

PUBLIC IMPROVEMENT REQUEST FOR PROPOSAL

RFP# 23-54

BARTON NATURE AREA BORDER TO BORDER TRAIL

City of Ann Arbor
PARKS AND RECREATION SERVICES/
COMMUNITY SERVICES AREA



Due Date: October 18, 2023 by 11:00 a.m. (local time)

Issued By:

City of Ann Arbor
Procurement Unit
301 E. Huron Street
Ann Arbor, MI 48104

TABLE OF CONTENTS

SECTION I: GENERAL INFORMATION	3
SECTION II: SCOPE OF WORK.....	11
SECTION III: MINIMUM INFORMATION REQUIRED	12
SECTION IV: ATTACHMENTS	21

SECTION I - GENERAL INFORMATION

A. OBJECTIVE

The purpose of this Request for Proposal (RFP) is to select a firm to provide construction services for the Barton Nature Area Border to Border Trail Project.

B. BID SECURITY

Each bid must be accompanied by a certified check or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

Proposals that fail to provide a bid security upon proposal opening will be deemed non-responsive and will not be considered for award.

C. QUESTIONS AND CLARIFICATIONS / DESIGNATED CITY CONTACTS

All questions regarding this Request for Proposal (RFP) shall be submitted via e-mail. Questions will be accepted and answered in accordance with the terms and conditions of this RFP.

All questions shall be submitted on or before October 6, 2023 at 1:00 p.m. (local time), and should be addressed as follows:

Scope of Work/Proposal Content questions shall be e-mailed to Hillary Hanzel, Park Planner - hhanzel@a2gov.org and Chris Elenbaas, Project Manager for OHM Advisors - chris.elenbaas@ohm-advisors.com

RFP Process and Compliance questions shall be e-mailed to Colin Spencer, Buyer - CSpencer@a2gov.org

Should any prospective bidder be in doubt as to the true meaning of any portion of this RFP, or should the prospective bidder find any ambiguity, inconsistency, or omission therein, the prospective bidder shall make a written request for an official interpretation or correction by the due date for questions above.

All interpretations, corrections, or additions to this RFP will be made only as an official addendum that will be posted to a2gov.org and MITN.info and it shall be the prospective bidder's responsibility to ensure they have received all addenda before submitting a proposal. Any addendum issued by the City shall become part of the RFP, and must be incorporated in the proposal where applicable.

D. PRE-PROPOSAL MEETING

A pre-proposal conference for this project will be held on Tuesday, October 3, 2023 at 11:00 a.m. (local time) at the Barton Park Parking Lot, 1010 W Huron River Drive, Ann Arbor, MI 48103.

Attendance at this conference is highly recommended. Administrative and technical questions regarding this project will be answered at this time. The pre-proposal conference is for information only. Any answers furnished will not be official until verified in writing by the Financial Service Area, Procurement Unit. Answers that change or substantially clarify the proposal will be affirmed in an addendum.

E. PROPOSAL FORMAT

To be considered, each firm must submit a response to this RFP using the format provided in Section III. No other distribution of proposals is to be made by the prospective bidder. An official authorized to bind the bidder to its provisions must sign the proposal. Each proposal must remain valid for at least one hundred and twenty (120) days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward, concise description of the bidder's ability to meet the requirements of the RFP. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person signing the proposal.

F. SELECTION CRITERIA

Responses to this RFP will be evaluated using a point system as shown in Section III. A selection committee comprised primarily of staff from the City will complete the evaluation.

If interviews are desired by the City, the selected firms will be given the opportunity to discuss their proposal, qualifications, past experience, and their fee proposal in more detail. The City further reserves the right to interview the key personnel assigned by the selected bidder to this project.

All proposals submitted may be subject to clarifications and further negotiation. All agreements resulting from negotiations that differ from what is represented within the RFP or in the proposal response shall be documented and included as part of the final contract.

G. SEALED PROPOSAL SUBMISSION

All proposals are due and must be delivered to the City on or before October 18, 2023 by 11:00 a.m. (local time). Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each respondent should submit in a sealed envelope

- **one (1) original proposal**
- **two (2) additional proposal copies**
- **one (1) digital copy of the proposal preferably on a USB/flash drive as one file in PDF format**

Proposals submitted should be clearly marked: **“RFP No. 23-54 – Barton Nature Area Border to Border Trail”** and list the bidder’s name and address.

Proposals must be addressed and delivered to:
City of Ann Arbor
c/o Customer Service
301 East Huron Street
Ann Arbor, MI 48107

All proposals received on or before the due date will be publicly opened and recorded on the due date. No immediate decisions will be rendered.

Hand delivered proposals may be dropped off in the Purchasing drop box located in the Ann Street (north) vestibule/entrance of City Hall which is open to the public Monday through Friday from 8am to 5pm (except holidays). The City will not be liable to any prospective bidder for any unforeseen circumstances, delivery, or postal delays. Postmarking on the due date will not substitute for receipt of the proposal.

Bidders are responsible for submission of their proposal. Additional time will not be granted to a single prospective bidder. However, additional time may be granted to all prospective bidders at the discretion of the City.

A proposal may be disqualified if the following required forms are not included with the proposal:

- **Attachment D - Prevailing Wage Declaration of Compliance**
- **Attachment E - Living Wage Declaration of Compliance**
- **Attachment G - Vendor Conflict of Interest Disclosure Form**
- **Attachment H - Non-Discrimination Declaration of Compliance**

Proposals that fail to provide these forms listed above upon proposal opening may be deemed non-responsive and may not be considered for award.

H. DISCLOSURES

Under the Freedom of Information Act (Public Act 442), the City is obligated to permit review of its files, if requested by others. All information in a proposal is subject to disclosure under this provision. This act also provides for a complete disclosure of contracts and attachments thereto.

I. TYPE OF CONTRACT

A sample of the Construction Agreement is included as Attachment A. Those who wish to submit a proposal to the City are required to review this sample agreement carefully. **The City will not entertain changes to its Construction Agreement.**

For all construction work, the respondent must further adhere to the City of Ann Arbor General Conditions. The General Conditions are included herein. Retainage will be held as necessary based on individual tasks and not on the total contract value. The Contractor shall provide the required bonds included in the Contract Documents for the duration of the Contract.

The City reserves the right to award the total proposal, to reject any or all proposals in whole or in part, and to waive any informality or technical defects if, in the City's sole judgment, the best interests of the City will be so served.

This RFP and the selected bidder's response thereto, shall constitute the basis of the scope of services in the contract by reference.

J. NONDISCRIMINATION

All bidders proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Attachment G shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

K. WAGE REQUIREMENTS

The Attachments provided herein outline the requirements for payment of prevailing wages or of a "living wage" to employees providing service to the City under this contract. The successful bidder must comply with all applicable requirements and provide documentary proof of compliance when requested.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. Use of Michigan

Department of Transportation Prevailing Wage Forms (sample attached hereto) or a City-approved equivalent will be required along with wage rate interviews.

For laborers whose wage level are subject to federal, state and/or local prevailing wage law the appropriate Davis-Bacon wage rate classification is identified based upon the work including within this contract. **The wage determination(s) current on the date 10 days before proposals are due shall apply to this contract.** The U.S. Department of Labor (DOL) has provided explanations to assist with classification in the following resource link: www.wdol.gov.

For the purposes of this RFP the Construction Type of Highway will apply.

L. CONFLICT OF INTEREST DISCLOSURE

The City of Ann Arbor Purchasing Policy requires that the consultant complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected bidder unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Conflict of Interest Disclosure Form is attached.

M. COST LIABILITY

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the bidder prior to the execution of an Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a proposal, bidder agrees to bear all costs incurred or related to the preparation, submission, and selection process for the proposal.

N. DEBARMENT

Submission of a proposal in response to this RFP is certification that the Respondent is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

O. PROPOSAL PROTEST

All proposal protests must be in writing and filed with the Purchasing Manager within five (5) business days of any notices of intent, including, but not exclusively, divisions on prequalification of bidders, shortlisting of bidders, or a notice of intent to award.

Only bidders who responded to the solicitation may file a bid protest. The bidder must clearly state the reasons for the protest. If any bidder contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the bidder to the Purchasing Manager. The Purchasing Manager will provide the bidder with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee, whose decision shall be final.

Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by the bidder to initiate contact with anyone other than the Designated City Contacts provided herein that the bidder believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.

P. SCHEDULE

The following is the schedule for this RFP process.

Activity/Event	Anticipated Date
Pre-Proposal Conference	October 3, 2023, 11:00 a.m. (Local Time)
Written Question Deadline	October 6, 2023, 1:00 p.m. (Local Time)
Addenda Published (if needed)	Week of October 9, 2023
Proposal Due Date	October 18, 2023, 11:00 a.m. (Local Time)
Selection/Negotiations	October/November 2023
Expected City Council Authorizations	December 2023

The above schedule is for information purposes only and is subject to change at the City's discretion.

Q. IRS FORM W-9

The selected bidder will be required to provide the City of Ann Arbor an IRS form W-9.

R. RESERVATION OF RIGHTS

1. The City reserves the right in its sole and absolute discretion to accept or reject any or all proposals, or alternative proposals, in whole or in part, with or without cause.
2. The City reserves the right to waive, or not waive, informalities or irregularities in terms or conditions of any proposal if determined by the City to be in its best interest.
3. The City reserves the right to request additional information from any or all bidders.
4. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested within RFP.

5. The City reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope be implemented.
6. The City reserves the right to select one or more contractors or service providers to perform services.
7. The City reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the firm of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted.
8. The City reserves the right to disqualify proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within the RFP.

S. IDLEFREE ORDINANCE

The City of Ann Arbor adopted an idling reduction Ordinance that went into effect July 1, 2017. The full text of the ordinance (including exemptions) can be found at: www.a2gov.org/idlefree.

Under the ordinance, No Operator of a Commercial Vehicle shall cause or permit the Commercial Vehicle to Idle:

- (a) For any period of time while the Commercial Vehicle is unoccupied; or
- (b) For more than 5 minutes in any 60-minute period while the Commercial Vehicle is occupied.

In addition, generators and other internal combustion engines are covered

- (1) Excluding Motor Vehicle engines, no internal combustion engine shall be operated except when it is providing power or electrical energy to equipment or a tool that is actively in use.

T. ENVIRONMENTAL COMMITMENT

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City's commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City's environmental principles.

U. MAJOR SUBCONTRACTORS

The Bidder shall identify each major subcontractor it expects to engage for this Contract if the work to be subcontracted is 15% or more of the bid sum or over

\$50,000, whichever is less. The Bidder also shall identify the work to be subcontracted to each major subcontractor. The Bidder shall not change or replace a subcontractor without approval by the City.

N. LIQUIDATED DAMAGES

A liquidated damages clause, as given on page C-2, Article III of the Contract, provides that the Contractor shall pay the City as liquidated damages, and not as a penalty, a sum certain per day for each and every day that the Contractor may be in default of completion of the specified work, within the time(s) stated in the Contract, or written extensions.

Liquidated damages clauses, as given in the General Conditions, provide further that the City shall be entitled to impose and recover liquidated damages for breach of the obligations under Chapter 112 of the City Code.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

SECTION II - SCOPE OF WORK

Project includes the construction of 0.60 miles of 10-foot-wide concrete shared used path along the Border to Border Trail within the Barton Nature Area.

Please see the plan set and detailed specifications for more details.

SECTION III - MINIMUM INFORMATION REQUIRED

PROPOSAL FORMAT

The following describes the elements that should be included in each of the proposal sections and the weighted point system that will be used for evaluation of the proposals.

