elements. These LED strips were approved to be placed in the public right-of-way along S. Old Woodward through the same streetscape agreement noted above. Because these fixtures are not cutoff, the Planning Board would need to grant an exception to Article 4, Section 4.21 (D) based on any of the following criteria:

a. The distribution of upward light is controlled by means of refractors or shielding to the effect that it be used solely for the purpose of decorative enhancement of the luminaire itself and does not expel undue ambient light into the nighttime environment.
b. The luminaire is neither obtrusive nor distracting, nor will it create a traffic hazard or otherwise adversely impact public safety, with appropriate methods used to eliminate undesirable glare and/or reflections.
c. The luminaire is consistent with the intent of the Master Plan, Urban Design Plan(s), Triangle district plan, Rail District plan and/or Downtown Birmingham 2016 Report, as applicable.
d. The scale, color, design or material of the luminaire will enhance the site on which it is located, as well as be compatible with the surrounding buildings or neighborhood.
e. Lighting designed for architectural enhancement of building features (i.e. architectural enhancement lighting). Appropriate methods shall be used to minimize reflection and glare.
f. The site lighting meets all requirements set forth in this ordinance including, but not limited to, light trespass and nuisance violations.

In addition to the in-ground LED fixtures, the applicant is proposing LED strip lighting located within a channel system around the windows to provide accent lighting along the edges of the window openings. The location of these LED strips in channels at the sides of the windows appears to render them fully cutoff.

On the 4th floor, the applicant is proposing a significant number (hundreds) of small LED spotlights that are placed in the planting beds and the perimeter of the outdoor seating areas on the 4th floor. It is somewhat unclear as to where these fixtures will be placed (on the pergola, on the ground, a combination of both?). These fixtures are also not considered cutoff, and the Planning Board would have to grant exceptions to the same zoning ordinance regulation as quoted above. Although the lights are small, and are beneath a louvered pergola structure, **the Planning Board may wish to consider requiring the applicant to reduce the sheer number of fixtures proposed to promote the purpose and intent of the Lighting Standards and to promote a dark sky approach to lighting.**

A photometric plan was submitted for the site that demonstrates a light intensity that does not exceed 1.5 maintained foot candles at the property line, or 5 ft. beyond the front façade, meeting the requirements of the Zoning Ordinance.

6.0 Departmental Reports

6.1 Engineering Department – Please see the attached Engineering Department Comments dated December 6, 2022.

6.2 Department of Public Services – The Department of Public Services has no concerns at this time.

6.3 Fire Department – Please see the attached Fire Department comments.

6.4 Police Department – The Police Department has no concerns at this time.

6.5 Building Department – Please see the attached Building Department comments dated December 6, 2022.

6.6 Parking Manager – The Parking Manager has no concerns at this time.

7.0 Design Review

As noted above, the majority of the changes proposed to the building are in regards to the exterior and its material composition. The former building was approved with a palate that consisted of grey architectural brick, modeled stucco, dark window frames and clear glass. This building met all of the architectural requirements outlined in Article 3, Section 3.04 of the Zoning Ordinance including all of the glazing requirements for each floor. The new proposal is similar in that the bulk of the building will be comprised of a tan architectural brick and clear glazing. There are additional elements proposed as well including steel canopies and a metal pergola system on the 4th floor.

In terms of the architectural standards noted above, the applicant still meets all of the requirements with the exception of first floor glazing. As noted in this section, ground floor facades in between 1 ft. and 8 ft. must be comprised of a minimum of 70% clear glazing. Due to the redesigned facades and the focus on symmetry, the first floor glazing was calculated to be 62% on the south (Daines) façade, 60% on the east (S. Old Woodward) façade, and 58% on the north (Brown) façade. It is worth nothing that the west façade along the pedestrian passage is also proposed with a significant amount of glazing, but is not required to be 70%. In addition, the applicant has not submitted specification sheets demonstrating the Visual Light Transmittance (VLT) or reflectance figures to ensure the glass meets the City's definition of Clear Glazing. Thus, **the applicant must submit revised plans demonstrating 70% clear glazing on the storefront facades or obtain a variance from the Board of Zoning Appeals.**

In regards to the rooftop restaurant, the seating located under the pergola would be considered outdoor dining and is subject to the Outdoor Dining Standards outlined in Article 4, Section 4.44 of the Zoning Ordinance. Because the outdoor dining is located on

private property on the 4th floor, only the following standards apply to the proposed outdoor dining facility:

1. Outdoor dining areas shall provide and service refuse containers within the outdoor dining area and maintain the area in good order.
2. All outdoor activity must cease at the close of business.
3. All tables and chairs provided in the outdoor dining area shall be constructed primarily of metal, wood, or material of comparable quality.

The site plans indicate trash receptacles on both sides of the outdoor dining facility, and the applicant has submitted examples of the furniture RH utilizes in their restaurants, which is constructed of a high quality material that may be accepted by the Planning Board.

Finally, the applicant is proposing several signs as a part of the redesigned building. A total of 4 signs are proposed, one on each façade of the building. The signs are centered on each façade and read "RH", one of which is illuminated. There are no dimensions or details provided for the proposed signs. In addition, the location of these signs would render them Building Identification signs. Article 1, Section 1.05 of the Sign Ordinance permits *non-illuminated* signs identifying the entire structure by a building name (Building Identification Signs) to be placed above the first floor. Although the principal building frontage is not labeled on the plans, it is apparent that the building has a large available combined sign area to work with. In summation, **the applicant must submit detailed and dimensioned sign plans that meet the requirements of the Sign Ordinance, or obtain a variance from the Board of Zoning Appeals.**

8.0 Required Attachments

	Submitted	Not Submitted	Not Required
Existing Conditions Plan	☒	☐	☐
Detailed and Scaled Site Plan	☒	☐	☐
Certified Land Survey	☒	☐	☐
Interior Floor Plans	☒	☐	☐
Landscape Plan	☒	☐	☐
Photometric Plan	☒	☐	☐
Colored Elevations	☒	☐	☐
Material Specification Sheets	☒	☐	☐
Material Samples	☒	☐	☐
Site & Aerial Photographs	☒	☐	☐

9.0 Approval Criteria

In accordance with Article 7, section 7.27 of the Zoning Ordinance, the proposed plans for development must meet the following conditions

1. The location, size and height of the building, walls and fences shall be such that there is adequate landscaped open space so as to provide light, air and access to the persons occupying the structure.
2. The location, size and height of the building, walls and fences shall be such that there will be no interference with adequate light, air and access to adjacent lands and buildings.
3. The location, size and height of the building, walls and fences shall be such that they will not hinder the reasonable development of adjoining property and not diminish the value thereof.
4. The site plan, and its relation to streets, driveways and sidewalks, shall be such as to not interfere with or be hazardous to vehicular and pedestrian traffic.
5. The proposed development will be compatible with other uses and buildings in the neighborhood and will not be contrary to the spirit and purpose of this chapter.
6. The location, shape and size of required landscaped open space is such as to provide adequate open space for the benefit of the inhabitants of the building and the surrounding neighborhood.

In addition, Article 7, Section 7.36 of the Zoning Ordinance estates that the City Commission shall not approve of any requests for a special land use permit unless it determines that the following standards are met:

1. The use is consistent with and will promote the intent and purpose of this Zoning Ordinance.
2. The use will be compatible with adjacent uses of land, the natural environment, and the capabilities of public services and facilities affected by the land use.
3. The use is consistent with the public health, safety and welfare of the city.
4. The use is in compliance with all other requirements of this Zoning Ordinance.
5. The use will not be injurious to the surrounding neighborhood.
6. The use is in compliance with state and federal statutes.

10.0 Recommendation

Based on a review of the site plans submitted and the requirements outlined in Article 7, Sections 7.27 and 7.36 of the Zoning Ordinance, the Planning Division recommends that the Planning Board **APPROVE** the Revised Special Land Use Permit, Final Site Plan and Design Review for 300 S. Old Woodward – RH – with the following conditions:

1. The Planning Board approves the projection of the canopy into the right-of-way;
2. The applicant must still adhere to the principles accepted by the Planning Board in the Community Impact Study review and provide ample space for the separation of recycling in this area;
3. The Planning Board approves the use of arborvitae and masonry screen wall with metal gates to screen the proposed electrical equipment;
4. The applicant must submit revised plans demonstrating 70% clear glazing on the storefront facades or obtain a variance from the Board of Zoning Appeals;
5. The applicant must submit detailed and dimensioned sign plans that meet the requirements of the Sign Ordinance, or obtain a variance from the Board of Zoning Appeals; and
6. The applicant must comply with the requests of all City Departments.

11.0 Sample Motion Language (*Special Land Use Permit*)

Motion to recommend to the City Commission **APPROVAL** of the Special Land Use Permit for 300 S. Old Woodward – RH – with the following conditions:

1. The Planning Board approves the projection of the canopy into the right-of-way;
2. The applicant must still adhere to the principles accepted by the Planning Board in the Community Impact Study review and provide ample space for the separation of recycling in this area;
3. The Planning Board approves the use of arborvitae and masonry screen wall with metal gates to screen the proposed electrical equipment;
4. The applicant must submit revised plans demonstrating 70% clear glazing on the storefront facades or obtain a variance from the Board of Zoning Appeals;
5. The applicant must submit detailed and dimensioned sign plans that meet the requirements of the Sign Ordinance, or obtain a variance from the Board of Zoning Appeals; and
6. The applicant must comply with the requests of all City Departments.

OR

Motion to **POSTPONE** the Special Land Use Permit for 300 S. Old Woodward – RH – pending receipt of the following:

1. _____
2. _____
3. _____

OR

Motion to recommend to the City Commission **DENIAL** of the Special Land Use Permit for 300 S. Old Woodward – RH – for the following reasons:

1. _____
2. _____
3. _____

12.0 Sample Motion Language (*Final Site Plan & Design Review*)

Motion to recommend to the City Commission **APPROVAL** of the Final Site Plan and Design Review for 300 S. Old Woodward – RH – with the following conditions:

1. The Planning Board approves the projection of the canopy into the right-of-way;
2. The applicant must still adhere to the principles accepted by the Planning Board in the Community Impact Study review and provide ample space for the separation of recycling in this area;

3. The Planning Board approves the use of arborvitae and masonry screen wall with metal gates to screen the proposed electrical equipment;
4. The applicant must submit revised plans demonstrating 70% clear glazing on the storefront facades or obtain a variance from the Board of Zoning Appeals;
5. The applicant must submit detailed and dimensioned sign plans that meet the requirements of the Sign Ordinance, or obtain a variance from the Board of Zoning Appeals; and
6. The applicant must comply with the requests of all City Departments.

OR

Motion to **POSTPONE** the Final Site Plan and Design Review for 300 S. Old Woodward – RH – pending receipt of the following:

1. _____
2. _____
3. _____

OR

Motion to recommend to the City Commission **DENIAL** of the Final Site Plan and Design Review for 300 S. Old Woodward – RH – for the following reasons:

1. _____
2. _____
3. _____

Zoning Compliance Summary Sheet
Revised Special Land Use Permit, Final Site Plan & Design Review
300 S. Old Woodward - RH

Existing Site: Vacant site under construction

Zoning: B2 (General Business) and D4 (Downtown Overlay)

Land Use: Commercial

Existing Land Use and Zoning of Adjacent Properties:

	North	South	East	West
Existing Land Use	Mixed-Use	Mixed-Use	Commercial	Commercial
Existing Zoning District	B4	B2B	B3	B2
Overlay Zoning District	D4	D2	D3 & D5	D3

Land Area: Existing: 0.46 ac.
Proposed: 0.46 ac.

Dwelling Units: Existing: 0 units
Proposed: 0 units

Minimum Lot Area/Unit: Required: 1,000 sq ft (single story hotel or motel)
500 sq ft (two/three-story hotel or motel)
1,280 sq ft (multiple-family)
Proposed: N/A

Min. Floor Area /Unit: Required: 300 sq ft (single story hotel or motel)
600 sq ft (efficiency and one bedroom)
800 sq ft (two or more bedroom)
Proposed: N/A

Max. Total Floor Area: Required: N/A
Proposed: N/A

Min. Open Space: Required: N/A
Proposed: N/A

Max. Lot Coverage: Required: N/A

	Proposed:	N/A
Front Setback:	Required:	0 ft.
	Proposed:	0 ft.
Side Setbacks	Required:	N/A
	Proposed:	
Rear Setback:	Required:	10 ft.
	Proposed:	10 ft.
Min. Front+Rear Setback	Required:	N/A
	Proposed:	N/A
Max. Bldg. Height:	Permitted:	70 ft., 4 stories (based on rezoning requirements)
	Proposed:	69 ft., 4 stories
Min. Eave Height:	Required:	N/A
	Proposed:	N/A
Floor-Celing Height:	Required:	N/A
	Proposed:	N/A
Front Entry:	Required:	On frontage line
	Proposed:	On frontage line
Absence of Bldg. Façade:	Required:	N/A
	Proposed:	N/A
Opening Width:	Required:	N/A
	Proposed:	N/A
Parking:	Required:	N/A
	Proposed:	26 spaces
Min. Parking Space Size:	Required:	180 sq. ft.
	Proposed:	180 sq. ft.
Parking in Frontage:	Required:	Not permitted
	Proposed:	None proposed
Loading Area:	Required:	2 spaces, 40 x 12 x 14
	Proposed:	2 spaces, 4- x 12 x 14

Screening:

Parking:	Required:	32 in. capped masonry
	Proposed:	Fully screened by building façade
Loading:	Required:	6 ft. minimum
	Proposed:	Screened by building
Rooftop Mechanical:	Required:	Obscured from public view
	Proposed:	6 ft. brick screen wall
Elect. Transformer:	Required:	Masonry screen wall with wood gates
	Proposed:	Masonry and arborvitae
Dumpster:	Required:	6 ft. masonry screen wall
	Proposed:	Within building envelope

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Planning Division

DATE: February 27, 2023

TO: Thomas M. Markus, City Manager

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Public Hearing to amend Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide clear and enforceable outdoor dining standards (Request to Table)

INTRODUCTION:
As a result of the temporary COVD-19 outdoor dining expansion resolution and continuing issues with outdoor dining patios encroaching onto required clear paths, and adding unapproved equipment/fixtures, heaters, and structures, the City Commission directed a review of outdoor dining requirements to evaluate potential changes that may clarify and/or enhance the outdoor dining environment within the City. At this time, the Planning Board has drafted revised regulations that are consistent, enforceable, and offer more clarity to outdoor dining establishments.

BACKGROUND:
On December 14, 2022 (Agenda – Minutes), the Planning Board held a public hearing to review the proposed ordinance amendments and moved to recommend approval to the City Commission amendments to Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide clear and enforceable outdoor dining standards.

A complete background of the outdoor dining ordinance study including dates, summaries, and links to previous agendas can be found in the attached Planning Board report.

Two items of note were discussed heavily at the Planning Board. One such item was the placement of outdoor dining facilities and whether or not an operator would be permitted to have outdoor dining on the sidewalk and the furnishing zone, or whether only one placement would be permitted. Ultimately, the Planning Board settled on language that permits outdoor dining on a sidewalk or furnishing zone, and both in limited exceptions made by the Planning Board where the streetscape conditions demonstrate sufficient space to permit adequate pedestrian passage.

Secondly, the Planning Board moved the proposed language forward without a sunset or amortization clause.

On February 13, 2023 (Agenda), the City Commission discussed the proposed ordinance at a public hearing and moved to postpone the public hearing to February 27, 2023 to afford time for staff to make the changes directed by the City Commission.

After the meeting on February 13, City Staff discussed the direction of the City Commission and determined that additional time is needed to conduct legal research on amortization, sunset clauses, and different approaches to managing the use of public versus private property.

LEGAL REVIEW:
The City Attorney has reviewed the suggested resolution and has no objections. The City Attorney is currently conducting additional research based on the issues raised at the February 13 City Commission meeting and concurs with the suggested resolution.

FISCAL IMPACT:
There are no direct fiscal impacts for this agenda item. However, the proposed ordinance language has the potential to affect rental income through the leasing of public space for outdoor dining facilities.

PUBLIC COMMUNICATIONS:
As required for proposed Zoning Ordinance amendments, a legal ad was placed in a newspaper of local circulation to advertise the public hearing at the City Commission meeting on February 13, 2023. Additional notices will be provided when the topic is brought back to the City Commission for consideration.

SUMMARY:
The Planning Division requests that the City Commission consider tabling the ordinance amendments to Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide staff with time to adjust the proposed language and address the concerns of the City Commission.

ATTACHMENTS:
Please see the following attached documents:

- Final Planning Board Report

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to table consideration of the ordinance amendments to Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide staff with time to adjust the proposed language and address the concerns of the City Commission.

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Planning Division

DATE: December 14, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Outdoor Dining Ordinance – Public Hearing #2

On December 7, 2020 (Agenda – Minutes), the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21, 2021 (Agenda – Minutes), the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23, 2021 (Agenda – Minutes), the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restauranteurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;

- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;
- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restauranteurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14, 2021 (Agenda – Minutes), the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes "good" outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11, 2021 (Agenda – Minutes), the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9, 2021 (Agenda – Minutes), the Planning Board discussed a report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on

enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4 Summary

On September 23, 2021 (Agenda – Minutes), the Planning Board discussed the MLCC rules for outdoor dining patios, the concept of a windbreak and whether or not they should be permitted, and also explored the different zoning districts in which outdoor dining is permitted. These topics led to more conversation about how overhead weather protection will interact with said overhead coverings, and what typed of overhead protection the Planning Board should permit. The Planning Board expressed an interest in taking a deeper dive into overhead weather protection and reviewing different options.