Bidders should organize Proposals into the following Sections:

- A. Qualifications, Experience and Accountability
- B. Workplace Safety
- C. Workforce Development
- D. Social Equity and Sustainability
- E. Schedule of Pricing/Cost
- F. Authorized Negotiator
- G. Attachments

Bidders are strongly encouraged to provide details for all of the information requested below within initial proposals. Backup documentation may be requested at the sole discretion of the City to validate all of the responses provided herein by bidders. False statements by bidders to any of the criteria provided herein will result in the proposal being considered non-responsive and will not be considered for award.

Pursuant to Sec 1:325 of the City Code which sets forth requirements for evaluating public improvement bids, Bidders should submit the following:

A. Qualifications, Experience and Accountability - 20 Points

1. Qualifications and experience of the bidder and of key persons, management, and supervisory personnel to be assigned by the bidder.
2. References from individuals or entities the bidder has worked for within the last five (5) years including information regarding records of performance and job site cooperation.
3. Evidence of any quality control program used by the bidder and the results of any such program on the bidder's previous projects.
4. A statement from the bidder as to any major subcontractors it expects to engage including the name, work, and amount.

B. Workplace Safety – 20 Points

1. Provide a copy of the bidder's safety program, and evidence of a safety-training program for employees addressing potential hazards of the proposed job site. Bidder must identify a designated qualified safety representative responsible for bidder's safety program who serves as a contact for safety related matters.
2. Provide the bidder's Experience Modification Rating ("EMR") for the last three consecutive years. Preference within this criterion will be given to an EMR of 1.0 or less based on a three-year average.
3. Evidence that all craft labor that will be employed by the bidder for the project has, or will have prior to project commencement, completed at least an authorized 10-hour OSHA Construction Safety Course.
4. For the last three years provide a copy of any documented violations and the bidder's corrective actions as a result of inspections conducted by the Michigan Occupational Safety & Health Administration (MIOSHA), U.S. Department of Labor – Occupational Safety and Health Administration (OSHA), or any other applicable safety agency.

C. Workforce Development – 20 Points

1. Documentation as to bidder's pay rates, health insurance, pension or other retirement benefits, paid leave, or other fringe benefits to its employees.
- 2.. Documentation that the bidder participates in a Registered Apprenticeship Program that is registered with the United States Department of Labor Office of Apprenticeship or by a State Apprenticeship Agency recognized by the USDOL Office of Apprenticeship. USDOL apprenticeship agreements shall be disclosed to the City in the solicitation response.
3. Bidders shall disclose the number of non-craft employees who will work on the project on a 1099 basis, and the bidders shall be awarded points based on their relative reliance on 1099 work arrangements with more points assigned to companies with fewer 1099 arrangements. Bidders will acknowledge that the City may ask them to produce payroll records at points during the project to verify compliance with this section.

D. Social Equity and Sustainability – 20 Points

1. A statement from the bidder as to what percentage of its workforce resides in the City of Ann Arbor and in Washtenaw County, Michigan. The City will consider in

evaluating which bids best serve its interests, the extent to which responsible and qualified bidders employ individuals in either the City or the County. Washtenaw County jurisdiction is prioritized for evaluation purposes for this solicitation.

2. Evidence of Equal Employment Opportunity Programs for minorities, women, veterans, returning citizens, and small businesses.
3. Evidence that the bidder is an equal opportunity employer and does not discriminate on the basis of race, sex, pregnancy, age, religion, national origin, marital status, sexual orientation, gender identity or expression, height, weight, or disability.
4. The bidder's proposed use of sustainable products, technologies, or practices for the project, which reduce the impact on human health and the environment, including raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, and waste management.
5. The bidder's environmental record, including findings of violations and penalties imposed by government agencies.

E. Schedule of Pricing/Cost – 20 Points

Company: _____

Unit Price Bid

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
1027051	Audio-Visual Filming	LSUM	1	\$ _____	\$ _____
1027051	Certified Payroll Compliance and Reporting	LSUM	1	\$ _____	\$ _____
1100001	Mobilization, Max	LSUM	1	\$ _____	\$ _____
2010001	Clearing	Acre	1	\$ _____	\$ _____
2020002	Tree, Rem, 19 inch to 36 inch	Ea	25	\$ _____	\$ _____
2020003	Tree, Rem, 37 inch or Larger	Ea	10	\$ _____	\$ _____
2020004	Tree, Rem, 6 inch to 18 inch	Ea	120	\$ _____	\$ _____
2030001	Culv, Rem, Less than 24 inch	Ea	10	\$ _____	\$ _____
2040025	Fence, Rem	Ft	78	\$ _____	\$ _____
2050040	Subgrade Undercutting, Type I	Cyd	200	\$ _____	\$ _____
2050041	Subgrade Undercutting, Type II	Cyd	200	\$ _____	\$ _____
2050043	Subgrade Undercutting, Type IV	Cyd	200	\$ _____	\$ _____
2057001	Infiltration Trench, Det A	Ft	171	\$ _____	\$ _____
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	5	\$ _____	\$ _____
2080036	Erosion Control, Silt Fence	Ft	6,247	\$ _____	\$ _____
2080042	Erosion Control, Turbidity Curtain, Deep	Ft	50	\$ _____	\$ _____
3027011	Aggregate Base, 10 inch, Modified	Syd	340	\$ _____	\$ _____
3060020	Maintenance Gravel	Ton	100	\$ _____	\$ _____

3067011	Aggregate Surface Cse, 6 inch, Modified	Syd	564	\$ _____	\$ _____
3080005	Geotextile, Separator	Syd	200	\$ _____	\$ _____
3082000	Geotextile, Separator, Non-Woven	Syd	200	\$ _____	\$ _____
3082002	Road Grade Biaxial Geogrid	Syd	200	\$ _____	\$ _____
4010047	Culv End Sect, Conc, 12 inch	Ea	12	\$ _____	\$ _____
4010573	Culv, CI E, Conc, 12 inch	Ft	169	\$ _____	\$ _____
4030006	Dr Structure Cover, Adj, Case 2	Ea	1	\$ _____	\$ _____
4030035	Dr Structure Cover, Type E	Ea	1	\$ _____	\$ _____
4030210	Dr Structure, 48 inch dia	Ea	1	\$ _____	\$ _____
4040093	Underdrain Outlet, 6 inch	Ft	10	\$ _____	\$ _____
4040113	Underdrain, Outlet Ending, 6 inch	Ea	1	\$ _____	\$ _____
4047001	Underdrain, Infiltration Trench, 6 inch	Ft	192	\$ _____	\$ _____
6020207	Joint, Expansion, E2	Ft	20	\$ _____	\$ _____
6020208	Joint, Expansion, E3	Ft	30	\$ _____	\$ _____
7060092	Reinforcement, Steel, Epoxy Coated	Lb	50	\$ _____	\$ _____
7062001	Conc, Grade 3500	Cyd	1	\$ _____	\$ _____
8010003	Driveway, Reinf Conc, 8 inch	Syd	212	\$ _____	\$ _____
8027001	Valley Gutter, Conc, Modified	Ft	22	\$ _____	\$ _____
8030010	Detectable Warning Surface	Ft	10	\$ _____	\$ _____
8060020	Shared use Path, Conc	Syd	3,491	\$ _____	\$ _____
3067011	Aggregate Surface Cse, 6 inch, Modified	Syd	564	\$ _____	\$ _____
3080005	Geotextile, Separator	Syd	200	\$ _____	\$ _____

8067001	Shared use Path, Grading, Modified	Ft	3,135	\$ _____	\$ _____
8067011	Shared use Path, Aggregate, 8 inch, Modified	Syd	3,965	\$ _____	\$ _____
8080013	Fence, Chain Link, 72 inch	Ft	150	\$ _____	\$ _____
8087001	Fence, Wood, 48 inch	Ft	918	\$ _____	\$ _____
8100371	Post, Steel, 3 lb	Ft	30	\$ _____	\$ _____
8100405	Sign, Type IIIB	Sft	4	\$ _____	\$ _____
8110293	Pavt Mrkg, Waterborne, for Rest Areas, Parks, and Lots, 4 inch, Blue	Ft	143	\$ _____	\$ _____
8120170	Minor Traf Devices	LSUM	1	\$ _____	\$ _____
8137001	Check Dam, Cobblestone	Ft	60	\$ _____	\$ _____
8137011	Riprap, Cobblestone	Syd	47	\$ _____	\$ _____
8150002	Watering and Cultivating, First Season, Min \$5,000.00	LSUM	1	\$ _____	\$ _____
8150003	Watering and Cultivating, 2nd Season, Min \$5,000.00	LSUM	1	\$ _____	\$ _____
8150805	Cercis canadensis, 2 inch clump, 3 Stem	Ea	10	\$ _____	\$ _____
8150983	Cornus florida, 2 inch	Ea	10	\$ _____	\$ _____
8151064	Cornus sericea, #5 cont.	Ea	30	\$ _____	\$ _____
8153044	Quercus bicolor, 2 inch	Ea	3	\$ _____	\$ _____
8154084	Viburnum lentago, #5 cont.	Ea	10	\$ _____	\$ _____
8157050	Bench, Backed	Ea	1	\$ _____	\$ _____
8157050	Platanus occidentalis, 2 inch	Ea	5	\$ _____	\$ _____
8167011	Turf Establishment, Turf Grass, Performance	Syd	600	\$ _____	\$ _____
8167011	Turf Establishment, Native Seed Mix, Mesic Tallgrass, Performance	Syd	1,100	\$ _____	\$ _____
8167011	Turf Establishment, Native Seed Mix, Woodland Edge, Performance	Syd	1,600	\$ _____	\$ _____

8167011 Turf Establishment, Native Seed Mix, Syd 800 \$ _____ \$ _____
Forested Wetland, Performance

ESTIMATED TOTAL \$ _____

F. AUTHORIZED NEGOTIATOR / NEGOTIATIBLE ELEMENTS (ALTERNATES)

Include the name, phone number, and e-mail address of persons(s) in your organization authorized to negotiate the agreement with the City.

The proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

If the bidder wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion, page C-2, it is requested to stipulate its proposed time for performance of the work.

Consideration for any proposed alternative items or time may be negotiated at the discretion of the City.

G. ATTACHMENTS

General Declaration, Legal Status of Bidder, Conflict of Interest Form, Living Wage Compliance Form, Prevailing Wage Compliance Form and the Non-Discrimination Form should be completed and returned with the proposal. These elements should be included as attachments to the proposal submission.

PROPOSAL EVALUATION

1. The selection committee will evaluate each proposal by the above-described criteria and point system. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested for evaluation. A proposal with all the requested information does not guarantee the proposing firm to be a candidate for an interview if interviews are selected to be held by the City. The committee may contact references to verify material submitted by the bidder.
2. The committee then will schedule interviews with the selected firms if necessary. The selected firms will be given the opportunity to discuss in more detail their qualifications, past experience, proposed work plan (if applicable) and pricing.
3. The interview should include the project team members expected to work on the project, but no more than six members total. The interview shall consist of a

presentation of up to thirty minutes (or the length provided by the committee) by the bidder, including the person who will be the project manager on this contract, followed by approximately thirty minutes of questions and answers. Audiovisual aids may be used during the oral interviews. The committee may record the oral interviews.

4. The firms interviewed will then be re-evaluated by the above criteria and adjustments to scoring will be made as appropriate. After evaluation of the proposals, further negotiation with the selected firm may be pursued leading to the award of a contract by City Council, if suitable proposals are received.

The City reserves the right to waive the interview process and evaluate the bidder based on their proposal and pricing schedules alone.

The City will determine whether the final scope of the project to be negotiated will be entirely as described in this RFP, a portion of the scope, or a revised scope.

Work to be done under this contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents.

Any proposal that does not conform fully to these instructions may be rejected.

PREPARATION OF PROPOSALS

Proposals should have no plastic bindings but will not be rejected as non-responsive for being bound. Staples or binder clips are acceptable. Proposals should be printed double sided on recycled paper.

Each person signing the proposal certifies that they are a person in the bidder's firm/organization responsible for the decisions regarding the fees being offered in the Proposal and has not and will not participate in any action contrary to the terms of this provision.

ADDENDA

If it becomes necessary to revise any part of the RFP, notice of the addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or the City of Ann Arbor web site www.A2gov.org for all parties to download.

Each bidder should acknowledge in its proposal all addenda it has received on the General Declarations form provided in the Attachments section herein. The failure of a bidder to receive or acknowledge receipt of any addenda shall not relieve the bidder of the responsibility for complying with the terms thereof. The City will not be bound by oral responses to inquiries or written responses other than official written addenda.

SECTION IV - ATTACHMENTS

Attachment A – Sample Standard Contract

Attachment B – General Declarations

Attachment C - Legal Status of Bidder

Attachment D – Prevailing Wage Declaration of Compliance Form

Attachment E – Living Wage Declaration of Compliance Form

Attachment F – Living Wage Ordinance Poster

Attachment G – Vendor Conflict of Interest Disclosure Form

Attachment H – Non-Discrimination Ordinance Declaration of Compliance Form

Attachment I – Non-Discrimination Ordinance Poster

Sample Certified Payroll Report Template

**ATTACHMENT A
SAMPLE STANDARD CONTRACT**

If a contract is awarded, the selected contractor will be required to adhere to a set of general contract provisions which will become a part of any formal agreement. These provisions are general principles which apply to all contractors of service to the City of Ann Arbor such as the following:

Administrative Use Only
Contract Date: _____

CONTRACT

THIS CONTRACT is between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 East Huron Street, Ann Arbor, Michigan 48104 ("City") and _____ ("Contractor")

(An individual/partnership/corporation, include state of incorporation) (Address)

Based upon the mutual promises below, the Contractor and the City agree as follows:

ARTICLE I - Scope of Work

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled **[Insert Title of Bid and Bid Number]** in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, all of which are incorporated as part of this Contract:

- | | |
|--|-------------------------|
| Non-discrimination and Living Wage Declaration of Compliance Forms (if applicable) | General Conditions |
| Vendor Conflict of Interest Form | Standard Specifications |
| Prevailing Wage Declaration of Compliance Form (if applicable) | Detailed Specifications |
| Bid Forms | Plans |
| Contract and Exhibits | Addenda |
| Bonds | |

ARTICLE II - Definitions

Administering Service Area/Unit means **Parks and Recreation Services / Community Services Area**

Project means **Barton Nature Area Border to Border Trail, RFP #23-54**

Supervising Professional means the person acting under the authorization of the manager of the Administering Service Area/Unit. At the time this Contract is executed,

the Supervising Professional is: **Hillary Hanzel** whose job title is **Park Planner / Landscape Architect**. If there is any question concerning who the Supervising Professional is, Contractor shall confirm with the manager of the Administering Service Area/Unit.

Contractor's Representative means _____ **[Insert name]** whose job title is **[Insert job title]**.

ARTICLE III - Time of Completion

- (A) The work to be completed under this Contract shall begin immediately on the date specified in the Notice to Proceed issued by the City.
- (B) The work for this Contract shall be completed with the pathway open to traffic by June 28, 2024. The entire work including all restoration, plantings and two year watering/cultivation period shall be completed by October 31, 2026.
- (C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the Contractor to pay the City, as liquidated damages and not as a penalty, an amount equal to \$1,000 for each calendar day of delay in the completion of all the work. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

ARTICLE IV - The Contract Sum

- (A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Form for the estimated bid total of:

_____ Dollars (\$ _____)
- (B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the Contract Documents. Increases or decreases shall be determined only by written agreement between the City and Contractor.

ARTICLE V - Assignment

This Contract may not be assigned or subcontracted any portion of any right or obligation under this contract without the written consent of the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under this contract unless specifically released from the requirement, in writing, by the City.

ARTICLE VI - Choice of Law

This Contract shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this Contract, the Contractor and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this Contract. The parties stipulate that the venue referenced in this Contract is for convenience and waive any claim of non-convenience.

Whenever possible, each provision of the Contract will be interpreted in a manner as to be effective and valid under applicable law. The prohibition or invalidity, under applicable law, of any provision will not invalidate the remainder of the Contract.

ARTICLE VII - Relationship of the Parties

The parties of the Contract agree that it is not a Contract of employment but is a Contract to accomplish a specific result. Contractor is an independent Contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship between the City and the Contractor.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any Contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this Contract.

ARTICLE VIII - Notice

All notices given under this Contract shall be in writing, and shall be by personal delivery or by certified mail with return receipt requested to the parties at their respective addresses as specified in the Contract Documents or other address the Contractor may specify in writing. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; or (2) three days after mailing certified U.S. mail.

ARTICLE IX - Indemnification

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with this Contract, by the Contractor or anyone acting on the Contractor's behalf under this Contract. Contractor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. The provisions of this Article shall survive the expiration or earlier termination of this contract for any reason.

ARTICLE X - Entire Agreement

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations, negotiations, agreements, or understandings whether written or oral. Neither party has relied on any prior representations in entering into this Contract. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Contract, regardless of the other party's failure to object to such form. This Contract shall be binding on and shall inure to the benefit of the parties

to this Contract and their permitted successors and permitted assigns and nothing in this Contract, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

ARTICLE XI – Electronic Transactions

The City and Contractor agree that signatures on this Contract may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Contract. This Contract may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

FOR CONTRACTOR

By _____

Its: _____

FOR THE CITY OF ANN ARBOR

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

By _____
City Administrator

By _____
Services Area Administrator

Approved as to form and content

Atleen Kaur, City Attorney

PERFORMANCE BOND

- (1) _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for \$ _____, the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City entitled _____, for RFP No. _____ and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq.
- (3) Whenever the Principal is declared by the City to be in default under the Contract, the Surety may promptly remedy the default or shall promptly:
- (a) complete the Contract in accordance with its terms and conditions; or
 - (b) obtain a bid or bids for submission to the City for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, arrange for a Contract between such bidder and the City, and make available, as work progresses, sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth in paragraph 1.
- (4) Surety shall have no obligation to the City if the Principal fully and promptly performs under the Contract.
- (5) Surety agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder, or the specifications accompanying it shall in any way affect its obligations on this bond, and waives 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.
- (6) Principal, Surety, and the City agree that signatures on this bond may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this bond. This bond may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

SIGNED AND SEALED this _____ day of _____, 202_.

(Name of Surety Company)

By _____
(Signature)

Its _____
(Title of Office)

(Name of Principal)

By _____
(Signature)

Its _____
(Title of Office)

Approved as to form:

Atleen Kaur, City Attorney

Name and address of agent:

LABOR AND MATERIAL BOND

- (1) _____
of _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan, (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for the use and benefit of claimants as defined in Act 213 of Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq., in the amount of \$ _____, for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City entitled _____

_____, for RFP No. _____; and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963 as amended;
- (3) If the Principal fails to promptly and fully repay claimants for labor and material reasonably required under the Contract, the Surety shall pay those claimants.
- (4) Surety's obligations shall not exceed the amount stated in paragraph 1, and Surety shall have no obligation if the Principal promptly and fully pays the claimants.
- (5) Principal, Surety, and the City agree that signatures on this bond may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this bond. This bond may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

SIGNED AND SEALED this _____ day of _____, 202__

(Name of Surety Company)
By _____
(Signature)
Its _____
(Title of Office)

(Name of Principal)
By _____
(Signature)
Its _____
(Title of Office)

Approved as to form:

Atleen Kaur, City Attorney

Name and address of agent:

GENERAL CONDITIONS

Section 1 - Execution, Correlation and Intent of Documents

The contract documents shall be signed in 2 copies by the City and the Contractor.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

(1) Addenda in reverse chronological order; (2) Detailed Specifications; (3) Standard Specifications; (4) Plans; (5) General Conditions; (6) Contract; (7) Bid Forms; (8) Bond Forms; (9) Bid.

Section 2 - Order of Completion

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

Section 3 - Familiarity with Work

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery, and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

Section 4 - Wage Requirements

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of

subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. A sample Prevailing Wage Form is provided in the Appendix herein for reference as to what will be expected from contractors. Use of the Prevailing Wage Form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Contract a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Contract are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision covering subcontractor's employees who perform work on this contract.

Section 5 - Non-Discrimination

The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

Section 6 - Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned.

Adequate sanitary facilities shall be provided by the Contractor.

Section 7 - Qualifications for Employment

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

Section 8 - Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

Section 9 - Permits and Regulations

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

Section 10 - Protection of the Public and of Work and Property

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the contract documents, or caused by agents or

employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

Section 11 - Inspection of Work

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the contract documents, the Contractor shall pay the cost.

Section 12 - Superintendence

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

Section 13 - Changes in the Work

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be

executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

Section 14 - Extension of Time

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;
- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in contract completion is appropriate under this or any other section of the contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in contract completion shall be extension of the required time for contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

Section 15 - Claims for Extra Cost

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section I3. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the contract documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;
- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;
- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract.

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

Section 16 - Progress Payments

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

Section 17 - Deductions for Uncorrected Work

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

Section 18 - Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material

at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

Section 19 - Acceptance and Final Payment

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;
- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's guarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

Section 20 - Suspension of Work

The City may at any time suspend the work, or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the

written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

Section 21 - Delays and the City's Right to Terminate Contract

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have, make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred. The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

Section 22 - Contractor's Right to Terminate Contract

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

Section 23 - City's Right To Do Work

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

Section 24 - Removal of Equipment and Supplies

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

Section 25 - Responsibility for Work and Warranties

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and installed under the contract, shall be inspected by the Contractor and the Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

Section 26 - Partial Completion and Acceptance

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

Section 27 - Payments Withheld Prior to Final Acceptance of Work

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

Section 28 - Contractor's Insurance

- (1) The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set forth below, as will protect itself and the City from all claims for bodily injuries, death or property damage that may arise under this Contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor, or anyone employed by them directly or indirectly. Prior to commencement of any work under this contract, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the required policies and endorsements. The certificates of insurance endorsements and/or copies of

policy language shall document that the Contractor satisfies the following minimum requirements. Contractor shall add registration@mycoitracking.com to its safe sender's list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).

Required insurance policies include:

- (a) Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

- Bodily Injury by Accident - \$500,000 each accident
- Bodily Injury by Disease - \$500,000 each employee
- Bodily Injury by Disease - \$500,000 each policy limit

- (b) Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 04 13 or current equivalent. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements specifically for the following coverages: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further there shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. The following minimum limits of liability are required:

- \$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined.
- \$2,000,000 Per Project General Aggregate
- \$1,000,000 Personal and Advertising Injury
- \$2,000,000 Products and Completed Operations Aggregate, which, notwithstanding anything to the contrary herein, shall be maintained for three years from the date the Project is completed.

- (c) Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

- (d) Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- (2) Insurance required under subsection (1)(b) and (1)(c) above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute

with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City for any insurance listed herein.

- (3) Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional and un-qualified 30-day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number(s); name of insurance company(s); name and address of the agent(s) or authorized representative(s); name(s), email address(es), and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which may be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) and all required endorsements to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.
- (4) Any Insurance provider of Contractor shall be authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-authorized insurance companies are not acceptable unless approved in writing by the City.
- (5) City reserves the right to require additional coverage and/or coverage amounts as may be included from time to time in the Detailed Specifications for the Project.
- (6) The provisions of General Condition 28 shall survive the expiration or earlier termination of this contract for any reason.

Section 29 - Surety Bonds

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company authorized to transact business in Michigan and satisfactory to the City Attorney.

Section 30 - Damage Claims

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

Section 31 - Refusal to Obey Instructions

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

Section 32 - Assignment

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

Section 33 - Rights of Various Interests

Whenever work being done by the City's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other contractors whose work impacts this project.