Study Session #5 Summary

On October 27, 2021 (Agenda – Minutes), the Planning Board focused much their conversation on overhead weather protection and which types may be considered within the new ordinance language, and what different issues might arise with the different styles. In addition, the Birmingham Fire Chief Paul Wells gave a brief overview of the fire code as it relates to overhead weather protection, and offered some guidance to the Planning Board regarding fire suppression and other aspects of outdoor dining. In addition to overhead weather protection, the Planning Board provided some clear direction on the subjects of windbreaks, year-round dining, and the role of outdoor dining decks.

Study Session #6 Summary

On December 8, 2021 (Agenda – Minutes), the Planning Board reviewed comments regarding outdoor dining from the Birmingham Shopping District (BSD). In addition to the BSD comments, the Planning Board also reviewed some updated comments from the Fire Department based on their additional research into the Fire Code. To round out the meeting, the Planning Board outlined several items that they feel need further discussion/decision moving forward:

- Whether establishments with liquor licenses and establishments without liquor licenses should be handled differently;
- Whether there should be on-season and off-season dates for outdoor dining, and what should happen to furniture and other equipment on public property if there are different 'seasons';
- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations;
- Whether outdoor dining should be permitted to extend beyond the storefront of an establishment, and if so, what the limitations should be;

- Whether outdoor dining decks should be limited to a certain number per block; and,
- Whether outdoor dining in public space and outdoor dining in private space should be regulated differently.

Study Session #7 Summary
On January 12, 2022 (Agenda – Minutes), the Planning Board discussed the several questions posed in the previous study session and came to a conclusion on most of them. In general, the Planning Board decided on a short extension to the regular outdoor dining season, treating all outdoor dining establishments alike, enhanced material and appearance standards, and allowing expansion of patios with neighbor consent. During this study session, the Planning Board also reviewed seating data for the different outdoor dining establishments, and was provided a map of all outdoor dining in the City, which is heavily concentrated downtown. Ultimately, the Planning Board asked Staff to take their comments and work them into a new revised set of ordinance amendments to review on February 9, 2022.

Study Session #8 Summary
On February 9, 2022 (Agenda – Minutes), the Planning Board worked on fine-tuning a set of ordinance amendments to try to finalize a few of their discussion points, and make sure the intent of the original direction of the City Commission was met. The Planning Board made several revision requests that were aimed at clarifying different aspects of the proposed ordinance, but especially relating to the barriers and enclosure regulations. In addition, the Planning Board made some requests to review various site plans from approved outdoor dining patios in the City to help guide the final discussions on the placement of patios, and other design limitations.

Study Session #9 Summary
On March 9, 2022 (Agenda – Minutes), the Planning Board took another long look at the proposed ordinance language and offered several minor changes to the text in an attempt to offer further clarity and consistency throughout the ordinance. In addition, the Planning Board discussed the remaining issues that were in need of direction. In short, the Planning Board decided that they did not wish to restrict outdoor dining patios to one contiguous patio, but did express interest in restricting platform dining to the street with no impingement on the furniture zone. Additionally, the majority of the Planning Board did not feel as though fixed awnings were appropriate over outdoor dining platforms, and sought additional language to restrict overhead weather protection to umbrellas on platforms. Finally, the Planning Board did not feel as though the numbers of platforms per block should be restricted.

Public Hearing #1 Summary
On March 9, 2022, the Planning Board moved to set a public hearing date of April 13, 2022 for a final review and recommendation to be forwarded to the City Commission. Due to a noticing issue, the Planning Board reset the public hearing to May 11, 2022 (Agenda – Minutes). At the public hearing, the Planning Division provided finalized ordinance language based on Planning Board comments, but also re-circulated the language to each department, as well as the City

Attorney to ensure that the language addressed their concerns, and would provide consistent and enforceable regulation. Ultimately, a motion to recommend approval to the City Commission failed 3-4. The driving factors behind the failed vote were concerns over the impact of the amended ordinance language on existing establishments, and some lingering design questions.

Joint Meeting Summary

On June 20, 2022 (Agenda – Minutes), the Planning Board and City Commission held a joint meeting to discuss a few remaining policy considerations related to the overall outdoor dining study, as well as give the Commission a progress report. Three main questions were posed to the group:

1. Does the Commission wish to engage in any additional public input on the outdoor dining ordinance?
2. Does the Commission wish to consider a cap on the number of outdoor dining platforms permitted in the public rights-of-way by block, by area, or overall?
3. Should the Planning Board require additional documents and plans regarding the integration of valet operations and outdoor dining?

During the meeting, there was consensus that the City should use its constant contact email service to help inform the public of the upcoming outdoor dining study session. In addition, the group was in agreement that a non-conformity or sunset provision would be appropriate based on the nature of some of the larger changes proposed. Finally, it was unanimously accepted that a valet operations plan be included wherever outdoor dining facilities and valet operations coexist.

Study Session #10 Summary

On July 13, 2022 (Agenda – Minutes), the Planning Board discussed at length the final major design considerations that were unresolved, which included outdoor dining facilities in the furnishing zone, overhead weather protection, and windbreaks.

Study Session #11 Summary

On August 10, 2022 (Agenda – Minutes), the Planning reviewed revised ordinance language to reflect an adjustment to outdoor dining facility placement, the allowance of canopies and awnings on platforms, and other minor improvements.

Study Session #12 Summary

On September 14, 2022 (Agenda – Minutes), the Planning Division provided the minor revisions requested from the Planning Board from the previous meeting. The Planning Board discussed each section and provided staff with comments and requests for minor changes. At that time, the Planning Board indicated that the nonconforming section of the ordinance is the final hurdle, and provided commentary on what type of language best suited the outdoor dining ordinance based on the number of outdoor dining facilities and the time horizon for changes.

Study Session #13 Summary

On November 9, 2022 (Agenda) the Planning Board reviewed a document that contained all of the requested changes from the Planning Board, which was also reviewed by the City Attorney. The Planning Board fielded a large amount of public comment regarding the proposed "sunset" language in the nonconformity section, which the Planning board agreed to remove for the public hearing.

Public Hearing #2

The Planning Division has provided final ordinance language that considered the feedback received from the Planning Board at the last study session, as well as sample motion language below.

Sample Motion Language:

Motion to recommend to the City Commission APPROVAL of the amendments to Article 4, Section 4.44, Article 3, Section 3.04, Article 3, Section 3.16, and Article 9, Section 9.02 to provide more clear and enforceable outdoor dining ordinances.

MEMORANDUM

City Clerk's Office

DATE: **Thursday, February 23, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Alexandria Bingham, City Clerk**

SUBJECT: **2022 Liquor License Establishment Review and Consideration for 2023 License Renewal**

INTRODUCTION:
Annually the City Commission is required by Chapter 10, Alcoholic Liquors, of the Birmingham Code of Ordinances to review and consider the renewal of liquor licenses for establishments which sell intoxicating liquor for consumption on the premises. As part of the review process investigations of each licensed establishment are conducted by the Building, Planning, Police, Fire and Treasury departments to determine whether the licensee is in compliance with all applicable City and State codes.

If violations of the City or State codes are found, a public hearing must be held to consider whether to recommend renewal of the license. Public hearings should be scheduled for March 27, 2023 7:30 p.m. to allow adequate time to forward objections to the Michigan Liquor Control Commission by the March 31, 2023 deadline.

BACKGROUND:
Pursuant to Chapter 10, Alcoholic Liquors, each January the City performs investigations as part of the renewal process for liquor licenses. As stated in City Ordinance:

<u>Chapter 10, Section 10-40</u>
The City Commission may object to renewal of a license for consumption of intoxicating liquor on the premises for one or more of the following reasons:

1. Licensee's failure to comply with all applicable city and state laws concerning health, safety, moral conduct or public welfare.
2. Licensee's repeated violations of state liquor laws.
3. Licensee's maintenance of a nuisance upon or in connection with the licensed premises, including but not limited to any of the following:
    a. Existing violations of building, electrical, mechanical, plumbing, zoning, health, fire or other applicable regulatory codes;

b. A pattern of patron conduct in the neighborhood of the licensed premises which is in violation of the law and/or disturbs the peace, order, and tranquility of the neighborhood;
c. Failure to maintain the grounds and exterior of the licensed premises, including litter, debris, or refuse blowing or being deposited upon adjoining premises;
d. Entertainment on the licensed premises without a permit and/or entertainment which disturbs the peace, order and tranquility in the neighborhood of the licensed premises;
e. Any advertising, promotion or activity in connection with the licensed premises which by its nature causes, creates or contributes to disorder, disobedience to rules, ordinances or laws, or contributes to the disruption of normal activity of those in the neighborhood of the licensed premises;
f. Numerous police contacts with the licensed premises or the patrons of the premises;
g. Failure to adequately staff and control the premises; and
h. The conditions or practices of the business present immediate health and safety issues.

4. Licensee's failure to permit the inspection of the licensed premises by the city's agents or employees in connection with the enforcement of the City Code.
5. Licensee's failure to comply with the terms of its liquor license or any conditions imposed by the city commission or the liquor control commission at the time of issuance or transfer of the license.
6. Licensee's failure to comply with all standards and plans established and approved by the city commission at the time of original approval or transfer of the license.
7. Licensee's failure to timely pay its taxes or other monies due the city.

(Code 1963, § 7.403(b); Ord. No. 1551, § 7.403(B), 3-15-93; Ord. No. 2067, 8-22-11)

Accordingly, all licensed establishments have been inspected to determine compliance with Chapter 10 of the City Code regarding Alcoholic Liquors. All licensed establishments were notified that the City Commission will be considering renewal of their licenses at the February 27, 2023 meeting. As City staff conducted their reviews and investigations, establishments were contacted multiple times by mail, email and phone on the status of any violations and how to quickly resolve them. The owners of the establishments with outstanding financial obligations to the City have been contacted personally, as well.

In addition, the latest 2022 inspection records were obtained from the Oakland County Health Division and the Department of Agriculture. A detailed review of these records did not reveal any outstanding critical violations at any of the establishments. Any minor violations were in the process of being resolved.

LEGAL REVIEW:
The City Attorney has reviewed the suggested process and finds it in order.

FISCAL IMPACT:
A total of $873.38 in past due billings remain unpaid as of February 18, 2023.

PUBLIC COMMUNICATIONS:
On November 23, 2022, liquor license holders were contacted by certified mail with return receipt and informed of the review and renewal process, including physical establishment inspections

and review of records by City staff. License holders were also notified of the date which the City Commission will review and recommend renewal of all licenses based on the review reports. All 2023 Liquor License applications were returned to the Clerk's Office.

In the weeks prior to the February 27, 2023 City Commission meeting, all license holders with outstanding financial obligations were contacted by phone and email in an effort to resolve all outstanding amounts prior to the Commission meeting on February 27, 2023.

SUMMARY:
Each year the City Commission reviews all licensed establishments for compliance with Chapter 10, Alcoholic Liquors of the City Code to consider the renewal of each license.

The City Commission may wish to recommend renewal for all Class B, Class C and Microbrewery Liquor Licenses for establishments which are in compliance with Chapter 10, Alcoholic Liquors of the Birmingham Code of Ordinances.

The City Commission may wish to object to the renewal of Class B, Class C and Microbrewery Liquor Licenses held by establishments that are not in compliance with Chapter 10, Alcoholic Liquors of the City Code. To do so, a public hearing must first be held for each establishment not in compliance. Objections must be received by the Michigan Liquor Control Commission by March 31, 2023. Therefore, if public hearings are to be held the City Commission should schedule them for the March 27, 2023 meeting.

ATTACHMENTS:

1. Listing of current and pending liquor licenses for on premise consumption in Birmingham
2. 2022 Liquor License investigative review summary of outstanding violations
3. Departmental reports from:
    a. Police
    b. Planning
    c. Building (includes Fire violations)
    d. Treasury

SUGGESTED COMMISSION ACTION:
To make a motion adopting a resolution to approve the renewal of liquor licenses for the 2023 licensing period for the following establishments holding a Class B, Class C, or Microbrewery Liquor License that are in compliance with Chapter 10, Alcoholic Liquors of the City Code:

- Adachi
- All Seasons Senior Living (Hospitality Of Birmingham)
- Bella Piatti, LLC
- Birmingham Pub
- Birmingham Theater
- Brooklyn Pizza
- Churchills Bistro
- Community House
- Dick O'Dows
- Elie's Mediterranean
- EM
- Emagine Palladium
- Fleming's Prime Steakhouse
- Forest Grill 2, LLC
- Griffin Claw Brewing Company
- Hazel Ravines & Downtown
- Hyde Park Steak House
- La Strada Italian Kitchen and Bar
- Lincoln Hills Golf Course
- Luxe Bar and Grille
- Mare Mediterranean

- Market North End
- Phoenicia Restaurant
- Salvatore Scallopini
- Sidecar/Slice/Shift
- Social Kitchen And Bar LLC
- Springdale Golf Course
- Streetside Seafood
- Sushi Japan
- Tallulah Wine Bar & Bistro
- The Daxton Hotel
- The Morrie Birmingham, LLC
- Townhouse Kitchen & Bar LLC
- Townsend
- Whistlestop
- Zana

And

To make a motion adopting a resolution to set public hearings on Monday, March 27, 2023 to consider whether the City Commission shall file objections with the Michigan Liquor Control Commission for the renewal of licenses held by the following establishments that are in violation of Chapter 10, Alcoholic Liquors of the City Code:

- 220 Merrill
- Casa Pernoi
- Papa Joe's/Bistro Joe's
- Toast
- Whole Foods

And

Further, to direct the City Manager to notify the owners and operators of licensed establishments for which a public hearing is set via first class certified mail, to inform them of the public hearing date set for the March 27, 2023 7:30 p.m. City Commission meeting, and inform them that they may submit any written material for consideration by the City Commission prior to or at the public hearing, that the licensee or counsel of licensee may appear at the hearing in person or via zoom, and that the licensee or counsel of licensee may present witnesses or written evidence for City Commission consideration at the public hearing.

Current Establishments with Liquor License

Establishment	Address	MLCC Status
220 Restaurant Hospitality, LLC	220 E Merrill	Class C
Adachi Restaurant Group, LLC	325 S Old Woodward Ave	Class C
All Seasons Senior Living (Hospitality Of Birmingham)	111 Elm Rd	Class C
Bella Piatti, LLC	167 Townsend	Class C
Birmingham Pub	555 S Old Woodward Ave	Class C
Birmingham Theater	211 S Old Woodward	Class C
Brooklyn Pizza	111 Henrietta	Class C
Churchills Bistro	116 S Old Woodward	Class C
Community House	380 S Bates	Class C
Dick O'Dows	160 W Maple	Class C
Elies Mediterranean	263 Pierce St	Class C
EM	470 N. Old Woodward Suite 100	Class C
Emagine Palladium	209 Hamilton Row	Class C
Fleming's Prime Steakhouse	323 N Old Woodward Ave	Class C
Forest Grill 2, LLC	735 Forest Ave	Class C
Griffin Claw Brewing Company	575 S Eton St	Class C - Microbrew
Hazel Ravines & Downtown	34977 Woodward Ave	Class C
Hyde Park Steak House	201 S Woodward	Class C - Quota
La Strada Italian Kitchen and Bar	243 E Merrill St	Class C
Lincoln Hills Golf Course	2666 W Fourteen Mile	Class C
Luxe Bar and Grille	525 N Old Woodward Ave	Class C
Mare Mediterranean	115 Willits St	Class C
Market North End	474 N Old Woodward	Class C
Papa Joe's/Bistro Joe's	34244 Woodward	Class C
Pernoi	310 E Maple Rd	Class C
Phoenicia Restaurant	588 S Old Woodward	Class C
Salvatore Scallopini	505 N Old Woodward	Class C
Sidecar/Slice/Shift	117 Willits St	Class C - Quota
Social Kitchen And Bar LLC	225 Maple	Class C
Springdale Golf Course	316 S Strathmore	Class C
Streetside Seafood	273 Pierce St	Class C - Quota
Sushi Japan	176 S Old Woodward	Class C
Tallulah Wine Bar & Bistro	151 -155 S Bates St	Class C - Quota
The Daxton Hotel	298 S Old Woodward Ave	Class B - Hotel
The Morrie Birmingham, LLC	260 N Old Woodward Ave	Class C
Toast Birmingham LLC	203 Pierce	Class C
Townhouse Kitchen & Bar LLC	180 Pierce 5/6	Class C
Townsend Hotel	100 Townsend St	Class B - Hotel
Whistlestop	501 S Eton	Class C
Whole Foods Market Group, Inc	2100 E Maple	Class C

Zana	210 S. Old Woodward	Class C - Conditional

Pending or Otherwise Inactive		
Establishment	**Address**	**MLCC Status**
Bloom/Green Kitchen LLC	239 N. Old Woodward	Class C - Conditional
Madhatter Bistro/Belle	185 N Old Woodward	Class C
Restoration Hardware	300-394 S. Old Woodward	Tavern - Escrow
Wilders	460 N. Old Woodward	Class C

2022 Liquor License Investigative Review Summary

Establishments Currently in Compliance	
Adachi	325 S. Old Woodward Ave
All Seasons Senior Living (Hospitality Of Birmingham)	111 Elm Rd
Bella Piatti, LLC	167 Townsend
Birmingham Pub	555 S Old Woodward Ave
Birmingham Theater	211 S Old Woodward
Brooklyn Pizza	111 Henrietta
Churchills Bistro	116 S Old Woodward
Community House	380 S Bates
Dick O'Dows	160 W Maple
Elies Mediterranean	263 Pierce St
EM	470 N. Old Woodward Suite 100
Emagine Palladium	209 Hamilton Row
Fleming's Prime Steakhouse	323 N Old Woodward Ave
Forest Grill 2, LLC	735 Forest Ave
Griffin Claw Brewing Company	575 S Eton St
Hazel Ravines & Downtown	34977 Woodward Ave
Hyde Park Steak House	201 S Woodward
La Strada Dolcie Caffee	243 E Merrill St
Lincoln Hills Golf Course	2666 W Fourteen Mile
Luxe Bar Grille	525 N Old Woodward Ave
Mare Mediterranean	115 Willits St
Market North End	474 N Old Woodward
Phoenicia Restaurant	588 S Old Woodward
Salvatore Scallopini	505 N Old Woodward
Sidecar/Slice/Shift	117 Willits St
Social Kitchen And Bar LLC	225 Maple
Springdale Golf Course	316 S Strathmore
Streetside Seafood	273 Pierce St
Sushi Japan	176 S Old Woodward
Tallulah Wine Bar & Bistro	151 -155 S Bates St
The Daxton Hotel	298 S Old Woodward Ave
The Morrie Birmingham, LLC	260 N Old Woodward Ave
Townhouse Kitchen & Bar LLC	180 Pierce 5/6
Townsend Hotel	100 Townsend St
Whistlestop	501 S Eton
Zana	210 S. Old Woodward