Section 34 - Subcontracts

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other contract documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the contract documents.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

Section 35 - Supervising Professional's Status

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

Section 36 - Supervising Professional's Decisions

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

Section 37 - Storing Materials and Supplies

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

Section 38 - Lands for Work

The Contractor shall provide, at its own expense and without liability to the City, any additional land and access that may be required for temporary construction facilities or for storage of materials.

Section 39 - Cleaning Up

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

Section 40 - Salvage

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

Section 41 - Night, Saturday or Sunday Work

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

Section 42 - Sales Taxes

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

Section 43

CONTRACTOR'S DECLARATION

I hereby declare that I have not, during the period _____, 20____, to _____, 20____, performed any work, furnished any materials, sustained any loss, damage or delay, or otherwise done anything in addition to the regular items (or executed change orders) set forth in the Contract titled _____, for which I shall ask, demand, sue for, or claim compensation or extension of time from the City, except as I hereby make claim for additional compensation or extension of time as set forth on the attached itemized statement. I further declare that I have paid all payroll obligations related to this Contract that have become due during the above period and that all invoices related to this Contract received more than 30 days prior to this declaration have been paid in full except as listed below.

There is/is not (Contractor please circle one and strike one as appropriate) an itemized statement attached regarding a request for additional compensation or extension of time.

Contractor

Date

By _____
(Signature)

Its _____
(Title of Office)

Past due invoices, if any, are listed below.

STANDARD SPECIFICATIONS

All work under this contract shall be performed in accordance with the Public Services Department Standard Specifications in effect at the date of availability of the contract documents stipulated in the Bid. All work under this Contract which is not included in these Standard Specifications, or which is performed using modifications to these Standard Specifications, shall be performed in accordance with the 2020 Michigan Department of Transportation Standard Specifications for Construction and the Detailed Specifications included in these contract documents.

Standard Specifications are available online:

<http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx>

DETAILED SPECIFICATIONS

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
CERTIFIED PAYROLL COMPLIANCE AND REPORTING

OHM:cje

1 of 2

09-11-2023

a. Description. This work covers all administrative requirements, payroll reporting procedures to be followed by Contractors performing work on City-sponsored public improvements projects, and all other miscellaneous and incidental costs associated with complying with the applicable sections of the City of Ann Arbor Code of Ordinances with regard to payment of prevailing wages and its Prevailing Wage Compliance policy.

This specification is not intended to include the actual labor costs associated with the payment of prevailing wages as required. Those costs should be properly incorporated in all other items of work bid.

b. General. The Contractor is expected to comply with all applicable sections of Federal and State prevailing wage laws, duly promulgated regulations, the City of Ann Arbor Code of Ordinances, and its Prevailing Wage Compliance Policy as defined within the Contract Documents. The Contractor shall provide the required certified payrolls, City-required declarations, and reports requested elsewhere in the Contract Documents within the timeline(s) stipulated therein.

The Contractor shall also provide corrected copies of any submitted documents that are found to contain errors, omissions, inconsistencies, or other defects that render the report invalid. The corrected copies shall be provided when requested by the Supervising Professional.

The Contractor shall also attend any required meetings as needed to fully discuss and ensure compliance with the Contract requirements regarding prevailing wage compliance. The Contractor shall require all employees engaged in on-site work to participate in, provide the requested information to the extent practicable, and cooperate in the interview process. The City of Ann Arbor will provide the needed language interpreters in order to perform wage rate interviews or other field investigations as needed.

Certified Payrolls may be submitted on City-provided forms or forms used by the Contractor, as long as the Contractor's forms contain all required payroll information. If the Contractor elects to provide their own forms, the forms shall be approved by the Supervising Professional prior to the beginning of on-site work.

c. Unbalanced Bidding. The City of Ann Arbor will examine the submitted cost for this item of work prior to Contract award. If the City determines, in its sole discretion, that the costs bid by the Contractor for complying with the Contract requirements are not reasonable, accurately reported, or may contain discrepancies, the City reserves the right to request additional documentation that fully supports and justifies the price as bid. Should the submitted information not be determined to be reasonable or justify the costs, the City reserves the right to pursue award of the Contract to the second low bidder without penalty or prejudice to any other remedies that it may have or may elect to exercise with respect to the original low-bidder.

The Contract Completion date will not be extended as a result of the City’s investigation of the as-bid amount for this item of work, even if the anticipated contract award date must be adjusted. The only exception will be if the Contractor adequately demonstrates that their costs were appropriate and justifiable. If so, the City will adjust the Contract completion date by the number of calendar days commensurate with the length of the investigation, if the published Notice to Proceed date of the work cannot be met. The Contract unit prices for all other items of work will not be adjusted regardless of an adjustment of the Contract completion date being made

d. Measurement and Payment. The completed work, as described, will be measured as a lump sum and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Certified Payroll Compliance and Reporting	Lump Sum

The unit price for this item of work shall include all supervisory, accounting, administrative, and equipment costs needed to monitor and perform all work related to maintaining compliance with the tasks specified in this Detailed Specification, the City of Ann Arbor Code of Ordinances, its Prevailing Wage Compliance policy and the applicable Federal and State laws.

Payment for this work will be made with each progress payment, on a pro-rata basis, based on the percentage of construction completed. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 times the Lump Sum bid amount. This amount will not be increased for any reason, including extensions of time, extra work, and/or adjustments to existing items of work.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
COORDINATION CLAUSE

OHM:cje

1 of 2

09-19-2023

The Contractor shall refer to section 104.08 of the Standard Specifications for Construction when coordinating other projects or dealing with other contractors in the work area.

The Contractor shall be aware of other projects that may be constructed within or near the Project Area during the same general period as this project and shall coordinate their activities to minimize disturbance between this project and any other project in the vicinity. Known projects include, but are not limited to:

1. The City of Ann Arbor plans to perform work on the Barton Dam. The Barton Dam project is anticipated to being in July 2024. This will include stockpiling of materials within Barton Park and equipment access adjacent to and across the proposed pathway route in Barton Park. The Contractor shall attend one coordination meeting with the Barton Dam contractor.
2. The City of Ann Arbor/Washtenaw County Parks and Recreation Commission are planning a future pathway/tunnel near Bandemer Park. Tree clearing and removals for this future project are included in the current project contract. See plan sheets for details.
3. MDOT Office of Rail is planning to install a new fence within the railroad right-of-way adjacent to the limits of this project.

As part of the coordination efforts associated with this project the Contractor shall prepare and submit a schedule in electronic format on a monthly basis. The Contractor shall provide advanced notice of changes in the anticipated project delivery date with a 30 day minimum notice.

The open space in Barton Park near Stations 101+00 and 103+00 can be utilized for staging and storage. The Contractor shall coordinate their staging area with other projects at the Barton Pump Station and Barton Dam. Staging plan shall be submitted to the Owner and Engineer for review.

The Contractor shall also coordinate with local third-party vendors providing services to the park and area residents for trash collection, leaf pickup, street cleaning, mail, and other services. Coordinate construction activities to allow third-party vendors and service vehicles to access areas of the project site needed to complete their work.

The Contractor shall coordinate with the City of Ann Arbor to maintain access to the boat launch on the Huron River in Barton Park. Complete closure of the boat launch shall be limited to a two-week period prior to June 15, 2024. For the remainder of the contract, intermittent closures on weekdays will be permitted, but the boat launch must be fully accessible for public use on the weekend. City staff shall be notified prior to closure of the boat launch. Contractor shall provide barricades as necessary to separate work area and access routes from the boat launch, which shall be incidental to the Minor Traf Devices pay item.

Construction activities and traffic control measures shall be coordinated with any of the projects listed or other authorized work within the City of Ann Arbor or MDOT Rail Right of Way.

It is the Contractor's responsibility to coordinate his/her work efforts with the other projects. Any additional costs incurred by the Contractor resulting from conflict with another project or work activities will be considered incidental and will not be paid for.

The Contractor shall not receive a time extension due to work delays resulting from conflicts with another project or work activities. Refer to the Progress Clause for information on the required completion date and associated penalties.

Access to the proposed pathway on the Bandemer Nature Area Peninsula between Stations 108+44 and 131+95 is limited by the Huron River and the existing MDOT Rail Right of Way. No overland route is available to access this portion of the project.

The Contractor shall only be permitted to access the proposed pathway between Stations 108+44 to 131+95 with equipment over the existing northern pedestrian bridge between stations 106+52 and 108+44. The Contractor shall not exceed the posted 6,000lb load limit on the bridge. All necessary accommodations required to comply with the load and access limitations shall be considered incidental and will not be paid for separately.

Equipment load information shall be provided to the Engineer for review prior to accessing the peninsula.

No equipment will be permitted to cross the southern pedestrian bridge 131+95 and 134+49.

Any additional permitting requirements associated with alternate access to this section of the project will be the responsibility of the Contractor.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
UTILITY COORDINATION

OHM:cje

1 of 2

09-19-2023

The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in subsection 104.08 of the Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in subsection 107.12 of the Standard Specifications for Construction. Contractor delay claims, resulting from a utility conflict, will be determined based upon subsection 109.05 of the Standard Specifications for Construction.

During the course of construction, the Contractor will encounter both overhead and underground utilities. The names and phone numbers of the utility company representatives will be made available at the pre-construction meeting and shown on the drawings.

For protection of underground utilities and in conformance with Public Act 174, of 2013, as amended, the Contractor shall contact "MISS DIG" at 1-800-482-7171 or 811 a minimum of three (3) full working days, excluding Saturdays, Sundays, and holidays prior to beginning each excavation in areas where public utilities have not been previously marked/located. This does not relieve the Contractor of the responsibility of notifying utility owners identified in the contract documents who may not be a part of the "MISS DIG" alert system.

The existing utilities listed below, and shown on the plans, represent the best information available. This information does not relieve the Contractor of the responsibility to be satisfied as to the accuracy and the location of the existing utilities.

NAME OF OWNER	CONTACT INFORMATION	UTILITY TYPE
City of Ann Arbor Utilities 4251 Stone School Rd Ann Arbor, MI 48108	Contacts: Jason McDonald -Water Mark Sirls - Stormwater Travis Conley – Sanitary Sewer Nicholas Jacob - Forestry Mark Moreno, Signs/Signals Phone: 734-794-6350	City Utilities
DTE Electric 1 Energy Plaza Detroit, MI 48226	Contact: Anthony Ignasiak Phone: 734-397-4447 Email: Anthony.ignasiak@dteenergy.com	Electric
DTE Gas Company 1 Energy Plaza – WCB 1710 Detroit, MI 48226	Contact: Chris Collins Phone: 313-999-0066 Email: christopher.collins@dteenergy.com	Gas
Consumers Energy 530 W Willow St Lansing, MI 48906	Contact: Kevin L Couturier Phone: 989-574-7538 Email:	Gas
AT&T 550 S Maple Rd Ann Arbor, MI 48103	Contact: Michael Jarema Phone: 734-996-5385 Email: MJ1749@att.com	Telephone
Comcast 27096 Oakmead Dr Perrysburg, OH 43551	Contact: Chris Cyr Phone: 734-359-1665 Email: Chris_cyr@comcast.com	Cable
Century Link 1025 Eldorado Blvd Broomfield, OH 80021	Contact: Ryan Egan Phone: 414-224-6767 Email:	Fiber Optic
Railroad Utilities Amtrak Engineering Dept 2330 Brooklyn Rd Jackson, MI 49203	Contact: Ray Weinel Phone: Email: wein2535@amtrak.com	Railroad Utilities

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
PROGRESS CLAUSE

OHM:mpb

1 of 1

09-19-2023

The Engineer anticipates that construction can begin no earlier than ten (10) calendar days after award or as directed by the Engineer.