Establishments with outstanding violations as outlined in Chapter 10, Section 10-40	
220 Restaurant	**220 Merrill** Treasury violation: 180.00 in open invoices and $10.15 in late water due
Casa Pernoi	**310 E. Maple** Planning violation: Interior seat count over by 10 chairs.
Papa Joe's	**34244 Woodward** Police Violation: Sold to minor during a liquor decoy operation in 2022
Toast	**203 Pierce** Planning violation: Persistent seating issue dating back annually to at least 2019, averaging 27 seats over the permitted interior maximum. Treasury violation: $683.23 in open invoices
Whole Foods	**2100 E Maple** Planning violation: Unpermitted e-commerce staging area obstructing view. Police violation: Sold to minor during a liquor decoy operation in 2022

MEMORANDUM

Police Department

DATE: **January 16, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Chris Koch, Investigative Captain**

APPROVED BY: **Scott A. Grewe, Chief of Police**

SUBJECT: **2022 Annual Class B/C Liquor License Report**

Liquor license inspections were conducted at the following Class B/C liquor license establishments/brew pubs in 2022:

1. 220 Merrill
2. Adachi Restaurant
3. All Seasons Senior Living
4. Bella Piatti
5. Birmingham Pub
6. Birmingham Theater
7. Bistro Joe's
8. Brooklyn Pizza
9. Churchill's Bistro
10. Community House
11. Daxton Hotel
12. Dick O'Dow's
13. Ellie's Mediterranean Grill & Bar
14. Emagine
15. Fleming's Prime Steakhouse & Wine Bar
16. Forest Grill
17. Griffin Claw Brewery
18. Hazel and Ravines
19. Hyde Park Steakhouse
20. La Strada Cafe
21. Luxe Bar & Grill
22. Maple Road Tap Room (Whole Foods)

23. Market North End
24. Pernoi
25. Phoenecia
26. Salvatore Scallopini
27. Sidecar/Slice/Shift
28. Social Kitchen and Bar
29. Streetside Seafood
30. Tallulah Wine Bar & Bistro
31. The Morrie
32. Toast
33. Townhouse
34. Townsend Hotel/The Corner Bar
35. Whistlestop
36. Lincoln Hills Golf Course-City of Birmingham
37. Springdale Golf Course-City of Birmingham
38. Zana

All of the above-listed establishments were license compliant according to the standards set by the Michigan Liquor Control Commission (MLCC).

2022 Liquor Law Violations Class B/C

The Birmingham Police Department conducted liquor decoy operations in 2022 on Class B/C licensed establishments. Two establishments sold to minors and were issued violations.

1. Maple Road Tap Room Whole Foods
2. Papa Joe's

2022 Liquor Law Violations Specially Designated Merchant (SDM)

The Birmingham Police Department conducted liquor decoy operations in 2022 on SDM licensed establishments. Three establishments sold to minors and were issued violations.

1. Primos Pizza
2. CVS
3. Holiday Market

The Birmingham police department was able to conduct liquor decoy operations on a total of 25 Class B/C and SDM licensed establishments.

2022 Police Contacts

All Class B/C establishments were checked for assaultive behavior and disorderly conduct-related police contacts. The following list details these contacts:

1) 220 Merrill (220 Merrill)

    a) January 30, 2022: Officers were dispatched to a fight in progress in the Rose Room. When officers arrived there was a large brawl in the back corner of the room. Officers were able to separate the parties involved. Two people were arrested, one was charged with disorderly breach of peace and the

other was charged with disorderly breach of peace, obstruction, and fail to identify.

b) July 31, 2022: Officers were dispatched to a fight in progress. A verbal altercation occurred in a booth that was located outside on the patio. One of the parties left and the other party ran after them. A physical altercation occurred west of the restaurant. Both parties were given criminal trespass warnings and one subject was given a citation for disorderly conduct.

2) Dick O Dow's (160 W. Maple)

a) June 18, 2022: Officers were dispatched to this location for an assault and battery. Officers spoke to all involved in the situation. After an investigation and review by the prosecutor, a warrant was issued for disorderly conduct.

3) Community House (380 Bates)

a) September 18, 2022: After walking out of a wedding two family members got into a verbal argument and began fighting. Parties were separated and after a further investigation, no charges were filed.

4) Sidecar/Slice/Shift (117 Willits)

a) April 29, 2022: Officers were called to this location for a fight in progress. Two individuals had a verbal altercation. It escalated and one subject assaulted the other. The suspect left prior to police arrival and was not identified.

b) October 16, 2022: Officers responded to an altercation. A female stated another female hit her with a glass in the head while in the bathroom. The case was submitted for a warrant and the warrant was denied.

5) The Morrie (260 N Old Woodward)

a) April 10, 2022: An officer witnessed several subjects fighting on the sidewalk in front of The Morrie near closing time. Officers were able to separate the subject and determined that the fight started after a drink was thrown at one of them. Two subjects were issued citations for disorderly conduct.

b) July 31, 2022: Two employees of The Morrie got into a physical altercation when they were closing the up for the night. The case was submitted to the prosecutor and charges were denied.

c) December 31, 2022: Officer responded to a subject that was assaulted while attempting to get a drink at the bar. When officers arrived the suspect was gone and they were not able to identify him.

It should be noted, in addition to the above listed incidents, the police department also conducted 211 documented self-initiated bar and restaurant checks in 2022.

BIRMINGHAM
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MEMORANDUM

Planning Division

DATE: February 17, 2023

TO: Alexandria Bingham, City Clerk

FROM: Nicholas Dupuis, Planning Director

SUBJECT: 2023 Liquor License Inspections

Please be advised that the Planning Division has completed the inspections for the annual renewal of liquor licenses across the City. These inspections serve as a means to ensure that all license holders in the City are in compliance with their Special Land Use Permits and have kept a well-maintained building and general site in accordance with the approved plans on file with the Planning Division. The following observations were made:

- **325 S. Old Woodward – Adachi**
  - Issues – Unpermitted portable sign (2 signs not permitted).
  - Resolution – Owner had one sign removed.
- **111 Henrietta – Brooklyn Pizza**
  - Issues – At the outdoor dining patio, several heaters are damaged and are in need of repair. Finally, there was some clutter in the window behind the bar that requires routine cleanup.
  - Resolution – The owner repaired the heaters and has cleaned up the area at the window.
- **474 & 470 N. Old Woodward – Market North End & EM**
  - Issues – Dumpster area cluttered/unkempt.
  - Resolution – Owner was notified and cleaned up the area.
- **310 E. Maple – Casa Pernoi**
  - Issues – Interior seat count over by 10 total chairs.
  - Resolution – None at this time.
- **117 Willits – Shift/Sidecar/Slice**
  - Issues – Unscreened dumpsters in alley. Outdoor dining tables/chairs stacked on sidewalk.
  - Resolution – Owner has been working with the Planning Division to get the dumpsters screened for some time now, a solution should be near. In regards to the tables/chairs, the owner was told that if they would like outdoor dining during this offseason, that they would need to be brought in each night until they are ready to be set up and utilized.

- **203 Pierce – Toast**
    - Issues – Interior seating was over by 29 seats.
    - Resolution – Staff re-inspected the interior with ownership, counsel and restaurant management and found that the seats had been removed and that they then matched their approved plans and the ordinance at this time. This issue has persisted since at least 2019 where the City counted an average of 27 seats over the permitted maximum over a three year period.
- **2100 E. Maple – Whole Foods (Grocery Store)**
    - Issue – Front area at northeast corner of the store seems to have transitioned into an e-commerce staging area with coolers and racks that obstruct views into the space. It is worth noting that the Planning Division has denied a Building Permit for a larger, more in-depth proposal to formally turn this area into an e-commerce hub of the store.
    - Resolution – None at this time.

Notes:

- In terms of the minor indoor seating discrepancies (1-4 seats) that are noted in the attached spreadsheet, all of those issues were remedied on the day of while the Planning Division was at the restaurant, which is why they are not listed as issues above.
- Outdoor dining – Not all establishments had their outdoor dining placed during this "offseason", but some of them did have their entire facility set up, or a partial facility set up. Those that had any outdoor dining set up were reviewed against the approved plans, and no major issues were found. The attached seat inspection spreadsheet in terms of the outdoor and total establishment seating should be viewed with an understanding that most restaurants did not have outdoor dining.
- In addition, there were some other issues such as site clutter that were also remedied the day of, so these items were not listed as issues, similar to the indoor seating comment above.

SUGGESTED COMMISSION ACTION:
Make a motion adopting a resolution to set a public hearing date of March 27, 2023 to review the liquor license and Special Land Use Permit for the following restaurants:

- 310 E. Maple – Casa Pernoi
- 203 Pierce – Toast
- 2100 E. Maple – Whole Foods (Grocery Store)

2023 Bistro Seat Counts

2023 Inspected

New		*Indoor Dining Seats*		*Outdoor Dining Seats*			*Total Seating*		
Bistro Licenses	**Address**	**Floor**	**Bar**	**Public Property**	**Dining Platform**	**Private Property**	**Indoor**	**Outdoor**	**Establishment**
Adachi Sushi	325 S. Old Woodward	58	7	0	0	0	65	0	65
Bella Piatti	167 Townsend	52	10	0	0	0	62	0	62
Bistro Joe's	34244 Woodward	58	10	0	0	60	68	60	128
Bloom	239 N. Old Woodward	-	-	-	-	-	-	-	-
Brooklyn Pizza	111 Henrietta	46	10	39	0	0	56	39	95
Churchills Bistro & Cigar Bar	116 S. Old Woodward	53	8	0	0	0	61	0	61
Elie's Mediterranean Grill/Bar	263 Pierce	57	8	12	16	0	65	28	93
EM	470 N. Old Woodward	32	10	0	0	0	42	0	42
Forest Grill	735 Forest	53	10	0	0	0	63	0	63
La Strada Café	243 E. Merrill	48	6	0	0	0	54	0	54
Luxe Bar & Grill	525 N. Old Woodward	42	8	0	0	0	50	0	50
Bell	185 N. Old Woodward	-	-	-	-	-	-	-	-
Maple Road Taproom (Whole Foods)	2100 E. Maple	18	8	0	0	0	26	0	26
Market North End	474 N. Old Woodward	52	10	0	0	42	62	42	104
Pernoi	310 E. Maple	66	8	0	0	30	74	30	104
Salvatore Scallopini	505 N. Old Woodward	59	6	0	0	0	65	0	65
Social Kitchen & Bar	225 E. Maple	53	8	45	0	0	61	45	106
Sushi Japan	176 S. Old Woodward	48	6	0	0	0	54	0	54
Tallulah Wine Bar & Bistro	155 S. Bates	52	11	0	36	0	63	36	99
Toast	203 Pierce	84	9	0	0	0	93	0	93
Townhouse	180 Pierce	38	6	0	0	0	44	0	44
Whistle Stop	501 S. Eton	56	8	0	0	0	64	0	64

2023 Approved

New		*Indoor Dining Seats*		*Outdoor Dining Seats*			*Total Seating*		
Bistro Licenses	**Address**	**Floor**	**Bar**	**Public Property**	**Dining Platform**	**Private Property**	**Indoor**	**Outdoor**	**Establishment**
Adachi Sushi	325 S. Old Woodward	55	10	0	0	67	65	67	132
Bella Piatti	167 Townsend	52	10	6	22	0	62	28	90
Bistro Joe's	34244 Woodward	54	10	0	0	60	64	60	124
Bloom	239 N. Old Woodward	58	7	36	0	0	65	36	101
Brooklynn Pizza	111 Henrietta	55	10	41	0	0	65	41	106
Churchills Bistro & Cigar Bar	116 S. Old Woodward	54	9	12	0	0	63	12	75
Elie's Mediterranean Grill/Bar	263 Pierce	56	8	4	20	0	64	24	88
EM	470 N. Old Woodward	30	10	24	0	28	40	52	92
Forest Grill	735 Forest	54	10	30	0	0	64	30	94
La Strada Café	243 E. Merrill	57	8	14	0	0	65	14	79
Luxe Bar & Grill	525 N. Old Woodward	49	10	12	0	0	59	12	71
Bell	185 N. Old Woodward	50	8	24	0	0	58	24	82
Maple Road Taproom (Whole Foods)	2100 E. Maple	28	8	0	0	33	36	33	69
Market North End	474 N. Old Woodward	54	10	0	0	44	64	44	108
Pernoi	310 E. Maple	58	7	0	0	64	65	64	129
Salvatore Scallopini	505 N. Old Woodward	58	6	34	0	0	64	34	98
Social Kitchen & Bar	225 E. Maple	54	10	56	0	30	64	86	150
Sushi Japan	176 S. Old Woodward	48	6	18	0	0	54	18	72
Tallulah Wine Bar & Bistro	155 S. Bates	54	10	0	42	0	64	42	106
Toast	203 Pierce	55	10	19	40	0	65	59	124
Townhouse	180 Pierce	40	10	64	0	0	50	64	114
Whistle Stop	501 S. Eton	56	8	28	0	0	64	28	92

2023 Differences

New		*Indoor Dining Seats*		*Outdoor Dining Seats*			*Total Seating*		
Bistro Licenses	**Address**	**Floor**	**Bar**	**Public Property**	**Dining Platform**	**Private Property**	**Indoor**	**Outdoor**	**Establishment**
Adachi Sushi	325 S. Old Woodward	3	-3	0	0	0	0	0	0
Bella Piatti	167 Townsend	0	0	0	0	0	0	0	0
Bistro Joe's	34244 Woodward	4	0	0	0	0	4	0	4
Bloom	239 N. Old Woodward	-		-	-	-	-	-	-
Brooklyn Pizza	111 Henrietta	-9	0	-2	0	0	-9	-2	-11
Churchills Bistro & Cigar Bar	116 S. Old Woodward	-1	-1	0	0	0	-2	0	-2
Elie's Mediterranean Grill/Bar	263 Pierce	1	0	8	-4	0	1	4	5
EM	470 N. Old Woodward	2	0	0	0	0	2	0	2
Forest Grill	735 Forest	-1	0	0	0	0	-1	0	-1
La Strada Café	243 E. Merrill	-9	-2	0	0	0	-11	0	-11
Luxe Bar & Grill	525 N. Old Woodward	-7	-2	0	0	0	-9	0	-9
Bell	185 N. Old Woodward	-		-	-	-	-	-	-
Maple Road Taproom (Whole Foods)	2100 E. Maple	-10	0	0	0	0	-10	0	-10
Market North End	474 N. Old Woodward	-2	0	0	0	-2	-2	-2	-4
Pernoi	310 E. Maple	8	1	0	0	-34	9	-34	-25
Salvatore Scallopini	505 N. Old Woodward	1	0	0	0	0	1	0	1
Social Kitchen & Bar	225 E. Maple	-1	-2	-11	0	0	-3	-11	-14
Sushi Japan	176 S. Old Woodward	0	0	0	0	0	0	0	0
Tallulah Wine Bar & Bistro	155 S. Bates	-2	1	0	-6	0	-1	-6	-7
Toast	203 Pierce	29	-1	0	0	0	28	0	28
Townhouse	180 Pierce	-2	-4	0	0	0	-6	0	-6
Whistle Stop	501 S. Eton	0	0	0	0	0	0	0	0

BIRMINGHAM
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MEMORANDUM

Building Department

DATE: **February 22, 2023**

TO: **Thomas M. Markus, City Manager**

FROM: **Bruce R. Johnson, Building Official**

SUBJECT: **2023 Liquor License Renewal Report**

The Building Department conducted inspections of the 41 establishments within the City this year that are licensed to serve liquor. The department inspected each facility for compliance with applicable building codes, reviewed the prior year's code enforcement records and obtained the Health Department inspection records for City Commission consideration per Section 10-37 of the City Code.

The initial inspections were conducted in January of this year to check that building, electrical, mechanical, and plumbing codes were being adhered to. The manager on site was informed of any deficiencies or violations discovered and was informed that a follow-up inspection would be scheduled within a couple weeks to verify compliance. The inspection history reports included in this report will show that all facilities have corrected their violations.

Building Department staff conducted a code enforcement audit of violations cited at each facility during calendar year 2022. Mare Mediterranean and Sidecar Slider Bar have open violations for having unscreened dumpsters behind the building that they are working with the Planning Department to resolve. In addition, we obtained the 2022 inspection records from the Oakland County Health Division and/or the Department of Agriculture for each facility. The code enforcement history and health department reports are attached for consideration.

The table below lists each facility with hyperlinks that will take you to the reports and records for each location.

Name	Address
220 RESTAURANT	220 E MERRILL ST
ADACHI RESTAURANT	325 S OLD WOODWARD AVE STE 1
ALL SEASONS OF BIRMIGHAM	111 ELM ST
BELLA PIATTI	167 TOWNSEND ST
BIRMINGHAM PUB	555 S OLD WOODWARD AVE STE 100
BIRMINGHAM THEATER	211 S OLD WOODWARD AVE

BISTRO JOE'S	34244 WOODWARD AVE
BROOKLYN PIZZA	111 HENRIETTA ST
CHURCHILLS	116 S OLD WOODWARD AVE
COMMUNITY HOUSE	380 S BATES ST
DAXTON HOTEL	298 S OLD WOODWARD AVE
DICK O DOWS	160 W MAPLE RD
ELIE'S MEDITERREAN GRILL	263 PIERCE ST
EMAGINE	209 HAMILTON ROW
EMPLOYEE MEAL	470 N OLD WOODWARD AVE STE 100
FLEMINGS PRIME STEAKHOUSE	323 N OLD WOODWARD AVE
FOREST GRILL	735 FOREST AVE STE 100
GRIFFIN CLAW BREWERY	575 S ETON ST
HAZEL RAVINES & DOWNTOWN	34977 WOODWARD AVE
HYDE PARK STEAKHOUSE	201 S OLD WOODWARD AVE
LASTRADA-CAFE	243 E MERRILL ST
LINCOLN HILLS GOLF COURSE	2666 W 14 MILE RD
LUXE BAR & GRILL	525 N OLD WOODWARD AVE
MARE MEDITERRANEAN	115 WILLITS ST
MARKET	474 N OLD WOODWARD AVE
PERNOI	310 E MAPLE RD
PHOENICIA RESTAURANT	588 S OLD WOODWARD AVE
SALVATORE SCALLOPINI RESTAURANT	505 N OLD WOODWARD AVE
SIDECAR SLIDER BAR	117 WILLITS ST
SOCIAL KITCHEN	225 E MAPLE RD
SPRINGDALE GOLF COURSE	316 STRATHMORE RD
STREETSIDE RESTAURANT	273 PIERCE ST
SUSHI JAPAN	176 S OLD WOODWARD AVE
TALLULAH WINE BAR & BISTRO	155 S BATES ST FL 1
THE MORRIE	260 N OLD WOODWARD AVE
TOAST	203 PIERCE ST
TOWNHOUSE KITCHEN & BAR	180 PIERCE ST
TOWNSEND HOTEL	100 TOWNSEND ST
WHISTLE STOP RESTAURANT	501 S ETON ST # 505
WHOLE FOODS	2100 E MAPLE RD
ZANA RESTAURANT	210 S OLD WOODWARD AVE STE 110

2022 Treasury Violations as of February 22, 2023 1:17 pm

APPLICANT	Parcel #	July 2022 Tax Due	December 2022 Tax Due	Invoices	Delinquent Special Assesments	Prior Year Delinquent Personal Property	Water Account Number	Late Water Due	Total Due	Comments
220 Merrill Restaurant	19-36-202-017			$180.00			00023-59924		$180.00	Late as of 2/13/23.
	99-00-015-113						00237-22056	$10.15	$10.15	Past due. Not delinquent
Adachi Restaurant Group LLC	99-00-019-073									
All Seasons	19-36-227-029						09901-10370			
	99-00-014-135						09902-10371			
Bella Piatti	99-00-012-120									
Birmingham Pub	99-00-022-038						17536-24761			
Birmingham Theater	99-01-960-507						32027-34038			
							07731-10184			
							07737-23518			
Bistro Joe's	99-00-002-103						19469-24354			
	19-36-283-025						00000-11514			
Brooklyn Pizza	99-01-950-279						32517-22522			
Churchill's Bistro	99-01-009-140						35143-25682			
Community House	19-36-132-007						00190-78528			
							01909-22470			
Dick O'Dow's	99-01-960-288						06549-23140			
							06551-23142			
Elie's Mediterranean Café	99-01-930-115						00022-19864			
EM	99-00-022-097									
Emagine Palladium	99-00-016-081									
Flemings	99-00-008-040									
Forest Grill 2 LLC	99-00-009-074									
Griffin Claw Brewery	99-00-014-048						29898-19115			
	20-31-203-036						29899-19116			
							29901-19118			
Hazel Ravines Downtown	99-00-019-061						34487-34546			
Hyde Park Steakhouse	99-00-013-091						07725-23506			
							32231-25766			

La Strada Caffe LLC	99-00-016-108									
Lincoln Hills Golf Course										
Luxe Bar & Grill	99-00-011-030									
Mad Hatter	99-00-015-066		$1,324.67						$1,324.67	Late. Will become delinquent 3/1.
Mare Mediterranean	99-00-022-037									
Market North End	99-00-014-056						07106-23265			
Morrie, The	99-00-020-060									
Papa Joe's Gourmet Market	19-36-282-005						00000-11459			
	99-00-014-117						19469-24354			
							19471-24356			
Pernoi	99-00-020-032									
Phoenecia	99-01-010-170						00785-22218			
Sidecar	99-00-017-071									
Salvatore Scallopini	99-01-850-267						06433-23066			
Social Kitchen & Bar	99-00-013-079									
Springdale Golf Course										
Streetside Seafood	99-01-006-540						00223-22048			
Sushi Japan	99-00-022-051									
Tallulah Wine Bar & Bistro	99-00-011-051						02017-22504			
The Daxton Hotel	99-00-021-065						00000-11541			
	19-36-202-019									
Toast	99-00-009-013		$683.23				21549-22036		$683.23	Will become Delinquent 3/1. Was told payment was put in the mail 2/20/23
Townhouse	99-00-012-092						01128-08396			
Townsend Hotel	19-36-134-006						00169-25030			
	99-01-870-185						00171-22012			
Whistlestop	20-31-203-004						33725-19112			
	99-01-002-570									
Whole Foods Market	99-00-018-001						10715-19104			

	20-31-202-001						10721-24202			
Total:			$2,007.90	$180.00				$10.15	$2,198.05	

BIRMINGHAM
A WALKABLE CITY

NOTICE OF INTENTION TO APPOINT TO THE MULTI-MODAL TRANSPORTATION BOARD

At the regular meeting of Monday, March 13, 2023, the Birmingham City Commission intends to appoint to the Multi-Modal Transportation Board one regular member at large from a different geographical area of the city to serve a three-year term to expire March 13, 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, March 8, 2023. 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.

In so far as possible, the seven-member committee shall be composed of the following: one pedestrian advocate member; one member with a mobility or vision impairment; one member with traffic-focused education and/or experience; one bicycle advocate member; one member with urban planning, architecture or design education and/or experience; and two members at large living in different geographical areas of the City. Applicants for this position do not have be a qualified elector or property owner in Birmingham.

Duties of the Multi-Modal Transportation Board

The purpose of the Multi-Modal Transportation Board shall be to assist in maintaining the safe and efficient movement of motorized and non-motorized vehicles and pedestrians on the streets and walkways of the city and to advise the City Commission on the implementation of the Multi-Modal Transportation Plan, including reviewing project phasing and budgeting.

Criteria/Qualifications of Open Position	**Date Applications Due** **(by noon)**	**Date of Interview**
In so far as possible, members shall represent pedestrian advocacy, mobility or vision impairment, traffic-focused education/experience, bicycle advocacy, urban planning, architecture or design education/experience, or different geographical areas of Birmingham. Members may or may not be electors (registered voter) or property owners of the City of Birmingham.	03/08/2023	03/13/2023

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

MEMORANDUM

Finance Department

DATE: February 17, 2023

TO: Thomas M. Markus, City Manager

FROM: Mark Gerber, Finance Director/Treasurer

SUBJECT: 2nd Quarter Investment Report

Public Act 213 of 2007 requires investment reporting on the City's general investments to be provided to the City Commission on a quarterly basis. This information is also required to be provided annually, which the City has and will continue to include within the audited financial statements.

General investments of the City are governed by State law and the City's General Investment Policy which is approved by the City Commission. The services of an outside investment advisor are utilized to assist the Treasurer in determining which types of investments are most appropriate and permitted under the investment policy, maximize the return on the City's investments within investment policy constraints and provide for cash flow needs.

The two primary objectives for investment of City funds are the preservation of principal and liquidity to protect against losses and provide sufficient funds to enable the City to meet all operating requirements that might be reasonably anticipated. Investment activities include all City funds except the retirement and retiree health-care funds as follows:

- General Fund
- Permanent Funds
- Special Revenue Funds
- Capital Projects Fund
- Enterprise Funds
- Debt Service Funds
- Component Unit Funds
- Internal Service Funds

Overall, the City has $110.9 million invested in various securities according to its general investment policy as of December 31, 2022.

The City has two pooled funds (CLASS Pool and J-Fund), which are used to meet payroll, contractor and other accounts payable needs. As indicated on the attached schedule, there is approximately $10.7 million invested in pooled funds at the end of December. A maximum of 50% of the portfolio may be invested in pooled funds that meet state guidelines. The amount currently invested in pooled funds is 10%.

The City also holds approximately $52.9 million, or 48%, of its investments in treasury notes and bills, which are obligations of the United States. The maximum amount of investments that may be held in government securities is 100%.

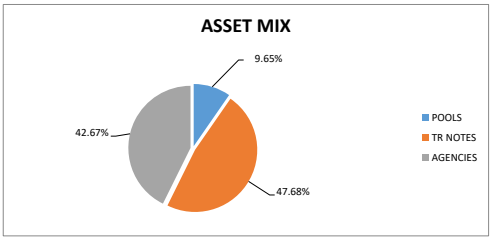
Investments in federal agencies total approximately $47.3 million, or 42%, of the City's investments. The maximum amount of the portfolio that may be invested in federal agencies is 75%.

The Investment Policy requires that the average maturity of the portfolio may not exceed two and one-half years. The current average maturity of the portfolio is 1.58 years.

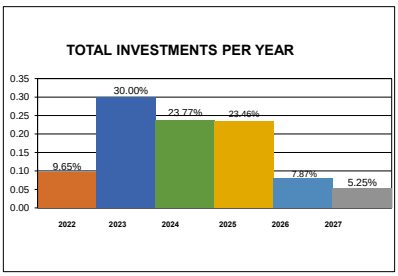
CITY OF BIRMINGHAM
GENERAL INVESTMENT PORTFOLIO SUMMARY

12/31/2022

YEAR	MATURITY DATE	DESCRIPTION	% YIELD	*	ISSUER	PAR VALUE	COST	CURRENT MARKET VALUE	YEARLY TOTAL	% OF TOTAL
2022	12/31/2022	CLASS POOL	4.265%	CITY	MICHIGAN CLASS	2,196,352.67	2,196,352.67	2,196,352.67		
	12/31/2022	J FUND	3.900%	CITY	COMERICA BANK	8,508,090.99	8,508,090.99	8,508,090.99		
									10,704,443.66	9.65%
2023	1/19/2023	AGENCY	1.617%	INSIGHT	FNMA	2,500,000.00	2,558,475.00	2,497,875.00		
	2/17/2023	AGENCY	0.192%	INSIGHT	FHLB	1,500,000.00	1,542,361.50	1,494,525.00		
	2/17/2023	AGENCY[86]	0.360%	INSIGHT	FNMA	1,000,000.00	999,800.00	939,580.00		
	2/21/2023	AGENCY	1.491%	INSIGHT	FFCB	2,000,000.00	2,004,653.94	1,992,320.00		
	3/16/2023	AGENCY[89]	0.500%	INSIGHT	FNMA	1,000,000.00	1,000,000.00	920,940.00		
	3/30/2023	AGENCY[84]	0.390%	INSIGHT	FHLMC	1,500,000.00	1,499,025.00	1,377,720.00		
	3/31/2023	TR NOTE	1.421%	INSIGHT	U.S.	1,500,000.00	1,556,430.81	1,492,965.00		
	4/15/2023	TR NOTE	0.207%	INSIGHT	U.S.	3,000,000.00	3,001,992.34	2,965,080.00		
	5/15/2023	TR NOTE	1.578%	INSIGHT	U.S.	1,500,000.00	1,509,028.46	1,484,295.00		
	6/19/2023	AGENCY	1.851%	INSIGHT	FHLMC	1,500,000.00	1,550,467.50	1,487,340.00		
	6/26/2023	AGENCY	0.233%	INSIGHT	FHLMC	1,500,000.00	1,500,705.00	1,469,040.00		
	8/15/2023	TR NOTE	4.130%	INSIGHT	U.S.	3,000,000.00	2,957,822.55	2,958,510.00		
	9/8/2023	AGENCY	1.466%	INSIGHT	FHLB	2,000,000.00	2,070,800.00	1,966,780.00		
	9/12/2023	AGENCY	1.591%	INSIGHT	FNMA	1,500,000.00	1,573,410.00	1,480,725.00		
	10/31/2023	TR NOTE	1.423%	INSIGHT	U.S.	1,500,000.00	1,587,954.24	1,477,560.00		
	10/31/2023	TR NOTE	0.307%	INSIGHT	U.S.	2,000,000.00	2,054,928.58	1,950,400.00		
	11/2/2023	AGENCY[87]	0.320%	INSIGHT	FHLMC	1,500,000.00	1,500,000.00	1,445,175.00		
	11/15/2023	TR NOTE	1.572%	INSIGHT	U.S.	1,500,000.00	1,570,258.93	1,474,455.00		
	11/15/2023	TR NOTE	0.320%	INSIGHT	U.S.	2,000,000.00	1,997,037.95	1,923,120.00		
	11/27/2023	AGENCY	0.202%	INSIGHT	FNMA	500,000.00	500,690.00	480,295.00		
									33,278,700.00	30.00%
2024	1/19/2024	AGENCY	0.241%	INSIGHT	FFCB	1,000,000.00	999,670.00	953,390.00		
	2/5/2024	AGENCY	1.572%	INSIGHT	FNMA	1,500,000.00	1,558,201.50	1,464,450.00		
	2/29/2024	TR NOTE	1.637%	INSIGHT	U.S.	1,750,000.00	1,785,621.10	1,699,477.50		
	3/8/2024	AGENCY	4.396%	INSIGHT	FHLB	2,900,000.00	2,868,825.00	2,861,546.00		
	4/15/2024	TR NOTE	0.434%	INSIGHT	U.S.	3,000,000.00	2,995,546.88	2,839,920.00		
	5/31/2024	TR NOTE	0.462%	INSIGHT	U.S.	1,000,000.00	1,040,823.66	963,830.00		
	6/14/2024	AGENCY	0.377%	INSIGHT	FHLB	1,500,000.00	1,556,520.00	1,437,375.00		
	6/14/2024	AGENCY	4.343%	INSIGHT	FHLB	2,500,000.00	2,481,025.00	2,471,775.00		
	7/2/2024	AGENCY	1.719%	INSIGHT	FNMA	1,500,000.00	1,502,037.00	1,436,475.00		
	8/19/2024	AGENCY	0.450%	INSIGHT	FNMA	2,000,000.00	1,999,500.00	1,863,400.00		
	9/13/2024	AGENCY	1.729%	INSIGHT	FHLB	1,750,000.00	1,843,345.00	1,699,617.50		
	9/30/2024	TR NOTE	0.569%	INSIGHT	U.S.	1,500,000.00	1,541,020.65	1,425,120.00		
	10/31/2024	TR NOTE	0.465%	INSIGHT	U.S.	1,000,000.00	1,032,695.31	938,490.30		
	10/31/2024	TR NOTE	0.557%	INSIGHT	U.S.	2,000,000.00	2,057,741.08	1,905,419.70		
	10/31/2024	TR NOTE	2.476%	INSIGHT	U.S.	1,000,000.00	994,378.35	960,980.00		
	11/15/2024	TR NOTE	0.560%	INSIGHT	U.S.	1,500,000.00	1,578,637.84	1,441,410.00		
									26,362,676.00	23.77%
2025	1/7/2025	AGENCY	0.362%	INSIGHT	FNMA	1,500,000.00	1,580,434.50	1,418,160.00		
	1/28/2025	AGENCY[90]	0.550%	INSIGHT	FHLB	1,500,000.00	1,500,000.00	1,383,120.00		
	2/12/2025	AGENCY	0.344%	INSIGHT	FHLMC	1,500,000.00	1,575,136.50	1,414,410.00		
	2/26/2025	AGENCY[91]	0.680%	INSIGHT	FHLB	1,000,000.00	1,000,000.00	920,330.00		
	2/28/2025	TR NOTE	0.508%	INSIGHT	U.S.	1,500,000.00	1,533,925.38	1,401,270.00		
	3/28/2025	AGENCY[93]	1.250%	INSIGHT	FHLB	1,500,000.00	1,370,835.00	1,370,835.00		
	3/28/2025	AGENCY[83]	0.450%	INSIGHT	FHLMC	1,500,000.00	1,500,000.00	1,367,760.00		
	3/31/2025	TR NOTE	0.669%	INSIGHT	U.S.	1,500,000.00	1,491,215.96	1,378,710.00		
	6/30/2025	AGENCY[92]	0.750%	INSIGHT	FHLB	2,000,000.00	2,000,000.00	1,819,080.00		
	7/15/2025	TR NOTE	4.233%	INSIGHT	U.S.	3,000,000.00	2,903,095.99	2,908,020.00		
	8/15/2025	TR NOTE	3.037%	INSIGHT	U.S.	2,000,000.00	1,937,506.70	1,890,000.00		
	9/15/2025	TR NOTE	4.187%	INSIGHT	U.S.	3,000,000.00	2,942,939.74	2,942,460.00		
	10/15/2025	TR NOTE	4.457%	INSIGHT	U.S.	1,500,000.00	1,491,386.71	1,500,120.00		
	10/31/2025	TR NOTE	3.167%	INSIGHT	U.S.	2,500,000.00	2,487,020.09	2,416,600.00		
	11/15/2025	TR NOTE	3.025%	INSIGHT	U.S.	2,000,000.00	1,951,959.82	1,894,760.00		
									26,025,635.00	23.46%
2026	2/25/2026	AGENCY	3.577%	INSIGHT	FFCB	1,500,000.00	1,487,659.50	1,461,540.00		
	3/31/2026	TR NOTE	4.144%	INSIGHT	U.S.	3,000,000.00	2,816,142.86	2,830,320.00		
	6/16/2026	AGENCY	4.203%	INSIGHT	FFCB	3,000,000.00	2,928,240.00	2,928,870.00		
	7/27/2026	AGENCY	4.412%	INSIGHT	FFCB	1,500,000.00	1,504,590.00	1,512,840.00		
									8,733,570.00	7.87%
2027	3/31/2027	TR NOTE	4.071%	INSIGHT	U.S.	1,500,000.00	1,406,430.81	1,409,715.00		
	6/30/2027	TR NOTE	3.701%	INSIGHT	U.S.	3,000,000.00	2,943,867.19	2,905,200.00		
	9/30/2027	TR NOTE	4.005%	INSIGHT	U.S.	1,500,000.00	1,507,851.56	1,508,025.00		
									5,822,940.00	5.25%
			2.139%			114,604,443.66	114,936,112.14	110,927,964.66	110,927,964.66	100.00%



AVERAGE MATURITY (YEARS): 1.58



POOLS	$10,704,443.66	9.65%
TR NOTES	$52,886,232.50	47.68%
AGENCIES	$47,337,288.50	42.67%
TOTAL	$110,927,964.66	100.00%

COMPARATIVE RETURNS			
	City Portfolio	1-Yr TR	2-Yr TR
Current Month	2.14%	2.79%	2.98%
Previous Month	2.01%	2.42%	2.68%
1 Year Ago	0.82%	0.36%	0.72%

* INSIGHT:	$100,223,521.00	90.35%
*ASSIGNED TO CITY:	$10,704,443.66	9.65%
	$110,927,964.66	100.00%

copies:
Treasury
Finance Director/Treasurer
Finance
Audit
Deputy Treasurer
Cutwater Asset Management

10E1

MEMORANDUM

Finance Department

DATE: February 17, 2023

TO: Thomas M. Markus, City Manager

FROM: Mark Gerber, Director of Finance/Treasurer

SUBJECT: Second Quarter Financial Reports

Background

Chapter 7, section 3(b) of the City charter requires the Director of Finance to report on the condition of the City quarterly. Quarterly reports are prepared for the first 3 quarters of the year with the annual audit serving as the 4th quarter report. Only the following funds are reported quarterly because by State law they require a budget: General Fund, Greenwood Cemetery Perpetual Care Fund, Major and Local Street Funds, Solid Waste Fund, Community Development Block Grant Fund, Law and Drug Enforcement Fund, Baldwin Public Library Fund, Principal Shopping District Fund, Brownfield Redevelopment Authority Fund, Triangle District Corridor Improvement Authority Fund, and the Debt Service Fund.