In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The Contractor shall prepare and submit a complete, detailed, signed Progress Schedule to the Engineer.

The project must be completely open to traffic by the open to traffic date of June 28, 2024.

All contract work, including restoration and plantings, must be complete by the interim completion date of October 31, 2024.

The entire project, including two years of watering and cultivating, must be completed by the final completion date of October 31, 2026.

Unless specific pay items are provided in the contract, any extra costs incurred by the Contractor due to cold-weather protection and winter grading will not be paid for separately, but will be included in the payment of other pay items in the contract.

After award and prior to start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the date, time, and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project.

The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

For compliance with threatened and endangered bats, tree clearing must be completed between October 1 and March 31.

For compliance with EGLE joint permit for inland lakes and streams, no work below the ordinary high-water mark (OHWM) shall occur between March 1 and June 30.

Failure by the Contractor to meet interim completion, open to traffic, and/or final completion dates will result in the assessment of liquidated damages in accordance with subsections 108.10.C.1 and 108.10.C.2 of the Standard Specifications for Construction..

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
AUDIO-VISUAL FILMING

OHM:mpb

1 of 2

08-24-2023

a. Description. This work consists of providing a film record of physical, structural, and aesthetic conditions as it exists prior to the beginning of any construction activity and after completion of construction in the locations outlined herein. Ensure the film is of professional quality and provides a clear and accurate visual and audio narrative record of existing conditions.

Complete filming, under the supervision of the Engineer, before any construction activity is started. Furnish the completed film on USB to the Engineer at least 1 week prior to placement of any materials or equipment in the construction area. Ensure any portion of the recording determined by the Engineer to be unacceptable for the documentation of existing conditions is re-filmed prior to the start of any construction activity at no cost to the contract.

b. Audio-Video Production. Provide the name of the video recording services company to the Engineer at least 5 workdays prior to the start of filming.

Use digital format and equipment which allows audio and video information to be recorded. Film in the general direction of vehicular travel and do not exceed 45 feet per minute (approximately 0.5 miles per hour). Control pan and zoom rates to ensure playback clarity of the subject matter being filmed.

Use audio and video cues to identify location, relative to project limits and landmarks, at intervals of not more than 100 feet along the filming route. Provide audio commentary as necessary during filming to describe streets, buildings, landmarks, and other details which will enhance the documentation of existing conditions.

Conduct filming during a time of good visibility and not during periods of precipitation, or when snow, leaves or other natural debris obstruct the area being filmed.

Use video equipment with date/time stamp and digital annotation capabilities. The final video recording must display the date (month, day, and year) and the time (hours, minutes, and seconds). This transparent information is to appear on the upper left-hand corner of the frame.

The project station numbers must appear in the lower half of the frame. This stationing must use MDOT standard engineering symbols (i.e., 3+50). If there is no project stationing in an area being filmed, assign assumed stationing to each street or other discrete area being filmed. Start the assumed stationing at 0+00 and increase from west to east or from south to north. Include periodic, transparent alpha/numeric information below the station numbers consisting of the name of the project, name of area shown, direction of travel, viewing direction, etc.

c. Area to be filmed. Provide a pre-construction video for both pedestrian bridges adjacent to the Barton Nature Area peninsula (Sta 106+50 to Sta 108+50, and Sta 131+90 to Sta 134+90). Film the top surface and underside of all bridge components, including abutments and any visual indications of wear or damage. Include an audio narrative to describe any notable observations.

Provide a pre-construction and post-construction video for the Barton Park portion of the project (Sta 100+00 to Sta 106+50). Film the top surface, any visual surface cracks, and any other notable observations.

d. Measurement and Payment. The completed work, as described, will be measured as a lump sum and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Audio-Visual Filming.....	Lump Sum

Audio-Visual Filming includes all labor, equipment and materials required to perform the filming and to provide the finished USB(s) to the Engineer.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
CLEARING, MODIFIED

OHM:cje

1 of 1

09-14-2023

a. Description. This work consists of clearing in areas of tree removal without a proposed shared use path. This work shall be done in accordance with sections 201 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as herein provided.

b. Materials. All work must be in accordance with the contract documents.

c. Construction. Remove trees less than 6-inches in diameter, within 18-inches of existing ground. Existing stumps, or stumps generated from tree removals will be removed with a future contract. The removal limits shall extend to the proposed grading limit line and include other areas designated on the plans. Trees shall be felled without danger to traffic or injury to other trees, structures or property. Trees are not to be removed until verified by the Engineer.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay items:

Pay Item	Pay Unit
Clearing, Modified	Acre

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
SUBGRADE UNDERCUTTING, TYPE IV, MODIFIED

OHM:mpb

1 of 1

08-24-2023

a. Description. Perform subgrade undercutting in conformance with Section 205 of the MDOT 2020 Standard Specifications for Construction except as modified herein.

b. Materials. Use 21AA limestone aggregate meeting the requirements of Section 902 of the MDOT 2020 Standard Specifications for Construction for backfill.

c. Construction. Conform to subsection 205.03.E of the Standard Specifications for Construction. Wrap Geotextile, Stabilization around the aggregate as directed by the Engineer and in conformance with section 308 of the Standard Specifications for Construction.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Subgrade Undercutting, Type IV, Modified	Cubic Yard

Subgrade Undercutting, Type IV, Modified will be paid for as detailed in subsection 205.04.E of the MDOT 2020 Standard Specifications for Construction for Subgrade Undercutting. The contract unit price shall be payment in full for all labor, materials, and equipment needed to accomplish this work. Geotextile, Stabilization shall be paid separately.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
INFILTRATION TRENCH AND UNDERDRAIN

OHM:mpb

1 of 1

09-08-2023

a. Description. This work consists of constructing an infiltration trench backfilled with fine graded aggregate as detailed on the plans.

b. Materials. Aggregate. Furnish 6A open-graded aggregate material meeting requirements of Section 902 of the 2020 Standard Specifications for Construction.

Geotextile. Furnish non-woven geotextile fabric in accordance with Section 910 of the 2020 Standard Specifications for Construction. Geotextile must meet the requirements of non-woven geotextile separator shown in Table 910-1.

Underdrain. Furnish 6" corrugated plastic tubing for underdrain pipe in accordance with Section 909 of the 2020 Standard Specifications for Construction.

c. Construction. Construct the infiltration trench in accordance with Section 404 of the 2020 Standard Specifications for Construction, at the location and depth as shown on the plans and as specified herein.

Excavate a trench to the depth specified on the plans and details. Scarify the bottom of the trench and do not compact the excavated surface. Place non-woven geotextile fabric over the excavated trench and provide a minimum overlap of 12" at seams between the infiltration trench and the existing subgrade. Place 6A aggregate and underdrain pipe (where specified in the plans) in max 12" lifts to ensure pipe backfill in accordance with the plan details.

The cost of material disposal and any damage or contamination of the constructed trench caused by the Contractor's operation will not be paid separately.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay items:

Pay Item	Pay Unit
Infiltration Trench, Det A.....	Foot
Underdrain, Infiltration Trench, 6 inch	Foot

The item of work includes all labor, materials, and equipment necessary to construct the infiltration trench in accordance with the plan details. Payment for infiltration trench shall include the following: excavating; disposal of unsuitable or excess excavated materials; temporary bracing and shoring of excavations stone, non-woven geotextile fabric, 6A aggregate, and any other items needed to construct the infiltration trench. Payment for restoration above the trench shall be paid for separately.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
AGGREGATE BASE, MODIFIED

OHM:cje

1 of 1

09-18-2023

a. Description. This work includes placement of 21AA limestone aggregate base course at the specified plan depth, constructed as shown on the drawings. Construct the aggregate base course on a prepared subbase or subgrade as shown on the drawings, or as directed by the Engineer. The aggregate base course will be in accordance with Sections 302 and 902 of the Standard Specifications for Construction, except as called for herein.

b. Materials. All aggregate materials shall be 21AA limestone, conforming in size and gradation to the Standard Specifications for Construction Section 902 for aggregate base material.

c. Construction. Place the modified aggregate base in accordance with Section 302 of the Standard Specifications for Construction.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Aggregate Base, __ inch, Modified.....	Square Yard

Aggregate Base, _ inch, Modified shall be measured in place by area in square yards based upon the average length and width measurements as determined in the field by the Engineer. The contract unit price shall be payment in full for all labor, materials, and equipment necessary to construct the aggregate base in accordance with the plan details.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
AGGREGATE SURFACE COURSE, MODIFIED

OHM:mpb

1 of 2

09-08-2023

a. Description. The work consists of constructing an aggregate surface course on a prepared grade in accordance with section 306 of the Standard Specifications for Construction, except as modified herein.

b. Materials. Furnish materials meeting the physical properties listed herein:

Furnish aggregate with a maximum loss of 50 percent Los Angeles Abrasion (*MTM 102*).

Furnish “high calcium” carbonate aggregate derived from natural limestone, with no mineral filler. Provide a General Certification ensuring the material is composed of predominantly calcium carbonate and not magnesium carbonate.

Furnish 100 percent crushed aggregate in accordance with Table 1.

Table 1: Grading Requirements For Crushed Natural Aggregate

Crushed Calcium Carbonate Aggregate	Sieve Analysis – Total Percent Passing							Loss by Washing
	3/8 inch	#4	#8	#16	#30	#50	#100	#200
Aggregate Surface Course	100	65-99	40-75	30-45	18-30	12-25	8-20	5-20

c. Construction. Construct the aggregate surface in accordance with plan details and as directed by the Engineer.

1. Hauling Equipment. Avoid damaging the grade and/or structures within the project limits by limiting the size and weight of hauling units. Repair damage caused by use of oversized equipment at no additional cost to the contract.

2. Preparation of Base. Prepare the specified grade to a tolerance of 3/4 inch. Maintain the base in a smooth and compacted condition until the aggregate surface course has been placed. Repair any rutting or other disturbance to the base caused by the Contractor’s operations prior to placing the aggregate surface course. Compact the base in accordance with the *Density Testing and Inspection Manual*. Notify the Engineer a minimum of 24 hours prior to the placement of the aggregate surface course, so grade checks can be performed. Obtain approval of the grade’s tolerances from the Engineer, prior to placement of the aggregate surface course.

3. Placement and Compaction. Place and spread aggregate surface course to the required grade and depth as detailed on the plans. Do not place aggregate surface course during freezing or other unfavorable weather conditions. Compact the aggregate surface course to at least 95 percent of the maximum unit weight or as directed by the Engineer in accordance with the *Density Testing and Inspection Manual*. Completely compact the aggregate surface prior to permitting construction traffic to travel on it.

4. Grading Tolerance. Shape the finished surface to the specified grade within a tolerance of 1/2 inch.

5. Maintenance. Maintain the aggregate surface course as constructed throughout construction. Prior to final acceptance, regrade, reshape, and compact the finished surface to the specified tolerance as necessary.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Aggregate Surface Cse, __ inch, Modified	Square Yard

Aggregate Surface Cse, __inch, Modified will be measured in place by the square yard for the specified depth along the trail. No additional payment will be made for material placed in excess of the dimensions specified on the plan details, unless otherwise directed by the Engineer.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
SHARED USE PATH, CONC, _ INCH

OHM:cje

1 of 1

09-19-2023

a. Description. This work shall be done in accordance with Sections 602 and 806, Concrete Pavement Construction and Shared use Paths, of the 2020 Michigan Department of Transportation Standard Specifications for Construction except as herein provided.

b. Materials. The concrete pavement materials shall be constructed in accordance with Sections 602.02 and 806.02 of the 2020 Michigan Department of Transportation Standard Specifications for Construction. Provide Concrete Grade 3500 for all Shared use Paths.

c. Construction. The Shared use Path shall be constructed in accordance with Sections 602.03 and 806.03 of the 2020 Michigan Department of Transportation Standard Specifications for Construction and as detailed in the drawings.