Overview

Attached is the first quarter 2022-2023 fiscal year financial reports. The reports compare budget to actual for the current fiscal year and the prior fiscal year for the same quarter. The previous year's budget and actual have been restated using the required state chart of account groupings. This allows meaningful comparisons between fiscal years as well as percentage of budget received/spent for the year. The budget categories used for each fund are the same ones approved by the Commission when they adopted the 2022-2023 budget. Budget discussions that follow will focus on each fund individually.

At this point, 50% of the fiscal year has lapsed.

General Fund

Revenues are approximately $3,600,000 higher than the previous year as a result of an increase in tax revenue of approximately $2,000,000, an increase in licenses and permits of $1,100,000, and an increase in charges for services of $200,000. Taxes increased as a result of an increase in taxable value. Licenses and Permits increased as a result of an increase in construction activity,

especially some large scale projects. Charges for services has increased as a result of higher ice arena revenues.

State and Local grant funds and Fines and Forfeitures are below expected budget due to timing of when the revenues are received. Special Assessments are at 11% due to timing of when these are billed. Licenses and Permits are at 81% due to large construction projects this fiscal year. Fines and Forfeitures are at 17% due to a timing difference in receiving court revenues.

Total current year-to-date expenditures for the General Fund are higher than the prior year by approximately $3,000,000. The increase is due to sidewalk improvements made on S. Old Woodward. All other functional expenditures are comparable to the previous year both in dollar amount and percentage of budget spent.

Greenwood Cemetery Fund

Cemetery perpetual care revenues are approximately $9,000 lower than the previous year mostly due to lower plot sales than the previous year. No expenditures have been budgeted for this fiscal year.

Major Street Fund

Total revenues are approximately $1,200,000 less than the prior year as a result of lower budgeted transfers from the General Fund. State grant revenue is at 34% as a result of November and December road funding being received after the quarter ended.

Overall expenditures are $1,400,000 higher than the previous year as a result of higher road construction expenditures through the end of the quarter compared to the prior year.

Local Street Fund

Total revenues for the year are approximately $100,000 higher than the prior fiscal year mostly due to higher scheduled transfers from the General Fund. We anticipate 2 large road special assessments which will be billed after those roads have been cape sealed (likely in the spring). As with the Major Street fund, state grants are generally received 2 months after the close of the month which explains the low budget to actual variance.

Total expenditures are approximately $100,000 more than the prior year mainly as a result of higher road construction costs.

Solid Waste Fund

Revenues are approximately $77,000 higher than the previous year as a result of higher property tax revenue and interest income.

Expenditures are approximately the same as the prior fiscal year.

Brownfield Redevelopment Authority Fund

Revenues are approximately $330,000 more than the prior year. This is the result of higher property tax revenue as a result of more property value subject to tax capture.

The increase in expenditures are due to increased reimbursements to developers as a result of higher tax revenue capture. Expenditures are at 73% of budget due to summer tax bills being a larger proportion of the captured tax revenue.

Principal Shopping District
Revenues are up slightly from the prior year due to special event revenue. The special assessment rate was increased for this fiscal year. Special assessments were billed in January.

Expenditures for the year are slightly down from the prior year due to vacancy of the department head position for a portion of the fiscal year.

Community Development Block Grant Fund
No CDBG expenditures have been recorded year-to-date.

Triangle District Corridor Improvement Authority
The City is attempting to re-engage with the County regarding tax capture for the district. To-date no property taxes have been captured and no funds spent on this activity.

Michigan Indigent Defense Fund
This fund records the revenues and expenditures of providing legal defense to indigent defendants at the 48th District Court. The legal costs are funded mainly through a grant from the State of Michigan. The City of Birmingham assumed control of this fund from the 48th District Court on January 1, 2022, so there was no activity in the fund in the prior year. Revenues from the State decreased from the prior year due to excess funding from the State in fiscal year 2021-2022.

When the budget for 2022-2023 was prepared, it was assumed that other funding units would take over the program at the end of the program year in September 2022. Therefore, only 3 months of expenditures were budgeted. However, the City has retained program administration and as a result expenditures are 107%. A budget amendment is being requested at the February 27, 2023 City Commission meeting to approve additional revenues and expenditures for the program which will cover the entire fiscal year.

Baldwin Library
Revenue has increased approximately $240,000. This is primarily the result of an increase in property tax revenue of $190,000 and an increase in local contributions of $25,000.

Expenditures are approximately $260,000 more than the prior fiscal year primarily due to building design services for the next phase of building improvements in the current fiscal year.

Law and Drug Enforcement Fund
Revenues are approximately the same as the prior year. Revenues are the result of forfeited property proceeds from prosecutions of drug cases.

Debt Service Fund
Budgeted revenues and expenditures are based on scheduled debt service payments. Expenditures are at 92% spent for the year as a result of making a principal payment in September 2022.

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

GENERAL FUND

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
TAXES	30,197,140	30,283,822	100%	28,163,010	28,211,107	100%
SPECIAL ASSESSMENTS	1,395,360	154,851	11%	905,420	42,480	5%
LICENSES AND PERMITS	2,678,930	2,178,254	81%	2,608,260	1,024,789	39%
FEDERAL GRANTS	51,500	50,638	98%	66,900	226,903	339%
STATE GRANTS	2,446,470	580,775	24%	2,249,910	503,430	22%
LOCAL CONTRIBUTIONS	90,240	2,793	3%	86,300	23,205	27%
CHARGES FOR SERVICES	3,159,460	1,590,780	50%	3,206,030	1,370,403	43%
FINES AND FORFEITURES	1,372,250	410,261	30%	1,635,250	427,801	26%
INTEREST AND RENT	417,320	326,062	78%	498,060	154,628	31%
OTHER REVENUE	51,650	48,544	94%	51,150	46,120	90%
TRANSFERS IN	100,000	50,000	50%	100,000	50,000	50%
TOTAL REVENUES	41,960,320	35,676,780	85%	39,570,290	32,080,866	81%
EXPENDITURES:						
GENERAL GOVERNMENT	5,847,560	2,530,988	43%	6,169,571	2,499,495	41%
JUDICIAL	2,195,057	958,326	44%	1,492,820	701,220	47%
PUBLIC SAFETY	18,451,712	9,064,692	49%	18,148,480	8,796,763	48%
PUBLIC WORKS	10,979,849	4,787,231	44%	4,932,440	1,371,319	28%
HEALTH AND WELFARE	179,040	77,911	44%	-	-	0%
COMMUNITY DEVELOPMENT	739,544	264,012	36%	733,871	287,630	39%
RECREATION AND CULTURE	3,210,828	1,328,953	41%	2,805,307	1,152,871	41%
TRANSFERS OUT	3,835,968	1,960,968	51%	6,190,000	3,095,000	50%
TOTAL EXPENDITURES	45,439,558	20,973,081	46%	40,472,489	17,904,298	44%
CONTRIBUTION TO (USE OF) FUND BALANCE	(3,479,238)	14,703,699		(902,199)	14,176,568	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

GREENWOOD CEMETERY FUND

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
CHARGES FOR SERVICES	60,000	21,150	35%	60,000	31,846	53%
INTEREST AND RENT	22,500	14,680	65%	24,500	13,001	53%
TOTAL REVENUES	82,500	35,830	43%	84,500	44,847	53%
EXPENDITURES:						
ENGINEERING AND PUBLIC SERVICES	-	-	0%	-	-	0%
TOTAL EXPENDITURES	-	-		-	-	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

MAJOR STREETS

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
SPECIAL ASSESSMENT	31,900	-	0%	-	-	
STATE GRANTS	1,786,350	608,977	34%	1,674,280	576,710	34%
INTEREST AND RENT	38,590	40,974	106%	59,580	15,826	27%
OTHER REVENUE	-	-	0%	-	1,245	0%
TRANSFERS IN	1,500,000	750,000	50%	4,100,000	2,050,000	50%
TOTAL REVENUES	3,356,840	1,399,951	42%	5,833,860	2,643,781	45%
EXPENDITURES:						
PUBLIC WORKS:						
ADMINISTRATIVE	19,640	10,785	55%	20,570	11,528	56%
TRAFFIC CONTROLS & ENGINEERING	993,067	141,929	14%	695,355	144,670	21%
CONSTRUCTION OF ROADS & BRIDGES	4,098,064	2,228,726	54%	4,535,522	837,203	18%
MAINTENANCE OF ROADS & BRIDGES	447,520	145,174	32%	465,840	118,787	25%
STREET CLEANING	237,990	97,976	41%	221,770	114,924	52%
STREET TREES	456,420	193,752	42%	292,680	170,388	58%
SNOW AND ICE REMOVAL	274,550	25,320	9%	261,770	31,437	12%
TOTAL EXPENDITURES	6,527,251	2,843,662	44%	6,493,507	1,428,937	22%
CONTRIBUTION TO (USE OF) FUND BALANCE	(3,170,411)	(1,443,711)		(659,647)	1,214,844	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

LOCAL STREETS

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
SPECIAL ASSESSMENT	521,730	47,362	9%	209,730	100,748	48%
STATE GRANTS	729,630	244,805	34%	683,860	233,803	34%
INTEREST AND RENT	28,950	20,631	71%	20,600	10,424	51%
OTHER REVENUE	5,000	3,938	79%	5,000	2,455	49%
TRANSFERS IN	2,250,000	1,125,000	50%	1,950,000	975,000	50%
TOTAL REVENUES	3,535,310	1,441,736	41%	2,869,190	1,322,430	46%
EXPENDITURES:						
PUBLIC WORKS:						
ADMINISTRATIVE	27,680	14,630	53%	28,960	15,738	54%
TRAFFIC CONTROLS & ENGINEERING	66,100	27,333	41%	68,700	35,918	52%
CONSTRUCTION OF ROADS & BRIDGES	1,466,862	421,300	29%	2,164,241	293,113	14%
MAINTENANCE OF ROADS & BRIDGES	1,073,210	214,070	20%	714,333	200,495	28%
STREET CLEANING	258,350	84,698	33%	255,550	124,489	49%
STREET TREES	946,370	470,424	50%	614,630	413,426	67%
SNOW AND ICE REMOVAL	175,490	24,254	14%	173,780	28,133	16%
TOTAL EXPENDITURES	4,014,062	1,256,709	31%	4,020,194	1,111,312	28%
CONTRIBUTION TO (USE OF) FUND BALANCE	(478,752)	185,027		(1,151,004)	211,118	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

SOLID WASTE

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
TAXES	2,245,000	2,248,764	100%	2,175,000	2,179,189	100%
STATE GRANTS	3,990	4,180	0%	3,990	4,063	0%
CHARGES FOR SERVICES	17,100	9,584	56%	17,100	8,681	51%
INTEREST AND RENT	15,440	14,016	91%	20,000	5,775	29%
OTHER REVENUE	-	208	0%	-	1,500	0%
TOTAL REVENUES	2,281,530	2,276,752	100%	2,216,090	2,199,208	99%
EXPENDITURES:						
PUBLIC WORKS	2,274,210	1,151,664	51%	2,179,200	1,087,970	50%
CONTRIBUTION TO (USE OF) FUND BALANCE	7,320	1,125,088		36,890	1,111,238	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

BROWNFIELD REDEVELOPMENT FUND

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
TAXES	627,240	691,568	110%	369,000	369,787	100%
CHARGES FOR SERVICES	-	-	0%	-	-	0%
INTEREST AND RENT	770	1,478	192%	2,000	478	24%
OTHER REVENUE	20,000	5,394	27%	20,000	351	2%
TRANSFERS IN	-	-	0%	-	-	0%
TOTAL REVENUES	648,010	698,440	108%	391,000	370,616	95%
EXPENDITURES						
COMMUNITY DEVELOPMENT	647,240	471,787	73%	389,000	297,689	77%
CONTRIBUTION TO (USE OF) FUND BALANCE	770	226,653		2,000	72,927	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

PRINCIPAL SHOPPING DISTRICT

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
SPECIAL ASSESSMENTS	1,101,370	27,390	2%	1,054,970	1,798	0%
CHARGES FOR SERVICES	25,000	-	0%	25,000	-	0%
INTEREST AND RENT	5,310	5,782	109%	13,700	2,421	18%
OTHER REVENUE	160,000	155,370	97%	100,000	133,833	134%
TOTAL REVENUES	1,291,680	188,542	15%	1,193,670	138,052	12%
EXPENDITURES						
COMMUNITY DEVELOPMENT	1,464,815	576,021	39%	1,268,230	624,453	49%
CONTRIBUTION TO (USE OF) FUND BALANCE	(173,135)	(387,479)		(74,560)	(486,401)	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

COMMUNITY DEVELOPMENT BLOCK GRANT

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
FEDERAL GRANTS	36,670	-	0%	36,100	3,901	11%
EXPENDITURES						
HEALTH AND WELFARE	36,670	-	0%	36,100	3,901	11%
CONTRIBUTION TO (USE OF) FUND BALANCE	-	-		-	-	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

TRIANGLE DISTRICT CORRIDOR IMPROVEMENT AUTHORITY

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
PROPERTY TAXES	-	-	0%	-	-	0%
INTEREST AND RENT	190	130	68%	470	61	13%
TOTAL REVENUES	190	130	68%	470	61	13%
EXPENDITURES						
COMMUNITY DEVELOPMENT	-	-	0%	-	-	0%
CONTRIBUTION TO (USE OF) FUND BALANCE	190	130		470	61	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

MICHIGAN INDIGENT DEFENSE FUND

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
STATE GRANTS	128,810	38,346	30%	515,257	128,814	0%
LOCAL CONTRIBUTIONS	-	-	0%	17,293	-	0%
INTEREST AND RENT	480	1,706	355%	-	150	0%
TOTAL REVENUES	129,290	40,052	31%	532,550	128,964	0%
EXPENDITURES:						
HEALTH AND WELFARE	132,150	141,226	107%	532,550	-	0%
CONTRIBUTION TO (USE OF) FUND BALANCE	(2,860)	(101,174)		-	128,964	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

BALDWIN LIBRARY

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
TAXES	3,854,880	3,867,794	100%	3,663,280	3,676,868	100%
FEDERAL GRANTS	-	6,400	0%	-	-	0%
STATE GRANTS	36,000	7,052	20%	35,000	7,058	20%
LOCAL CONTRIBUTIONS	1,062,390	425,462	40%	1,030,710	400,783	39%
CHARGES FOR SERVICES	21,000	14,300	68%	18,400	11,384	62%
FINES AND FORFEITURES	6,000	2,209	37%	3,000	2,714	90%
INTEREST AND RENT	30,000	28,607	95%	30,000	10,686	36%
TOTAL REVENUES	5,010,270	4,351,824	87%	4,780,390	4,109,493	86%
EXPENDITURES:						
RECREATION AND CULTURE	4,531,340	2,137,808	47%	4,208,760	1,879,166	45%
CONTRIBUTION TO (USE OF) FUND BALANCE	478,930	2,214,016		571,630	2,230,327	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

LAW & DRUG ENFORCEMENT FUND

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
FINES & FORFEITURES	25,000	42,410	170%	25,000	37,844	151%
INTEREST AND RENT	580	1,134	196%	2,000	403	20%
OTHER REVENUE	-	-	0%	-	3,851	0%
TOTAL REVENUES	25,580	43,544	170%	27,000	42,098	156%
EXPENDITURES:						
PUBLIC SAFETY	5,430	3,635	67%	119,590	-	0%
CAPITAL OUTLAY	-	-	0%	-	-	0%
TOTAL EXPENDITURES	5,430	3,635	67%	119,590	-	0%
CONTRIBUTION TO (USE OF) FUND BALANCE	20,150	39,909		(92,590)	42,098	

CITY OF BIRMINGHAM

QUARTERLY BUDGET REPORT

DEBT SERVICE FUND

QUARTER ENDED: DECEMBER 31, 2022 AND DECEMBER 31, 2021

% OF FISCAL YEAR COMPLETED: 50%

	2022-2023			2021-2022		
	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED	AMENDED BUDGET	YEAR-TO-DATE ACTUAL	% OF BUDGET USED
REVENUES:						
TAXES	1,508,190	1,513,248	100%	1,566,100	1,565,485	100%
STATE GRANTS	5,200	2,982	57%	3,300	5,249	159%
INTEREST AND RENT	1,740	2,314	133%	3,000	1,215	41%
TOTAL REVENUES	1,515,130	1,518,544	100%	1,572,400	1,571,949	100%
EXPENDITURES:						
DEBT SERVICE	1,515,130	1,398,911	92%	1,566,900	1,437,975	92%
CONTRIBUTION TO (USE OF) FUND BALANCE	-	119,633		5,500	133,974	

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

Fire Department

DATE: February 27, 2023

TO: Thomas M. Markus, City Manager

FROM: Paul A. Wells, Fire Chief
Matthew J. Bartalino, Assistant Fire Chief

SUBJECT: Train Emergency Response and Safety Staff Report

Following the recent incident in East Palestine, Ohio, residents may be wondering how their local government has prepared for the possibility of a train derailment. The City of Birmingham has previously experienced a train derailment and has used that experience to improve its response to future incidents.