Concrete shall be placed to a depth of 6 inches.

Space transverse plane-of-weakness joints at 10-foot intervals. Space full-depth transverse expansion joints at 200-foot intervals.

Tooled transverse and longitudinal joints are not permitted. Transverse and longitudinal joints shall be saw cut.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Shared use Path, Concrete, _ inch.....	Square Yard

Shared use Path, Conc, __ inch shall be measured in place by area in square yards based upon the average length and width measurements as determined in the field by the Engineer and shall be paid for by the square yard for the required thickness in inches. The contract unit price shall be payment in full for all labor, materials, and equipment necessary to construct the concrete pavement path in accordance with the plan details.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
SHARED USE PATH, GRADING, MODIFIED

OHM:cje

1 of 2

09-19-2023

a. Description. This work shall be done in accordance with Sections 806 Shared use Paths, of the Michigan Department of Transportation 2020 Standard Specifications for Construction except as herein provided.

This work consists of all labor, materials, and equipment necessary to perform excavation, stump removal, ditching, swales, wall backfill, embankment and grading required for trail construction as well as proof rolling to verify the uniformity of support and to identify unstable areas which might require repairing, undercutting and replacement. Complete this work at locations as shown on the plans and in accordance with typical cross sections or as directed by the Engineer.

b. Materials. Materials shall meet the requirements specified in the 2020 Standard Specifications for Construction.

c. Construction. Complete work in accordance with Section 806 of the 2020 Michigan Department of Transportation Standard Specifications for Construction and as modified herein.

Utilize this Contract Item for mainline pathway as well as ramps and driveway.

Clear and remove all brush, debris, stumps, and all trees less than six (6) inches DBH as shown on the plans or as directed by the Engineer. Prune trees as necessary to allow construction equipment to traverse the alignment without damaging tree limbs.

Cut any tree roots that interfere with pathway construction and apply sealer to cutoff root ends greater than 3" in diameter. Sawcut tree roots 2-feet outside the proposed edge of pavement as shown in the plans. Root cutting shall only be performed with Engineer approval following a walkthrough with the Engineer and Owner.

Remove or grind all stumps within the grading limits. Stumps within a 1:1 influence of any pavement shall be completely removed. Stumps within the grading limits, but outside the 1:1 influence of pavement shall be ground down to 3" below grade.

Strip and stockpile topsoil for future use. The work of screening and placing salvaged topsoil shall be paid for separately as Turf Establishment, Performance.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Shared use Path, Grading, Modified	Foot

Shared use Path, Grading, Modified. The Engineer will measure Shared use Path, Grading, Modified in place, along the centerline of the path, and within the limits shown on the plans. The

unit price for **Shared use Path, Grading, Modified** includes the cost of the following:

1. Required brushing and tree trimming and removing and disposing of excess material, including removal of stumps within the grading limits;
2. Miscellaneous concrete removal including concretes pads, concrete footings and concrete bumper blocks.
3. Stripping and salvaging of topsoil layer where present;
4. Excavation including transporting excavated material to fill sections, stockpiling, haul-off and disposal of excess material;
5. Grading for ditching, swales, and drainage features;
6. Providing embankment through project excavated material or imported fill materials;
7. Compacting the grade per the requirements and as directed by the Engineer;
8. Grading for sidewalk and curb ramps;
9. Fine grading of constructed grades or existing ground that requires no further shaping than the removal of the root mat or vegetative cover; and
10. Earthwork associated with Modular Block Retaining Wall construction, outside of the 1H:1V slope shown in the drawings, is included in Shared use Path, Grading, Modified.

Excavation in areas requiring retaining walls, culverts, or storm sewers as shown on the plans or as directed by the Engineer in the field shall be paid for as **Culv, CI** __, __ **inch** or **Sewer, CI** __, __ **inch, Tr Det** __, respectively.

All other miscellaneous excavation and embankment within rights-of-way or designated easement areas shall be included in the pay item Shared Use Path, Grading, Modified and will not be paid for separately.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
SHARED USE PATH, AGGREGATE, _ INCH, MODIFIED

OHM:cje

1 of 1

09-19-2023

a. Description. This work shall be done in accordance with Sections 302 and 806, Aggregate Base Courses and Shared use Paths, of the 2020 Michigan Department of Transportation Standard Specifications for Construction except as herein provided.

b. Materials. Aggregate materials shall meet the requirements as specified in Section 902 of the 2020 Standard Specifications for Construction, Table 902-1 and 902-2 for 21AA dense-graded aggregate. Aggregate base material shall be MDOT 21AA Limestone.

c. Construction. The Aggregate Base Course shall be constructed in accordance with Sections 302.03 and 806.03 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Shared use Path, Aggregate, __ inch, Modified	Square Yard

Shared use Path, Aggregate, __ inch, Modified shall be measured in place by area in square yards based upon the average length and width measurements as determined in the field by the Engineer and shall be paid for by the square yard for the required thickness in inches. The contract unit price shall be payment in full for all labor, materials, and equipment necessary to construct the aggregate base in accordance with the plan details.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
FENCE, WOOD, 48-INCH

OHM:cje

1 of 2

09-11-2023

a. Description. This work consists of furnishing all labor and material in order to install Three Rail Wood Fence as shown on the plans.

b. Materials. Fence components must be in accordance with sections 707, 709, 808, 906, 907, 908, and 912 of the Standard Specifications for Construction except as modified herein.

1. Timber. Treat all timber and lumber in accordance with section 912 of the Standard Specifications. Lumber shall be S4S (surfaced four sides) according to *ASTM D 245*. All lumber sizes are nominal. Stamp all lumber by the rating agency and provide certifications to verify the preservative treatment including net retention, pressure process used, and compliance to current standards. Use #2 or better southern yellow pine for all lumber.

2. Fasteners. Provide fasteners in accordance with section 908 of the MDOT Standard Specifications. All fasteners to be hot dipped galvanized per *ASTM A 123* for bolts, *A 153* for washers, and *A 653* for screws. Provide all screws for composite and wood specifically manufactured for composite decking with a high shear resistance in accordance with manufacturers specifications.

3. Concrete: Grade 3500 concrete in accordance with Section 1004 of the MDOT Standard Specifications.

4. Submittals. Submit the following to the Engineer for approval at least 14 calendar days prior to the start of construction. Do not begin work until all submittals have been received and approved by the Engineer.

A. Product data conforming to the materials listed above.

c. Construction. Construction must be in accordance with sections 707, 709, and 808 of the Standard Specifications except as modified herein.

Protection in Transit. Apply a coat of end sealer to ends of all wood members as soon as practicable after end trimming. Protect wood members until installed.

Field Storage and Handling. Wood members must be placed on blocking, well off the ground and must be separated by wood blocking so air can circulate around each member if products are stored temporarily at the job site after arrival. Place water

resistance paper over the top but do not use opaque polyethylene.

Provide blocking as indicated. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects. Lumber with wane will not be allowed to be used for exposed edges of railing or deck materials. Comply with AWPAC M4 for applying a field treatment of copper naphthenate to cut surfaces of preservative-treated lumber. Attach joists by using metal joist tie-downs as indicated on the plans. Install deck boards with annular rings downward. Do not install boards with knot holes or defects that will affect the walking surface.

Countersink all wood and screws. Screws must not protrude above the deck or railing cap surface. Use approved screws and install per the manufacturer’s instructions.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Fence, Wood, 48-inch	Foot

Fence, Wood, 48-inch includes furnishing and installing the railing including all excavation, wood members, aggregate, concrete, hardware and fasteners and appurtenances for a complete installation and as shown on the plans.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
**RIPRAP, COBBLESTONE
CHECK DAM, COBBLESTONE**

OHM: mpb

1 of 2

09-08-2023

a. Description. This work consists of installing heavy geotextile fabric and furnishing and placing fieldstone riprap for aprons, permanent check dams, and level spreaders as detailed on the plans. All work must be done in accordance with section 813 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction except where noted in this special provision and as directed by the Engineer.

b. Materials. Use stone for riprap that is washed, uncrushed, rounded cobblestone. Acceptance will be based on visual inspection of riprap in-place by the Engineer, in accordance with gradation requirements specified in Table 1.

**Table 1: Individual Stone Gradation Requirements
for Riprap, Cobblestone**

Least Dimension, inches	Percent Smaller Than
24	100
20	85
16	50
8	15

Provide non-woven geotextile fabric meeting the requirements for pay item Geotextile, Separator, Non-Woven as specified in section 910 of the MDOT Standard Specifications. Furnish test data certification from the manufacturer on the specific product intended for use prior to installation.

c. Construction. Excavate existing material to the limits shown on the plans prior to placing heavy geotextile fabric and riprap. Place geotextile fabric on the prepared grades in accordance subsection 910.03.B of the MDOT Standard Specifications. Place riprap in accordance with subsection 813.03 of the MDOT Standard Specifications, on prepared grades to the elevations, thickness, and lateral limits as shown on the plans. Ensure that the installation of the riprap does not damage the geotextile fabric. Remove and replace all damaged geotextile fabric at no cost to the Department.

Start placement of riprap at the toe and proceed up the slope, with each stone firmly embedded into the slope and against the adjoining stones. Construct the riprap to minimize voids. If placed riprap contains large voids, the Engineer may direct the Contractor to place additional stones of smaller sizes to fill the voids. The finished surface of the riprap must present a tight, even surface.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Riprap, Cobblestone	Syd
Check Dam, Cobblestone	Syd

Riprap, Cobblestone includes furnishing all labor, equipment, and materials necessary to clear and prepare grades, excavate and dispose of surplus materials, furnish and place geotextile fabric, and to place the stone, in accordance with the plans and this special provision.

Check Dam, Cobblestone includes furnishing all labor, equipment, and materials necessary to clear and prepare grades, excavate, and dispose of surplus materials, furnish and place geotextile fabric, place the stone in accordance the plan details and with this special provision. This pay item includes removal of cobblestone check dams if directed by the Engineer.

CITY OF ANN ARBOR

SPECIAL PROVISION
FOR
BENCH

OHM:cje

1 of 1

09-19-2023

a. Description. This work consists of installing an owner furnished bench at the location on the plans. This includes any necessary excavation, backfilling, and disposal of unsuitable materials required for a complete installation.

b. Materials. Bench will be furnished by the City of Ann Arbor.

Fasteners. Furnish anchor bolts, nuts, washers, and all other hardware required for installation in accordance with the details included on the plans and per the manufacturer's recommendations. Anchor bolts shall be minimum 3/8" dia. 3-1/2" long zinc plated steel wedge anchors compatible with the owner furnished bench.

c. Construction. Install and anchor the bench in the concrete path in accordance with the manufacturer's recommendations. Ensure the bench is level and square in a true, flat plane to prevent rocking. Bench pad shall be constructed and paid for as Shared Use Path.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay items:

Pay Item	Pay Unit
Bench, Backed	Each

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
TURF ESTABLISHMENT, PERFORMANCE

OHM:mpb

1 of 6

09-08-2023

a. Description. For the work identified in this special provision paid for by the pay item Turf Establishment, Performance only, delete section 816 of the Standard Specifications for Construction and replace it with 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.

Establish a durable, permanent, weed-free, mature, perennial turf. The work consists of fundamental turf work, including but not limited to topsoiling, seeding, mulching, erosion control, maintenance, watering, and repair of turf as described herein during the life of the contract and during the life of any supplemental performance bond which may ensue.

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.

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.

Subsection 107.11 of the Standard Specifications for Construction is revised relative to the Contractor's responsibility for the repair of turf establishment work as follows. The Contractor is responsible, at no additional cost to the contract, for the repair of turf establishment work occasioned by storm events up to 3 inches of rain in a 24 hour period as documented by local meteorological data submitted to the Engineer for review and approval. All other portions of subsection 107.11 remain unchanged.