The fire department has a long history of working with the local railway companies Canadian National Railway (CN) and Amtrak. Before the Troy Transit Center was built, passengers would board the Amtrak train near the former Big Rock Restaurant. The fire department would occasionally respond to an Amtrak passenger train because a passenger or crew member was in need of emergency medical attention. Since the Transit Center was built, the City of Troy has taken responsibility for emergency medical patients due to the ease of access at the Transit Center. The City of Birmingham remains responsible for leading all other emergency responses that involve the train tracks or the trains themselves.

Every year, millions of gallons of dangerous goods are transported by railroads. 99.9977% of these dangerous goods are transported to their destination without any release of the transported chemicals. Dangerous goods that travel by rail car are 16 times safer than those transported by road tanker trucks. CN railroad owns and maintains the tracks in Birmingham. They have one of the safest records of any railroad in North America. Bi-annually CN provides free training to the OAKWAY MABAS 3202 mutual aid group's hazardous materials (HazMat) response team, of which the City of Birmingham is a member department. In fact, our fire department used its mutual aid partners and CN dangerous goods representatives on August 29, 1999, when a CN freight train accidently derailed in Birmingham. The incident involved 97 train cars, of which 42 derailed. Some of the derailed cars were carrying hazardous goods. Thankfully no hazardous chemicals were released due to the protection that the transit cars engineering provided. Two freight cars carrying new pickup trucks from General Motors did catch fire and were extinguished by the Birmingham Fire Department. You can see the coverage of the incident in this YouTube video:
https://www.youtube.com/watch?v=Q3v2Rprruq8

Do not, however, do what the spectators did in the news clips and get close to an accident before the scene is deemed safe and never walk along train tracks. Not only is it dangerous, but it is also trespassing!

Since the derailment 24 years ago, CN railroad has updated its entire fleet of hazardous materials tankers to the newest safety standards. Automatic braking systems are now in place to prevent a freight train from going too fast in a city environment, typically governed at 35 mph. This system is in place so that even the engineer cannot exceed the speed limit; which is what caused the Birmingham crash.

OAKWAY has more than doubled its trained HazMat personnel and equipment since 1999. There are now two HazMat trucks in south Oakland County, one which is located at Birmingham Fire Station 2. In April of 2020, OAKWAY purchased and received a custom flammable liquid hazardous materials response trailer that is capable of rapidly extinguishing road mobile hazardous material or train tankers fires. (Pictured below)

This high capacity foam dispensing trailer is centrally located for OAKWAY's response; which is Birmingham Fire Station 1. Every Birmingham firefighter is trained on the rapid deployment of the trailer and the 4-wheel drive mini-pumper can haul the trailer into its needed position.

Birmingham Fire Department Station 1 is less than one mile from the train tracks in Birmingham. In an ideal emergency, the foam apparatus could provide a foam blanket over a leaking container and eliminate the risk of fire. If a fire already started, the foam apparatus can extinguish it quickly allowing HazMat personnel safer access in order to secure the vessel and mitigate the leak. The County also has 4 additional foam trailers strategically located throughout the area for rapid deployment. These resources, along with the amount of full-time firefighters in OAKWAY could present a different outcome compared to what was available to the rural area in East Palestine, Ohio a few weeks ago.

Most of the OAKWAY HazMat team members have specialized tanker training for both road and rail chemical tanker transport. These road and rail tankers are made to endure crashes and keep their liquid or gas cargo contained. OAKWAY HazMat personnel have the skill and equipment to stop leaks after an accident or due to a faulty valve/hatch, etc. In addition to OAKWAY's resources, CN railroad has a quick response HazMat team along with their own foam suppression equipment. The City of Birmingham runs its own emergency management program that has benefits such as a direct line of contact with the State of Michigan and CN for resources.

OAKWAY also has a drone team available to quickly survey an area. Additional drone teams from the County and the Michigan State Police can be deployed to assist as well. This is a big improvement from the 1999 crash when the fire department relied on a news helicopter to provide a bird's eye view with a Birmingham Fire Department Lieutenant on-board.

The below excerpt is a report that CN sends to all jurisdictions that have CN rail tracks. This information is protected and not released to the public so that it is not used for any potential terrorism. Train carriers are required to have information on any materials they are transporting, but it is only shared to the local jurisdiction when an emergency occurs. Since the information below shows that Oakland County **is not** a major route for large amounts of flammable liquids, I felt it necessary to present.

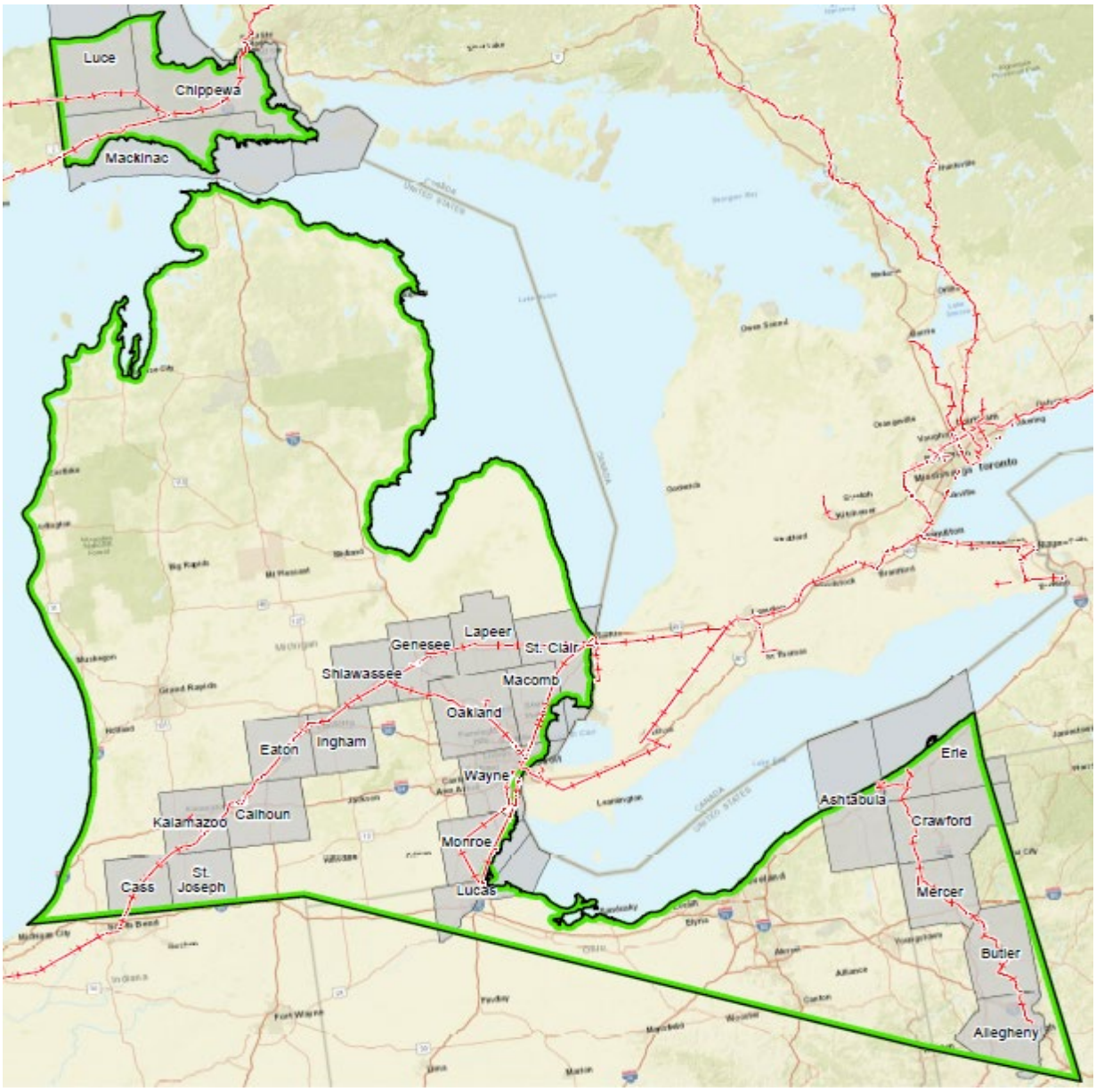
SECTION 1 Report of the Estimated Number of High Hazard Flammable Trains Transported by CN through the State

A High Hazard Flammable Train (HHFT § 171.8 Definitions and abbreviations): "means a single train transporting 20 or more loaded tank cars of a Class 3 flammable liquid in a continuous block or a single train carrying 35 or more loaded tank cars of a Class 3 flammable liquid throughout the train consist."

The following table provides an estimate of the number of High Hazard Flammable Trains (HHFT) that are expected to travel, per week, through each county within the state. This is expressed as a five-week forecast, with the number shown in each column as the number of estimated HHFT to travel through the county within the 7-day period.

COUNTY	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
Oakland	0	0	0	0	0

In the next picture you can see how the tracks in Oakland county are not a direct path for trains coming out of Sarnia, Canada. This is an indication that there is less dangerous goods and liquids coming through our community which is also backed by the report above.



Communities that have a direct route of chemicals for manufacturing, have a higher probability of large amounts of rail traffic carrying these potentially hazardous products. This is not the case for the usage of the tracks located in Birmingham. Our tracks still may have dangerous goods traverse them, but not in large quantities as described in CN's report.

Trains traveling along the City's tracks are also moving at slower speeds than trains in open, rural communities which helps to reduce large-scale kinetic accidents.

Unfortunately, train emergencies can and will happen. The goal of the department is to learn from the past and continually prepare, so that in the event an emergency occurs, we will mitigate the damage quickly. The City of Birmingham and its OAKWAY partners are well-trained and equipped to respond to a train or road emergency and will continue to always improve.

For more information on how to remain safe during an emergency or receive emergency notifications, please consider the following:

- Visit our website and read the Family Preparedness Workbook

https://www.bhamgov.org/emergency_management/family_preparedness_workbook/index.php

- Receive the latest communications by joining the City-wide email http://bhamgov.org/citywideemail

- Receive emergency notifications by joining NIXLE http://local.nixle.com/zipcode/48009/

CITY MANAGER'S REPORT

February 2023

Baldwin Public Library

Library Board

The Library Board met on February 20, 2023 for its regular meeting. The Board approved an updated Employee Handbook. The Board also voted to approve updates to the following policies: Bylaws of the Board of Directors, Idea Lab User Agreement and Purchasing Guidelines. Library Director Rebekah Craft will present the FY 2023-2024 library budget at the March 20, 2023 Board meeting in a public hearing.

Friends of the Baldwin Public Library

On February 14, 2023, the Friends of the Baldwin Public Library adopted their new Code of Conduct, which works in tandem with the Baldwin Public Library's Code of Conduct.

Phase 3 Construction

Construction drawings for the Phase 3 expansion and renovation have been completed. PCI Dailey, the construction management firm, is currently working with the Building Department to have the plans approved. PCI Dailey will be soliciting bids for each trade involved in the project during the month of March. We expect to have the guaranteed maximum price for the project available in early April.

Library Tour

If you'd like to learn even more about the library, join Library Director Rebekah Craft for a Behind the Scenes Tour. You'll visit staff areas, learn how items are added to the collection, and hear about new programs and services. The next tour will meet in the Library's vestibule on Tuesday, March 7 at 4:00 p.m.

Student Representative to the Library Board

We welcomed Titus Smith, III as our new student representative to the Library Board. Titus is a current Junior at Groves High School. He will be working with the board and our teen librarian Elisabeth Phou on planning and marketing some teen programs throughout the year.

Upcoming Programs

The Fire of Frederick Douglass
Tuesday, February 28 at 7:00pm
Dr. Richard Bell, Professor of History at the University of Maryland, returns to examine the visionary

contributions of Frederick Douglass. A slave who dreamed of being a senator, a great literary figure without formal schooling, a courageous freedom fighter, as well as an outspoken feminist, Douglass was a prophet who saw a better future. This is a virtual event.

College Info Series: How to Find the Right College for You
Wednesday, March 15 at 7:00pm
There are over 2,000 four-year colleges in the United States for students to consider. How can families identify those schools at which their student will be happiest and most successful? We'll share ways for attendees to evaluate the many factors that need to be considered. Teens and parents are welcome. You may attend these sessions in-person or on Zoom.

New York Times & Wall Street Journal from Home
Thursday, March 30 at 3:00pm
Learn how to access popular newspapers, including the New York Times and the Wall Street Journal with your Baldwin Public Library card.

Register for these upcoming programs and more at baldwinlib.org/calendar.

The Birmingham Museum

Museum Board Update

The Museum Board has established a Collections Subcommittee, whose role will be to consider proposed deaccessions from the museum's collection of items that are damaged, duplicates, or not in the museum's scope. The Birmingham Museum's 2020 Collections Policy specifies the conditions under which items may be removed from the collection, which begins with the Collections Subcommittee review, followed by the Museum Board's review, and, if recommended, coming to the City Commission for final review and approval. It is anticipated that the first group of deaccessions will be brought before the City Commission later this year, and will include unneeded school yearbooks that are duplicates, damaged, and/or mold/mildew compromised.

Birmingham Museum Podcast

In March, the Birmingham Museum will launch its new podcast, which will stream twice monthly with approximately 25 minute episodes that highlight some of Birmingham's colorful characters in the past two hundred years. The podcast will reach new audiences in the 12-36 age range who like to listen to podcasts while doing other things, such as driving or cooking, and are interested in local history with a fun twist. Among the planned episodes are titles like, "A Tale of Two Fishes" (featuring stories of brothers Elijah Fish, abolitionist, and Imri Fish, convicted murderer); "Prindles Go Everywhere Together" (featuring the story of the three Prindle sisters who married three of the first settlers in Birmingham); and "How to Steal a Train" (featuring the story of the colorful John Allen Bigelow, who stole a train--twice--while serving in the Union Army during the Civil War).

Birmingham Shopping District (BSD)

Retail Recruitment Strategy

The BSD continues to explore adding an incentive-based program for local realtors and properties to recruit targeted businesses researched by the BSD. A business mix analysis and tenant recruitment recommendation is in the process of being prepared. The Board will then determine whether or not a revised scope of work is needed for a retail recruiter in the future. Outreach has started with local realtors and property owners to develop relationships.

Strategic Planning Meeting
The BSD held its strategic planning meeting on February 6 with the Board, committee, City staff, BSD staff and local merchants. The plan content is being compiled for review by the Board and Committees for the next Board meeting.

Merchant Meeting
The BSD's Merchant Meeting will be held on February 15, 2023, at 9 a.m. at Zahra, one of the newest retail store additions to the district.

Spring Stroll
Spring Stroll is planned for April 15 where families, couples and friends will be encouraged to explore the businesses downtown and shop local while taking advantage of the retail promotions and free giveaways.

Restaurant Promotion
The BSD held a meeting with about 14 local restaurateurs on January 24, 2023, to discuss possible new concepts for a restaurant promotion. The Special Events Committee has since reviewed the feedback and has developed two concepts that they are now vetting with the restaurants who attended the meeting.

Bylaws
The BSD is in the process of developing bylaws that are currently being reviewed by the City Attorney and Finance Department for their respective knowledge on areas within the bylaws.

2023/24 Holiday Lighting Plan
The Maintenance and Capital Improvement Committee is working with DPS to modify the holiday lighting plan for 2023/24 in order to reduce costs yet still maintain the quality lighting throughout the district. A final determination will be presented to the Board in April.

New Businesses
The BSD welcomes the following new businesses who have opened since January's reporting period:

- Chrysalis Couture, 554 North Old Woodward — Apparel
- Sugaring NYC, 34110 Woodward Avenue — Salon
- RH, 320 Martin Street — Home furnishings
- Via Manzoni, 239 Pierce Street — Apparel
- CB2, 100 N. Old Woodward — Home furnishings

2023 Dashboard Metrics
Retail Occupancy Rate - 96% (out of 1.5 million sq.ft.)
Office Occupancy - 89% (out of 2 million sq.ft.)
4 New Business Openings in 2023 (4 more in process)

Building Department

Snow and Ice Enforcement

In the months of December and January, the Building Department logged 158 snow and ice enforcements. Many of the violations were received through GovPilot. Residential and commercial property owners are asked to clear snow and ice from the sidewalks in front of their homes or businesses. When a complaint is received, Code Enforcement will inspect and place a notice on the resident's door if the sidewalk has not been cleared. The Department of Public Services is notified and will clear snow and ice from the sidewalk usually within 24 hours of the notice and bill the resident in accordance with the fee schedule.

Code Enforcement officers issued 16 tickets to contractors for failure to clear snow and ice from sidewalks in front of their sites in accordance with the City's snow ordinance.

Congratulations, Suzanne!

Suzanne Pedigo just earned her International Zoning Inspector certification. This achievement demonstrates Suzanne's excellent knowledge of zoning principles, increases her creditability and helps substantiate the professionalism of both the Building Department and the City.

Monthly Report

The Building Department's monthly report provides an update on the following construction activity: building permits issued, building inspections conducted, trades permits issued and trades inspections conducted. In January, we processed 245 online permit applications.

City Clerk's Office

General Election on November 7, 2023

Birmingham will hold a General Election on Tuesday, November 7, 2023. At this time, four Birmingham Commissioner positions for a 4-year-term and three Birmingham Library Board positions for a 4-year-term will be on this ballot. The petition and candidate filing deadline for the November 7, 2023 General Election is 4:00 p.m. on July 25, 2023. For more information regarding petition and candidate filing please visit www.bhamgov.org/elections.

Michigan Association of Municipal Clerk Institute Training

Deputy Clerk Woods is scheduled to complete her second year of Municipal Clerk Institute Training the week of March 13th. City Clerk Bingham is scheduled to complete her third year and graduate from the Institute the week of March 20th.

Party & Parade in Shain Park

SAVE THE DATE: Sunday, May 21, 2023 Parade at 1:00 p.m. and party to follow in Shain Park

Planning is picking up steam for the 2023 Celebrate Birmingham Hometown Parade on Sunday, May 21 at 1:00 p.m. Community groups, local businesses, dance teams, scout troops, children and adults of all ages are encouraged to march in this year's parade. It's a great opportunity to spotlight your group!

Sponsors are welcome to join in the 2023 festivities. Being a sponsor is another way for a business, group, organization or individual to be recognized as part of this family-friendly event which reflects the hometown feel of Birmingham. The Hometown Parade is televised by Bloomfield Community Television

and is covered by traditional and social media, giving sponsors a fantastic PR opportunity. Visit www.bhamgov.org/parade for registration forms and sponsorship packages.

Greenwood Cemetery Advisory Board
The Greenwood Cemetery Advisory Board met on Friday, February 3, 2023 to get an update from Cheri Arcome of Creative Collaborations who coordinates cemetery services for the city. The board will continue to discuss strategic planning and cemetery services contract elements at the next Greenwood Cemetery Advisory Board meeting on Friday, April 14, 2023 at 8:30 a.m.

Ethics Board
The Ethics Board met on Monday, January 30, 2023 to continue their work on reviewing the city's current Ethics Ordinance and to set a date for the Ethics Opinion Request submitted by City Manager Tom Markus. The next meeting of the Ethics Board will be on Tuesday, March 7, 2023 at 1:00 p.m.

Board Appointments

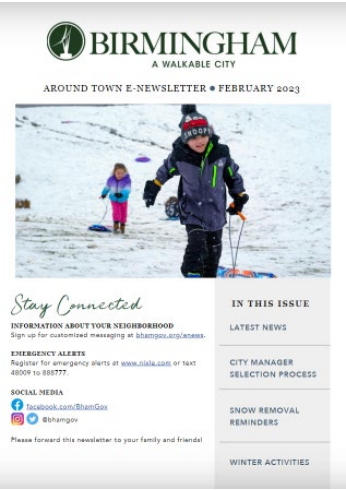
The following City of Birmingham boards and commissions have vacant positions or members with terms expiring soon. Applications are due before noon the Wednesday prior to the commission interview/ appointment date:

Board	**Openings**	**Application Due by Noon**	**Interview/ Appointment at City Commission meeting 7:30 pm**
Ad Hoc Environmental Sustainability Committee	9 Member terms ending 9/27/2024. Preferred qualifications/areas of professional expertise: energy, equity, civil/construction engineering, water quality, environmental engineering/consulting/law, recycling and solid waste.	3/22/23	3/27/23
Advisory Parking Committee	1 Resident shopper term ending 9/1/2025 1 Large Retail Member term ending 9/1/25	3/22/23	3/27/23
Birmingham Shopping District	1 Business Representative term ending 11/16/2026	Until Filled	
Birmingham Area Cable Board	2 Regular Member terms ending 3/30/2026 1 Regular member term ending 3/30/2024 1 Alternate Member term ending 3/30/2025	Until Filled	
Board of Building Trades Appeals	1 Regular member term ending 5/23/25 1 Regular member term ending 5/23/24	Until Filled	
Board of Review	2 alternate members terms ending 12/31/2025	Until Filled	

Board of Zoning Appeals	1 alternate members term ending 2/18/2026	Until Filled	
Brownfield Redevelopment Authority	1 regular member term ending 5/23/2024	Until filled	
Martha Baldwin Park Board	1 Regular member term ending 5/1/24	3/22/23	3/27/23
Public Arts Board	1 regular member term ending 1/28/2026, 1 alternate member term ending 1/28/2026, 1 alternate member term ending 1/28/2025	Until Filled	
Stormwater Utility Appeals Board	3 regular member terms ending 1/31/2026 2 alternate member terms ending 1/31/2025	Until Filled	
Triangle District Corridor Improvement Authority	1 regular business owner term ending 12/15/2026	Until Filled	

City Manager's Office

Communications



Around Town e-Newsletter
The communications team is working on the March edition of the Around Town e-Newsletter, which will include information about how to use the new parking structure equipment, early golf incentives, upcoming construction projects, daylight savings safety reminders and more. Follow this link to view the February edition of the Around Town e-Newsletter.

Parking Equipment Video
The communications team has been working on an instructional video which shows the community how to use our new and improved parking structure equipment. The video will soon be available at www.bhamgov.org/parking and in upcoming editions of the Around Town e-Newsletter.

Spring edition of The Birmingham Beat Newsletter
The team is working on the spring edition of The Birmingham Beat, which will have a fresh, modern look that is easy to read and aesthetically pleasing. Keep an eye out for it in your mailbox around April 1, 2023.

Human Resources

A top applicant for the role of Secretary A in Community Development's Building Department has been identified, and should be hired in the next week. Bill Helm is a new Streets/Sewer/Water Operator, hired into the Department of Public Services. A vacancy for a new Fleet Mechanic is actively receiving applications. Applications are being collected for the role of Assistant City Engineer, backfilling the vacancy left by Scott Zielinski's promotion. Applications for the Plumbing Inspector position continue to

be collected. Fire Marshal Al Soave is returning to his role of Battalion Chief, and an internal and external recruitment for a new Fire Marshal has opened for applications.

BIRMINGHAM CITY COMMISSION - UPCOMING AGENDA ITEMS

Topics brought up by the Commission

Meeting	Topic	Commissioner	Staff Follow Up	Dates Addressed	Status (resolved/ongoing)
In Progress					
1/9/23	Ad Hoc Senior Services Committee	M: Baller S: Longe		2/13 Commission to discuss further - no action at this time	In progress
12/5/22	Becoming Mayor	McLain	Mary	12/19 - Motion to make a workshop Workshop scheduled for March 2023	In progress
11/14/22	Renters Rights	M: Host	Mary	11/28 CC Discussion Scheduled - Voted to make a formal agenda item at the next available meeting 1/23/23 Tabled, will be brought back soon	In progress
8/15/22	Speed Bumps	M: Haig S: Host	Clemence/Brooks	8/29 - Staff report *Further study by MMTB	In progress, sent to MMTB
3/28/22	City Manager Selection Process	M: Host S: Boutros	Managers Office & HR	4/25/22 - direct to formal agenda item 5/9/22 - New Business Item 5/23/22 CM report 10/3/22 - motion for CM to conduct formal recruitment 10/25/22 - CM recruitment portfolio posted 1/9/23 - Scheduling Interviews 2/8&2/9 First round interviews 2/15 Meet & Greet	In Progress
1/10/22	Commissioner Conduct	No vote	Mary Kucharek	2/14/22 - Workshop	In progress

				2/28/22 Directed CM to prepare Code of Conduct for future agenda 7/11/22 - Initial presentation to Commission by CA 2/13/23 – Commission reviewed draft Code and will provide feedback to CM for future workshop.	
Resolved					
4/11/22	BBCC - Mental Health Workshop - More time to talk	M: Baller S: Haig	Marianne Gamboa	4/25/22 - clarify commissioners intent 5/9/22 - added time on the agenda to discuss Tom directed staff to add mental health info in city publications	Resolved
5/9/22	Pickleball	Baller, no vote	Lauren Wood	Agenda item 5/23/22	Installed on 6-3-22
1/24/22	Social Districts	M: Schafer S: Boutros	Nick Dupuis/Jana Ecker	2/14/22 - make formal item 3/9/22 - Workshop 3/14/22 - Informally brought up by Host 6/20/22 Commission and Planning Board Discussed	No formal action taken by the Commission
5/23/22	Commission Meeting Start Time	Baller	Mary Kucharek	On agenda for 6/27/22 - Mary to draft generic ordinance language and discuss in july On agenda for 7/11/22 - Commission decided not to proceed	No changes for now
8/15/22	Birmingham Country Club	M: Host S: Haig	Fairbairn, Dupuis, Clerk's Office	8/29 - CC Discussion Possibly plan to write a letter, invite bham cc and twp to	Resolved, letter sent

				meeting to collaborate *Draft a letter	
9/12/22	Banner	M: Baller S: Host	TBD	11/14 CC discussion scheduled	Completed
12/5/22	Lighting to sustainability board	Haig	Nick Dupuis	12/19 - Direction for staff to prepare list for Sustainability Board	To be explored by Sustainability Board
6/13/22	Sustainability Board	M: Schafer S: Host	Nick Dupuis	On agenda for 6/27/22 - direction for staff to draft requirements to establish board, coming back at next available meeting 10/3/22 Workshop - staff given direction to return with recommendation 1/23/23 - ad hoc board established	Resolved - Recruiting Board Members
1/10/22	Leaf Blowers	M:Baller S:Host	Nick Dupuis	1/24/22 - make formal item 10/3/22 Workshop - staff given direction to return with recommendation	Item sent to sustainability board
1/10/22	Food Trucks	M: Host S: Schafer	Nick Dupuis/Jana Ecker	1/24/22 - CC req. more info 3/9/22 - Workshop 3/14/22 - Informally brought up by Host 6/20/22 Commission and Planning Board Discussed 6/27/22 - City Manager Directed to encourage food trucks at all city sponsored events, BSD events, and direct the BSD to organize a rotation of food truck events	Staff monitoring
4/25/22	Improvements in Information	M: Haig S: Baller	TBD	1/9/23 M: Haig, S: Host	Resolved

	Provision and Methodology			To continue discussion -Addressed in Jan 2023 CM report	

Topics Failed

4/25/22	On Street Parking Study	M:Haig S: Host
4/11/22	Downtown Parking	M: Host S: Haig
3/28/22	Parking Matters	M: Host S: Haig
6/13/22	479 SOW (Doraid) PAD	M: Boutros

Topics With No Vote - Resolved

1/10/22	Unimproved Streets	Discussed during the Long Range Planning meeting.
2/28/22	Solidarity with Ukraine	City Manager arranged for exterior lighting at City Hall.

Topics With No Vote

5/9/22	-PAD ordinance/cleanup	Baller, no vote	No vote
5/9/22	-Policy for granting public space ODD/Valet	Baller, no vote	No vote

SOCWA Quarterly Report

The Southeastern Oakland County Water Authority (SOCWA) quarterly report covers the first six months operation of the fiscal year 2022/23. The report contains a financial statement of the Authority's operation and an outline of projects in progress or completed during the second quarter. Download SOCWA's quarterly report here.

eCities Award

The City of Birmingham has been recognized as a 5-star community in UM-Dearborn's 2022 eCities program. The eCities project collects and analyzes data across Michigan communities as it relates to entrepreneurship, economic development, and job growth. Specifically, the study examines five-year's worth of publicly available data relating to community growth and investment metrics that impact the business community. The data points are benchmarked against the State of Michigan, as well as all of the other participating communities. Download Birmingham's eCities certificate and performance report here.

Engineering Department

Construction Update

Construction season will begin soon, but work has been ongoing over the winter as weather conditions allow:

Water Service Verification Program

As a reminder, the "In-Home/Business" water service line material needs to be determined as part of this program. Property owners can schedule an inspection by an authorized City Representative at (248) 303-2292 or determine the in-home/business material themselves with the steps provided in the property owner letter.

2021-2022 Sewer Rehabilitation Program

DVM Utilities has completed this project during the winter, which included basic cleaning and inspection of sewer lines, plus specialized rehabilitation/repairs of minor issues that were found in the system.

The following projects will start in the next few months:

Westwood, Oak, and Raynale Project
2022-2023 Cape Seal Program
Cranbrook Road Non-Motorized Pathway Improvement Program
Parking Lot No. 5 Slope Repair
Water Tower Maintenance and Coating

Affected property owners will receive information about these projects.

Fire Department

Assistance to Firefighters Grant

The Fire Department recently submitted an Assistance to Firefighters Grant (AFG) for replacement of the department's Self Contained Breathing Apparatus (SCBA) harnesses, masks, and bottles due to their ageing stock. The grant request is for $340,000.00; of which a 10% match will be required from the City if the grant is awarded later this fall. The City will have time to agree to the $34,000.00 match prior to acceptance of the grant if it is awarded to the Fire Department. The Fire Department has opportunities to apply for the grant for the next two years before the SCBAs will be at their 15-year end of life span. Currently, the department has budgeted $200,000.00 in FY 2024-2025 and $200,000.00 in FY 2025-2026 to cover the replacement costs of this equipment if the grant application attempts are unsuccessful.

Station 1 Roof Replacement

Station 1's metal roof replacement and insulation improvement is currently underway and should be done by March 1.

Planning Department

Master Plan 2040

The City of Birmingham is deep into its review of the third and final draft of the Birmingham Plan 2040, which is available to read and download on www.thebirminghamplan.com. At a minimum, the remaining schedule of review will consist of a public hearing at the Planning Board, and a public hearing at the City Commission. The remaining schedule of review should closely resemble the following:

Date	Meeting Type	Action Needed
March 8, 2023	Planning Board	• Hold a public hearing and further discuss comments received during the distribution period as needed. • Adopt plan; recommend to the City Commission for adoption.
May 2023 (Exact date TBD)	City Commission	• Present the final Plan and hold a public hearing. • If prepared to do so, the City Commission may adopt the Plan by resolution.

All of the documents related to the 2040 Plan remain available on www.thebirminghamplan.com. You can also watch a recording of past meetings on the City of Birmingham website. As a reminder, you can still submit comments directly to the consultant team through the aforementioned 2040 Plan website, and can submit comments directly to the Planning Division to be placed in the next available Planning Board agenda.

Planning Board

As prime development season inches closer and closer, the Planning Division is starting to field phone calls and applications for new developments at an accelerated rate. The Planning Board reviewed 34 development applications in 2022, which is an average of three per meeting. The 2023 schedule is expected to be a similar workload. In addition, the Planning Board is developing a new action list and new priorities for the year, which will be reported to the City Commission in March 2023. A tentative Planning Board list of scheduled items is provided below:

1. 2040 Master Plan – Draft #3 Review (Ongoing)
2. B1 Zoning District Commercial Permitted Uses – Study Session (2/8/23)
3. 479 S. Old Woodward – Special Land Use, Final Site Plan & Design Review (3/22/23)
4. 34952 Woodward & 690 E. Maple – Community Impact Study & Preliminary Site Plan Review (3/22/23)

Multi-Modal Transportation Board

The MMTB is continuing to review design concepts for S. Eton resurfacing. Considerations under review include pedestrian crossings, protected bike lanes, and enhanced sight distance turning onto S. Eton. The MMTB will also begin reviewing operations of Adams Road in March 2023.

Public Arts Board

The Public Arts Board is reviewing interactive art projects to engage with the community for 2023.

Sustainability

With the recent establishment of the Ad Hoc Environmental Sustainability Committee (ESC), City Staff have begun to formulate a plan of action for the completion of the greenhouse gas emissions inventory, and have started on an outline of a formal sustainability plan. Once ESC members are appointed, staff will begin to introduce the outline to the group for input and direction. In the meantime, the Birmingham Green Team sustainability meetups have been going very well with robust participation and dissemination of information/ideas.

Police Department

Introduction of Newly Hired Police Officers

The Birmingham Police Department is excited to welcome its newest members.

On January 16, 2023, Officer Maryna Elia was sworn in as a Birmingham Police Officer. Officer Elia graduated with her bachelor's degree from Oakland University and is fluent in three languages. After graduating, she was enrolled in the Oakland Police Academy. During her academy, the Birmingham Police Department conducted a recruitment presentation to the recruits, which resulted in her and several other applications being submitted. After interviewing candidates, Officer Elia was at the top of the list.

On January 17, 2023, Meghan Bade was hired by the Birmingham Police Department. Meghan graduated from Michigan State University in 2016 with a bachelor's degree. She has worked as a CrossFit Instructor and in Pharmaceutical sales. However, Meghan always had a passion for law enforcement growing up

having a police officer for a father. In fact, her father, Mathew Bade, started his career as a police officer many years ago right here in the City of Birmingham in 1986 and later transferred to another department. Meghan is currently enrolled at the Mott Community College Police Academy and will be sworn in as a Birmingham Police Officer upon successful completion of the academy. Meghan is excited to start her career in the same department her father did.

Speed Hump Study

The City Commission directed city staff and traffic consultants—Fleis & Vandenbrink (F&V) and MKSK Studios to study speed humps as an October 2022 agenda item for research and possible implementation. In preparation for review by the Multi-Modal Transportation Board (MMTB) several cities utilizing speed humps were analyzed to develop both a baseline and speed hump criteria for the City of Birmingham.