1. Contractor Turf Establishment Experience Requirements. Ensure weed control is 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. Provide appropriate documentation and secure approval from the Engineer before application of herbicides.

At least 10 work days prior to start of turf establishment, provide 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 a 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 five (5) years of experience in turf establishment and native plantings.

b. Materials. Provide topsoil, seed, mulch, pesticide, herbicide, mulch blankets and any other unique erosion control materials as necessary to fulfill this specification, as detailed on the plans. Use additional materials, as necessary, to meet the standards set forth for turf establishment in this special provision. The use of sod on the project requires the prior approval of the Engineer and if approved, may be used at limited site locations only.

Selection of all materials is the responsibility of the Contractor with the following minimum conditions.

1. Soil. Provide furnished or salvaged topsoil, which may be blended compost, that will support vigorous growth. Ensure topsoil is humus bearing and placed at least 4 inches deep. Ensure it is free of stones larger than 1/2 inch (2 inches on freeway projects) in diameter and other debris. Trim and grade the finished slope in accordance with subsection 205.03.N of the Standard Specifications for Construction.
2. Native Seed Mixes (Roadside and Shade). Native seed shall be obtained from sources within the same EPA Level III Ecoregion, or the next adjacent Ecoregion, preferably to the west or east. For more information, see the EPA website at: <http://www.epa.gov/wed/pages/ecoregions/leveliii.htm>
 - a. Utilize the seeding mixes listed below or an approved equal. Ensure seed is less than 1 year old and stored as recommended by the supplier. Provide documentation regarding the supplier's source with location, quantity, purity, and mix proportions to the Engineer at least 30 calendar days before application of seed mixture.
 - i. Mesic Tallgrass: Mesic Tallgrass Prairie Mix,: Prepared by Native Connections, Kalamazoo, MI, phone (269) 459-6900 or approved equal. No Purple Coneflower, Rattlesnake Master, Wild White Indigo or Rosin Weed shall be included in the seed mix.
 - ii. Woodland Edge: Woodland Edge Seed Mix: Prepared by Michigan Wildflower Farm, Portland, MI, 48875, phone (517) 647-6010 or approved equal.
 - iii. Forested Wetland: Forested Wetland Seed Mix,: Prepared by Native Connections, Kalamazoo, MI, phone (269) 459-6900 or approved equal. No Wild Senna shall be included in the seed mix.

Install native seed mixes in the areas as shown on the plans or as directed by the Engineer. No aggressive, threatened, endangered, or special concern species shall be in the seed mix. Species may be substituted through written approval by the Engineer.

Provide Temporary Cover Seed consisting of annual rye, winter wheat or other approved equivalent. Temporary cover seed shall be applied at a rate of 15 lb per acre over all disturbed areas, or as recommended in Seed Mixes. Temporary Cover Seed shall be mixed and applied with the large seed only in all native seed areas on the project site.

3. Turf Grass Seed. Use a seeding mixture that is composed of four (4) or more species of perennial grass. Use only species and their cultivars or varieties which are guaranteed hardy for Michigan.

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. Ensure the seed is legally saleable in Michigan. Ensure the seed product does not contain more than 10 percent inert materials. Ensure the seed source is an MDOT approved certified vender.
 - B. Adapt the species and varieties of seed to the site conditions, to 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. Ensure at least two of the species in the mixture proposed to be planted within 15 feet behind the curb or the shoulder are salt tolerant.
4. Mulch. Mulch seeded areas with slopes less than 1 on 3 with the appropriate materials for the site conditions to promote germination and growth of seed and to mitigate soil erosion and sedimentation.
 5. Mulch blanket. 6-foot mulch blanket shall be placed along the pathway and in areas where final grades have slopes greater than 1 on 3 or at the bottom of all proposed stormwater channels and swales. Provide straw mulch blanket with biodegradable jute netting. Anchor blankets in-place with wooden stakes.
 6. 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 at least 48 hours prior to any applications being made. Furnish and apply herbicide(s) 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.

7. Fertilizers. 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. The use of phosphorus is strongly discouraged and is only allowed only when required by soil conditions. Obtain the Engineer's approval of work methods and fertilizer(s) prior to the application of the fertilizer(s).

8. Water. Furnish and apply water from an approved source at a rate to promote healthy growth.

c. Construction. The Contractor is responsible for all work and all construction methods used in completing this work. Implementation of any part of the 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. Inspection of the Work. The Contractor is responsible for all inspection of turf establishment work.

Use a Contractor's Daily Report, approved by the Engineer, to report inspections made and to document turf establishment work performed on this project. Complete and submit a Contractor's Daily Report to the Engineer when any work performed under this special provision is in progress.

Include all necessary materials documentation including tests slips, certifications, etc. with the associated Contractor's Daily Report.

The Engineer will determine the acceptability of the Contractor's Daily 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.

2. Erosion Control. Control erosion 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. Continuously monitor the site for needed erosion repair from any cause as addressed in the contract. Return all eroded areas to original grade as detailed in the contract.

Take immediate corrective action if sedimentation occurs in drainage structures or any watercourse or water containment area and stabilize all disturbed areas contributing to this sedimentation within 24 hours after the erosion occurrence. Remove sediment deposited as a result of the Contractor's inability to control the soil erosion at the Contractor's expense.

Reimburse the Owner for any costs levied against the Owner, 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.

3. 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.

Report all erosion occurrences and the repairs made by the Contractor to the Engineer in the format and at the frequency required by the Engineer. Repair any erosion, displacement or disturbance to ongoing or completed work by any cause 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. Repair any eroded area that may affect the support of the roadbed or safety of the public within 24 hours of the erosion occurrence and notify the Engineer immediately.

Place protective devices such as barriers, directional signs/signals, temporary fence, or any other safety measures immediately after any erosion damage occurs that has the potential of endangering the public. In these instances, provide the Engineer with a written summary of the immediate action taken describing the repairs made and the safety measures taken, within 24 hours of the occurrence of the damage.

4. Mowing and Weeding. Maintain turf 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 10 percent of the turf establishment area at all times during construction.
5. Final Acceptance and Supplemental Performance Bond.

- a. Final Acceptance Parameters. Before final acceptance of the turf establishment work, ensure all of the following minimum parameters are met throughout all exposed areas of the project designated on the plans or identified by the Engineer as turf establishment areas: there must be no exposed bare soil and the turf must be fully germinated, erosion free, weed free, disease free, dark green in color and in a vigorous growing condition.

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. The Contractor shall pay all expert fees and expenses charged by the third party.

- b. Supplemental Performance Bond. In the event that all contract items of work are completed, including the placement of all turf establishment items of work, and the final acceptance of the project is delayed because the final acceptance parameters for the turf establishment work have not been fully met; the Contractor may propose to the Engineer the use of a supplemental performance bond.

The bond serves to secure the successful completion of turf establishment work and fulfillment of all final acceptance parameters for the turf establishment work. Ensure the supplemental performance bond, in all respects, is satisfactory and

acceptable to the Owner and executed by a surety company authorized to do business with the State of Michigan.

Ensure the bond is in an amount equal to 50 percent of the turf establishment work items covered by this special provision. Ensure the bond remains in place for two (2) growing seasons. At the discretion of the Engineer, the bond may be reduced on a prorated basis as portions of the areas designated for turf establishment on the project meet the final acceptance parameters.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract price using the following pay item:

Pay Item	Pay Unit
Turf Establishment, Turf Grass, Performance	Square Yard
Turf Establishment, Native Seed Mix, Mesic Tallgrass, Performance	Square Yard
Turf Establishment, Native Seed Mix, Woodland Edge, Performance	Square Yard
Turf Establishment, Native Seed Mix, Forested Wetland, Performance	Square Yard

Turf Establishment, _____, Performance will include all labor, equipment and materials 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 Daily Reports.

Limits of turf grass and native seed mixes to be determined in the field by the Engineer. Approximate limits are as follows:

- Turf Grass – Station 100+00 to 103+00
- Forested Wetland – Station 103+00 to 106+50
- Mesic Tallgrass – Station 108+50 to 121+00
- Woodland Edge – Station 121+00 to 132+00

Repairs made to damaged turf establishment areas as a result of a documented storm by local meteorological data resulting in rainfall amounts of more than 3 inches in a 24 hour period will be paid for as an increase to original quantities in accordance with subsection 109.05 of the Standard Specifications for Construction.

The following schedule of payment applies to work performed according to this special provision. Upon completion of seed, fertilizer, and mulch, 50 percent of the final field measured amount for **Turf Establishment, _____, Performance** will be paid to the Contractor. The remaining 50 percent of the final field measured 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, _____, Performance** or at such time as the supplemental performance bond is accepted by the Owner.

The supplemental performance bond and all costs associated with turf establishment work performed during the duration of the performance bond will not be paid for separately. These costs which may include, but are not limited to, mobilization, traffic control devices, and the required permit insurance are included in the unit price bid for **Turf Establishment, _____, Performance**.

APPENDIX



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September 19, 2023

Mr. Jeremy Hedden, PE
Bergmann Associates
7050 W. Saginaw Highway, Suite 200
Lansing, Michigan 48917

Via E-mail: jhedden@bergmannpc.com

RE: Geotechnical Evaluation Report
Barton-Bandemer Trail
Sections P3 and P4 – Approx. Station 100+00 to Station 131+90
Washtenaw County, Michigan
SME Project No. 080118.00

Dear Mr. Hedden:

SME has completed our geotechnical evaluation for the referenced portion of the paved multi-use trail known as the Barton-Bandemer Trail in Washtenaw County, Michigan. This report presents our interpretation of the soil conditions encountered at the exploratory locations discussed herein, and our recommendations related to subgrade preparation and pavement design for the trail.

This report addresses the portion of the trail labeled as Sections P3 and P4 in Image 1. Preliminary plans provided by Bergmann Associates for these sections of the trail are appended to this report. Section P4 refers to the point of beginning (POB) at Station 100+00 in an existing parking lot (orange on the left side of Image1) off Huron River Drive and extending to an existing pedestrian bridge over the Huron River near Station 106+50. Section P3 begins on the other side of the pedestrian bridge at about Station 108+45, and ends at a second pedestrian bridge crossing the Huron River near Station 131+90. A geotechnical evaluation report for Sections P1 and P2 will be submitted under separate cover.

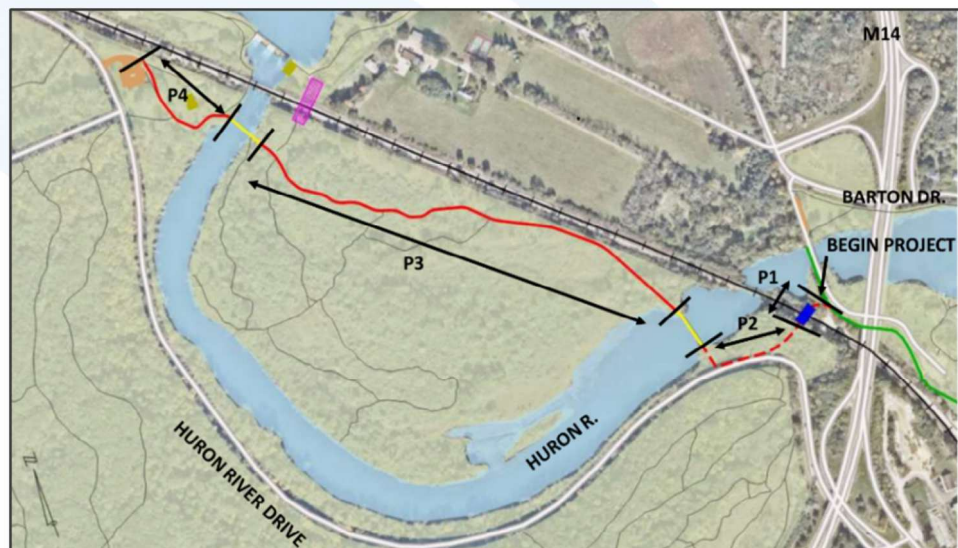


IMAGE 1: Map of Barton-Bandemer Trail Sections

PROJECT INFORMATION

Representatives of the city of Ann Arbor and Washtenaw County Parks and Recreation are planning to construct a new 10-foot wide, multi-use paved trail near the Huron River northwest of Ann Arbor. The project location is shown in Image 1. The existing surface along the proposed trail alignment consists of gravel and exposed subgrade. This project consists of grading and paving the trail. Section P4 of the trail near the POB begins at an existing parking lot located off Huron River Drive, southwest of Barton Dam. East of the POB, the trail alignment crosses the first of two existing pedestrian bridges, then crosses property that is bordered on the south by the Huron River and the north by the Amtrak Railroad. The portion of the trail alignment between the two pedestrian bridges is referred to herein as Section P3.