Speed humps went before the Multi-Modal Transportation Board (MMTB) on October 6th, 2022 and again on November 3rd, 2022. Based on the cities studied, there was not a street in Birmingham that met the criteria based on current conditions such as speeds, volume, and if the street was improved/unimproved. This led to the discussion of lowering the proven and necessary criteria identified in other communities, which the MMTB did not support. There was a general Board consensus not to recommend speed hump criteria presently since few-to-no streets would qualify based on established criteria used by others and existing conditions in the City of Birmingham.

Follow these links to the MMTB full agenda packet regarding speed humps: October 6, 2022 and November 3, 2022.

Towing Contract

The Birmingham Police Department recently submitted an invitation to bid to MITN to renew the towing and impound contract currently set to expire on February 25, 2023. One bid was returned from Bob Adams Towing with whom the existing contracts exist. Bob Adams Towing submitted a fee schedule consistent with our existing contract with only a minor increase of $5 per day for storage fees. The contract was reviewed and approved for a three-year term until February 25, 2026, with an optional two-year extension, upon mutual agreement between the City and Bob Adams Towing.

ADA Annual Report

The police department, in cooperation with the engineering and public services department, has worked to update all of the existing curb ramps and on-street parking spaces to bring them into compliance with the American for Disabilities Act (ADA) Standards. This work was started as part of a consent decree giving the City five years to correct any locations that do not meet the standards. We have completed the third year of this project and the vast majority of locations out of tolerance have been updated. Please see the attached annual report documenting all the work that has been completed to date.

Crime Report – Marijuana sales to minors

In early January, Birmingham detectives investigating minors in possession of marijuana learned of a nearby shop selling to minors regularly. A Birmingham detective assigned to the Oakland County Narcotics Enforcement Team (NET) investigated the case. This investigation led to criminal charges and the closure of a business in the City of Southfield.

Parking Systems Update

Equipment:

Installation of the new TIBA parking equipment is rolling along. The new equipment has been installed at the Chester St. garage, Pierce Garage, and Peabody Garage. Park and the N. Old Woodward garages are the only remaining garages, and they will be complete by the end of March.

Once the new TIBA equipment is installed, City staff is looking to extend the agreement with ParkMobile into its parking structures, giving the City one consistent online payment provider for all things parking. Currently ParkMobile is offered as a form of online payment for all of the City's metered parking.

Occupancy:

JANUARY AVG CAPACITY	
Chester Garage (880)	29.42%
Old Woodward (745)	51.36%
Park Garage (811)	56.40%
Peabody Garage (437)	78.95%
Pierce Garage (706)	62.22%

Future Agenda Items
Download a summary of future agenda items.

Future Workshop Items
Download a summary of future workshop items.

BIRMINGHAM
A WALKABLE CITY

MEMORANDUM

City Clerk's Office

DATE: February 21, 2023

TO: Thomas M. Markus, City Manager

FROM: Alexandria Bingham, City Clerk

SUBJECT: Save the Date – Next Steps in the City Manager Selection Process

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Assistant City Manager Fairbairn is in the process of compiling staff and public feedback on the candidates for City Manager in a report to the Commission. At the same time, the Police Department is running extensive background checks and investigations on the candidates. The Police Department expects to conclude their reports in early March.

At this time, City Manager Markus is proposing that the City Commission save the date for a special City Commission meeting to complete final interviews, select the next City Manager and give direction to the City Manager on next steps to complete the selection, employment agreement, appointment, starting date, etc.

Proposed Date: Monday, March 20, 2023 at 6:30 p.m.

With consensus of the City Commission, a special meeting date for the next steps in the City Manager Selection process will be set for Monday, March 20, 2023 at 6:30 p.m.

BIRMINGHAM
A WALKABLE CITY

CITY MANAGER SELECTION PROCESS

1

FIRST ROUND ZOOM INTERVIEWS
Special City Commission Meetings
Wednesday, February 8 and Thursday, February 9
4:30 p.m. - 8:30 p.m.
Department of Public Services - 851 South Eton

2

CITY FACILITY TOUR
Wednesday, February 15, 2023
Candidates will tour city facilities and meet with department heads and administrative staff.

3

PUBLIC MEET AND GREET EVENT
Wednesday, February 15, 2023
7 p.m. - 8:30 p.m.
Baldwin Public Library, Lower Level
300 West Merrill Street

4

ENGAGE BIRMINGHAM PUBLIC INPUT
Share your feedback on Engage Birmingham at http://engage.bhamgov.org/city-manager from Feb. 16 through Feb.23.

5

FEEDBACK REVIEW
Feedback received from city staff and the public will be reviewed by City Commissioners.

6

FINAL INTERVIEWS
City Commissioners may conduct a final round of interviews on a date to be determined.

7

CITY MANAGER APPOINTMENT
The City Commission will announce Birmingham's new City Manager this spring.

ENGAGE BIRMINGHAM

Teens, especially girls, are experiencing more violence, suicidal thoughts and mental health challenges, CDC survey finds

By Deidre McPhillips, CNN

Updated 1:19 PM EST, Mon February 13, 2023

Adobe Stock

Teen girls in the S experienced record high levels of violence, sadness and suicide risk in recent years, a new survey finds.

(CNN) — Teen girls in the United States experienced record high levels of violence, sadness and suicide risk in recent years, amid "significant" and "heartbreaking" declines in youth health and well-being overall, according to data published Monday by the US Centers for Disease Control and Prevention.

INFORMATION ONLY

for Disease Control and Prevention.

Responses for the CDC's bi-annual Youth Risk Behavior Survey were collected in the fall of 2021, offering the first look at trends since the start of the Covid-19 pandemic.

RELATED ARTICLE
New Jersey school superintendent resigns after 14-year-old student's suicide

"Many measures were moving in the wrong direction before the pandemic. These data show the mental health crisis among young people continues," Kathleen Ethier, director of the CDC's division of adolescent and school health, said at a media briefing. The findings are "alarming," she said.

The survey found increasing mental health challenges, experiences of violence, and suicidal thoughts and behavior among all teens. More than 40% of high school students said that feelings of sadness or hopelessness prevented them from engaging in their regular activities for at least two weeks of the year.

Girls broadly fared worse than boys, and there is "ongoing and extreme distress" among teens who identify as lesbian, gay, bisexual or questioning (LGBQ+).

Most teen girls (57%) felt persistently sad or hopeless in 2021, double the rate for teen boys (29%). Nearly one in three teen girls seriously considered attempting suicide. Both rates "increased dramatically" over the past decade, according to the CDC.

HOW TO GET HELP

• Help is there if you or someone you know is struggling with suicidal thoughts or mental health matters.

In the US: Call or text 988, the Suicide & Crisis Lifeline.**Globally:** The International Association for Suicide Prevention and Befrienders Worldwide have contact information for crisis centers around the world.

Most LGBQ+ students (52%) have also recently experienced poor mental health and more than one in five attempted suicide in the past year.

"These data show a distressing picture," said Dr. Debra Houry, CDC's chief medical officer and deputy director for program and science. "America's teen girls are engulfed in a growing wave of sadness, violence and trauma."

Few measures of adolescent health and well-being showed continued improvement, including declines in risky sexual behavior, substance use and bullying at school. But most other indicators "worsened significantly," according to the CDC report.

The latest data show increases in the proportion of youth who did not go to school because of safety concerns. There were also increases in teen girls experiencing sexual violence and teen boys experiencing electronic bullying.

Nearly one in five teen girls (18%) had experienced sexual violence in the past year and about one in seven (14%) had ever been forced to have sex.

"These data are clear: our young people are in crisis," Ethier said.

CDC leaders, along with National PTA President Anna King, emphasized the important role schools play.

"Schools are on the front lines of the mental health crisis and they must be equipped with the proven tools that help students thrive," Houry said.

Among those tools are training for staff to recognize and manage mental health challenges, counseling and mentorship programs and others that encourage connection and intervention.

King called for action from Congress to address the youth mental health crisis and emphasized the importance of regular conversations about mental health.

GET CNN HEALTH'S WEEKLY NEWSLETTER

Sign up here to get The Results Are In with Dr. Sanjay Gupta every Tuesday from the CNN Health team.

"It's critical to talk with our children about what they're feeling and their concerns," she said. "I'm urging our families to come together, look for signs, look for ways that you can have these conversations with your children. Get to know them. Have these routine conversations all the time."

INFORMATION ONLY

conversations all the time.

Many of the challenges facing youth health and well-being are “preventable,” Houry said. “When I look toward our young people’s future, I want to be filled with hope, not heartbreak.”

If you or someone you know is struggling with suicidal thoughts or mental health matters, please call the 988 Suicide and Crisis Lifeline, or visit the hotline’s website.

Paid Links

Drinks to Burn Belly Fat

Foods That Reverse Diabetes

Best Vitamins for Memory

Symptoms of Mental Illness

Take a Mental Health Test

INFORMATION ONLY

COMCAST

February 15, 2023

Ms. Alexandria Bingham, Clerk
City of Birmingham
151 Martin St.
Birmingham, MI 48012-3001

Dear Ms. Bingham:

We are committed to keeping you and our customers informed about changes to Xfinity TV services. Accordingly, please note the changes below. Impacted customers are being notified through bill message.

On March 28, 2023, NewsNation HD will move from channel 1420 to channel 1116 on Popular TV/Digital Starter, no longer will be available on Entertainment and will be added to Sports & News on channel 1116. NewsNation will no longer be available on Entertainment and will be added to Sports & News; GrioTV HD will move from channel 1116 to channel 1636 on Popular TV/Digital Starter, no longer available on Sports & News and will be added to Entertainment. Requires X1 TV Box or compatible customer owned device. HD Technology Fee required.

Additionally, on April 11, 2023, INSP and INSP HD will move from Limited Basic/Choice TV to Entertainment and Digital Starter; INSP HD will move from channel 1655 to channel 1431; Great American Family will move from channel 1620 to channel 1461 remaining on Entertainment and Digital Starter; Requires X1 TV Box or compatible customer owned device. HD Technology Fee required to receive HD channels.

Please feel free to contact me at 248-924-4917 if you have any questions.

Sincerely,

Eric M. Woody

Eric Woody
Manager of External Affairs
Comcast, Heartland Region
41112 Concept Drive
Plymouth, MI 48170

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A WALKABLE CITY

Alex Bingham <abingham@bhamgov.org>

Fwd: New report on Michigan local officials' assessments of workforce challenges, from the Spring 2022 Michigan Public Policy Survey (MPPS)

1 message

Tom Markus <tmarkus@bhamgov.org> Wed, Feb 22, 2023 at 9:25 AM
To: Alex Bingham <abingham@bhamgov.org>

Info only agenda

---------- Forwarded message ---------
From: **Natalie Fitzpatrick** <nfitzpat@umich.edu>
Date: Wed, Feb 22, 2023 at 9:07 AM
Subject: New report on Michigan local officials' assessments of workforce challenges, from the Spring 2022 Michigan Public Policy Survey (MPPS)
To: <tmarkus@bhamgov.org>

Dear Mr. Markus,

Below is a link to a new report from the University of Michigan's Center for Local, State, and Urban Policy (CLOSUP) which presents the views of Michigan local government leaders like you on their government's workforce issues and challenges, including recruitment, retention, and retirement turnover.

The findings come from surveys of local government leaders in 1,327 Michigan jurisdictions—counties, cities, townships, and villages—as part of last year's Spring 2022 Michigan Public Policy Survey (MPPS).

The full report is available online at: https://myumi.ch/MrzXb

You can read or download the report from the website, or if you contact us here at CLOSUP (closup-mpps@umich.edu or 734-647-4091), we would be happy to email you a PDF version.

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Key Findings:

Employee recruitment is a widespread problem among the 92% of Michigan's local governments that report having some kind of paid employees. As of Spring 2022, 60% statewide report that recruiting employees with the necessary skills is problem, up from 48% in 2017. Only 16% of jurisdictions statewide say recruiting is not a problem at all.

Among jurisdictions with over 30,000 residents, 89% report that recruitment is a problem, including 41% who say it is a significant problem. Among mid-sized jurisdictions with between 5,001-10,000 residents, reports of significant recruitment problems have tripled in the past five years, up to 28% in 2022 from 9% in 2017.

Retaining current employees is a growing problem as well. Two-thirds (64%) of jurisdictions with over 30,000 residents have problems retaining current employees, up from 43% in 2017. Among jurisdictions with 5,001-10,000 residents, retention problems have more than tripled in the past five years to 37%, up from 12%. Meanwhile, even in

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jurisdictions with fewer than 1,500 residents that have paid employees, retention problems have increased to 26%, up from 17%.

Local leaders express concern about a variety of other workforce problems, especially in Michigan's largest jurisdictions, where 62% report problems with turnover due to retirements, 58% note problems with employee workload, 54% identify low employee morale, and 48% report challenges due to hostile interactions from the public.

More detailed information is available in the report itself.

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The CLOSUP website provides detailed, easy-to-read tables of the data collected in all of the MPPS surveys, including Spring 2022. The data are broken down by jurisdiction type, population size, region of the state, and urban-rural categorization. These easy-to-read tables allow quick analysis for a wide range of issues and can be found at: https://myumi.ch/qgwR0

CLOSUP is eager to answer any questions you may have and to help you interpret the MPPS survey data. We would also be able to produce customized data tables for different groupings of local governments, such as responses for all jurisdictions within a particular county. Our goal is to help inform the policymaking process in Michigan at all levels.

The MPPS is conducted by CLOSUP in partnership with the Michigan Association of Counties, Michigan Municipal League, and Michigan Townships Association. The survey program is unique in the country as the only ongoing survey targeted at every unit of general purpose local government across an entire state.

For more information, contact MPPS staff by email at closup-mpps@umich.edu or by phone at 734-647-4091. More information is also available on the CLOSUP website at: http://closup.umich.edu. Follow CLOSUP on Twitter @closup.

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CITY CLERK
CITY OF BIRMINGHAM
P.O. BOX 3001, 151 MARTIN STREET
BIRMINGHAM, MI 48012

COMMISSION NOTICE OF HEARING
FOR THE ELECTRIC CUSTOMERS OF
DTE ELECTRIC COMPANY
CASE NO. U-21297

- DTE Electric Company requests Michigan Public Service Commission's approval for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority.

- The information below describes how a person may participate in this case.

- You may call or write DTE Electric Company, One Energy Plaza, 570 SB, Detroit, MI 48226, (800) 477-4747 for a free copy of its application. Any person may review the documents at the offices of DTE Electric Company or on the Commission's website at: michigan.gov/mpscedockets.

- A pre-hearing will be held:

DATE/TIME:	**Tuesday, March 7, 2023 at 10:00 AM**
BEFORE:	**Administrative Law Judge Sharon Feldman**
LOCATION:	**Video/Teleconferencing**
PARTICIPATION:	Any interested person may participate. Persons needing any assistance to participate should contact the Commission's Executive Secretary at (517) 284-8096, or by email at mpscedockets@michigan.gov in advance of the hearing.

The Michigan Public Service Commission (Commission) will hold a pre-hearing to consider DTE Electric Company's (DTE Electric) February 10, 2023 application requesting the Commission to: 1) approve DTE Electric proposed rate increase in which a typical residential customer's average electric bill may be increased by up to $12.46 per month, if approved; 2) determine that the proposed rates are reasonable and just, effective as early as December 10, 2023, which will provide DTE Electric a reasonable opportunity to recover its costs of operation, including a reasonable rate of return, in the projected test year and beyond; 3) approve an additional annual revenue increase of approximately $622 million ($619 million if the IRM proposed by the Company is accepted) effective as soon as possible in the projected test year as proposed; 4) approve DTE Electric's proposed capital structure and return on equity; 5) approve new rates effective as early as December 10, 2023 as proposed; 6) grant DTE Electric's request to approve the Power Supply Cost Recovery base; 7) approve DTE Electric's proposals to implement certain customer rate schedules and tariffs; 8) approve recovery of DTE Electric's generation investments; 9) approve recovery of DTE

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Electric's investments related to the strengthening of DTE Electric's distribution system and reliability improvements; 10) approve DTE Electric's proposed Investment Recovery Mechanism; 11) approve all proposed pilot programs as requested by DTE Electric; 12) approve all proposed regulatory accounting treatments as requested by DTE Electric; 13) approve the capacity charge calculated by DTE Electric which is based on the methodology established in Case No. U-20836 and approve the capacity-related costs supported by DTE Electric as proposed; 14) grant DTE Electric any other relief as proposed and as requested by DTE Electric.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscedockets. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: mpscedockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 284-8090 or by email at: mpscedockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by February 28, 2023. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon DTE Electric Company's attorney, Jon P. Christinidis, One Energy Plaza, Detroit, MI 48226.

The prehearing is scheduled to be held remotely by video conference or teleconference. Persons filing a petition to intervene will be advised of the process to participate in the hearing.

Any person wishing to participate without intervention under Mich Admin Code, R 792.10413 (Rule 413), or file a public comment, may do so by filing a written statement in this docket. The written statement may be mailed or emailed and should reference Case No. **U-21297**. Statements may be emailed to: mpscedockets@michigan.gov. Statements may be mailed to: Executive Secretary, Michigan Public Service Commission, 7109 West Saginaw Hwy., Lansing, MI 48917. All information submitted to the Commission in this matter becomes public information, thus available on the Michigan Public Service Commission's website, and subject to disclosure. Please do not include information you wish to remain private. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

Requests for adjournment must be made pursuant to Michigan Office of Administrative Hearings and Rules R 792.10422 and R 792.10432. Requests for further information on adjournment should be directed to (517) 284-8130.

For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

The Utility Consumer Representation Fund has been created for the purpose of aiding in the representation of residential utility customers in various Commission proceedings. Contact the Chairperson, Utility Consumer Participation Board, Department of Licensing and Regulatory Affairs, P.O. Box 30004, Lansing, Michigan 48909, for more information.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and Parts 1 & 4 of the Michigan Office of Administrative Hearings and Rules, Mich. Admin Code, R 792.10106 and R 792.10401 through R 792.10448.

U-21297

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