Based on preliminary plans provided by Bergmann, earthwork to establish grades for the proposed trail is anticipated to be nominal and be limited to less than 2 feet of earth cuts and fills. Side-slopes for the trail are generally anticipated to be established at 1V:4H, or flatter. An exception to this is the west approach of the eastern-most pedestrian bridge. The existing approach embankment has side-slopes of about 1V:2H. Grading information shown on the preliminary plans indicates about 1-foot of earth cut is planned in this portion of the trail alignment, and no new embankment is planned on the approach side-slopes.

Trail Section P3 has limited right of entry for construction equipment due to load restrictions on the pedestrian bridges and a restriction of at-grade crossings of the Amtrak Railroad. As a result, the pavement section for the trail is planned to be constructed using Portland cement concrete (PCC). The design team is evaluating the load-rating for the pedestrian bridges and the feasibility of using light-weight construction equipment (grading equipment and buggies with concrete buckets) to construct Section P3.

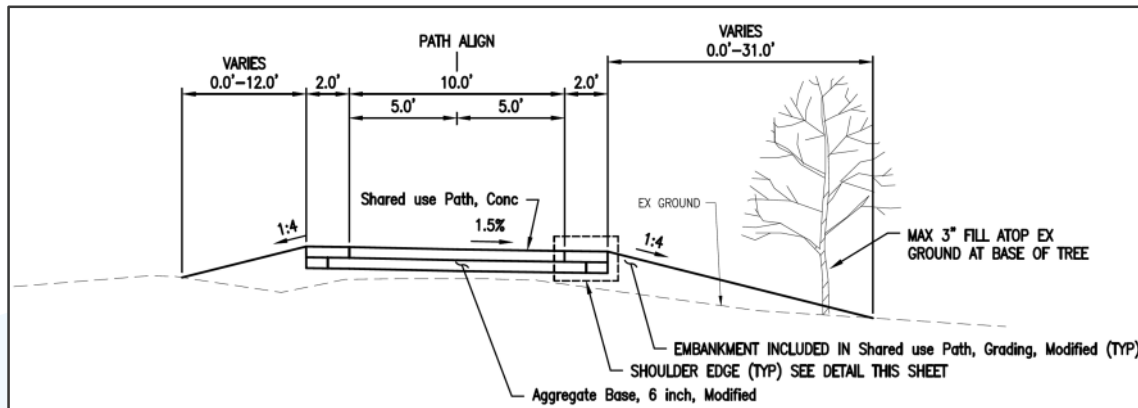


IMAGE 2: Proposed Typical Section from Preliminary Plans

EXPLORATORY AND LABORATORY PROCEDURES

In Section P4, SME performed borings at three locations with a drill rig (designated B1 through B3). The borings included soil sampling based upon ASTM Standard D-1586 (Split-Barrel Sampling Procedure) and recording Standard Penetration Testing (SPT) blow counts (N-values). Representative soil samples recovered from the borings were preserved in glass jars and transported to our laboratory for evaluation and testing. Groundwater observations were recorded during drilling and, if possible, immediately after completion of the drilling operations. The attached boring logs include the SPT N-values corrected for hammer efficiency (N_{60}), based on the hammer energy noted on the boring logs.

In Section P3, a drill rig could not be used to access the trail due to weight restrictions on the pedestrian bridges and no permitted at-grade access over the railroad. SME performed nine hand auger borings (designated HA1 through HA9) on Section P3 of the proposed trail alignment. The hand auger borings were typically advanced to depths ranging from 2 feet to 3½ feet below the existing ground surface on or

near the proposed alignment. Hand auger borings HA5 to HA8 were performed on the existing embankment side-slopes of the west approach to the eastern pedestrian bridge. The bucket auger could only be advanced to depths of 7 inches to 10 inches at these locations due to cobbles in the existing embankment material.

The approximate locations of the drill rig borings and hand auger borings are depicted on the attached preliminary plan sheets provided by Bergmann. The number and approximate locations of the borings were determined jointly by SME and the design team. SME recorded horizontal coordinates of the borings in the field using a hand-held GPS unit with sub-meter accuracy.

At the drill rig and hand auger boring locations, SME performed United States Army Corps of Engineers (USACE) Dynamic Cone Penetrometer (DCP) tests to evaluate the upper subgrade support. The DCP tests extended to a depth of about 1 meter below the existing ground surface. USACE DCP testing is conducted to estimate the in-situ California Bearing Ratio (CBR) of the subgrade materials. CBR is an index commonly used in pavement design that gives an indication of subgrade support characteristics. The USACE has developed relationships to estimate the CBR value from the results of the DCP test. The results of the DCP testing are included on attached USACE DCP Data Sheets and Boring Data Sheets. No USACE DCP testing was performed at the location of hand auger borings HA5 through HA8.

Groundwater levels in the boreholes were recorded (if present) after completing each boring. After completion of the borings, the boreholes were backfilled with auger cuttings. Therefore, long-term groundwater level information is not available from the boring locations.

The laboratory testing program consisted of performing visual soil classification on recovered samples in general accordance with ASTM D2488, and moisture content and shear strength tests on portions of recovered cohesive samples. The attached Laboratory Testing Procedures provides descriptions of these laboratory tests. Based on the laboratory testing, we assigned a Unified Soil Classification System (USCS) group symbol to each of the various soil strata encountered. Refer to the attached boring logs and Boring Data Sheets for a summary of our observations and test results at each boring location.

SUBSURFACE CONDITIONS

At the location of borings B1 through B3, performed in Section P4, the subsurface conditions consisted of about 3 inches to 4 inches of topsoil underlain by both cohesive- and granular-type soils within the depths explored (7½ feet). The cohesive-type soils were described as lean clay and sandy lean clay. The moisture contents ranged from 16 to 18 percent, and hand penetrometer type undrained shear strength estimates typically ranged from 2 to 3 kips per square foot (ksf). An exception was a layer of near-surface lean clay at the location of boring B2, where a moisture content of 59 percent was observed at the surface, likely due to the presence of organic matter. The granular soils observed at the location of borings B1 to B3 contained varying levels of fine (silt- and clay-sized) soil particles, and was described as sand, silty sand, and clayey sand.

At the hand auger boring locations in Section P3, the subsurface conditions consisted primarily of 6 inches to 9 inches of topsoil underlain by sand, silty sand, and clayey sand with gravel and cobbles. The frequency of the gravel and cobbles limited the effectiveness of the bucket auger advancement.

As mentioned, USACE DCP tests were performed at the drill rig and hand auger boring locations. Test results generally indicated good to marginal subgrade support conditions, except at boring B2, where very poor conditions were indicated within 3 feet of the surface. These poor conditions at the location of boring B2 correlate to the surficial topsoil and very loose clayey sand fill in the upper 3 feet below the surface. Refer to the attached boring logs, Boring Data Sheets, and USACE DCP Data Sheets for additional subsurface information.

ANALYSES AND RECOMMENDATIONS

The following report sections contain our recommendations for pavement subgrade preparation and pavement section design for the PCC-surfaced multi-use pathway. We have developed these recommendations based on our experience with similar applications and AASHTO design methodology. As stated above, we understand the design pavement grades will mostly remain within about 1 foot to 2 feet of the existing grades, and minimal cuts and fills of less than 2 feet are anticipated. If desirable, SME could provide recommendations for an HMA pavement section in Section P4, where it is feasible for paving equipment to access the site.

SUBGRADE PREPARATION

In trail areas, remove existing pavement (where present near existing infrastructure at the west end of the project), surface vegetation, surficial topsoil, or soils containing organic matter, to expose the underlying inorganic subgrade soils. After stripping vegetation and surface materials, the exposed subgrade is expected to consist primarily of native granular soils in Section P3 and near-surface cohesive-type soils in Section P4.

After surficial materials and any unsuitable soils are removed from the proposed pathway areas, the exposed subgrade should be thoroughly compacted to a minimum 95 percent of the maximum unit weight determined in accordance with the MDOT Density Control Handbook for the type of soil exposed. We recommend the compacted subgrade be evaluated by proofrolling the surface with a fully loaded tandem axle dump truck (in areas accessible for heavy vehicles, such as Section P4). Areas exhibiting greater than ¼ inch of deflection or rutting during a proofroll should be evaluated by SME on a case-by-case basis, and may require improvement through a combination of undercutting of unstable materials and placement of geogrid reinforcement and crushed aggregates. A larger, well-graded coarse crushed aggregate, ranging in size from about 1 inch to 3 inches, may be necessary to improve unstable wet subgrades. We anticipate undercutting and/or coarse crushed aggregate will be required in the vicinity of boring B2, where near-surface poor subgrade support (soft clayey soils) were observed. *In areas not accessible by heavy equipment to perform a proofroll, such as in Section P3, it will be necessary to evaluate the pavement subgrade using alternative measures – e.g., hand-operated equipment, such as a DCP, nuclear density gauge, and/or a hand auger. SME can work with the project team to develop a suitable construction testing approach depending on equipment accessibility limitations.*

Positive drainage should be established and maintained, and water should not be permitted to pond or accumulate on prepared subgrades. As is typical for pathways and trails, we assume the proposed multi-use pathway pavement will be required to support emergency passenger vehicles and anticipate that the heaviest loading on the subgrade will consist of that required to construct the pavement (i.e., paving equipment). We recommend that construction equipment not be permitted to travel on any prepared subgrades more than necessary to construct the pathway. The contractor will need to exercise care when trafficking these areas. The type of earthwork equipment used should be limited to lightweight, tracked equipment to reduce subgrade disturbance.

RECOMMENDED PAVEMENT SECTION

The following report sections include recommendations for design and construction of a Portland cement concrete (PCC) surfaced trail pavement section. Based on traffic information provided to us by Bergmann, we understand occasional pick-up trucks or other passenger vehicles will traffic the trail surface for snow removal or other maintenance purposes. The concrete pavement design was performed using the procedures described in the Supplement to the AASHTO Guide for Design of Pavement Structures.

The recommended PCC pavement section for Sections P3 and P4 is shown in the table below.

RECOMMENDED PCC PAVEMENT SECTION – TRAIL SECTIONS P3 AND P4

LAYER	MATERIAL	THICKNESS (IN.)
PCC Surface	MDOT 3500 ⁽¹⁾	6.0 ⁽²⁾
Aggregate Base	MDOT 21AA Natural Aggregate or Crushed Limestone Aggregate	6.0

NOTES:

1. As modified in Concrete Material Recommendations section below.
2. We recommend PCC Surface should be increased to 7.0 inches in areas where the trail width will be 13.0 feet or greater (if any).

PCC MATERIAL RECOMMENDATIONS

We recommend MDOT 3500 concrete mix be used and modified, as noted below. The coarse aggregate should meet the specifications of MDOT 6AA crushed limestone. Gravel or slag aggregates should not be allowed as the coarse aggregate. We recommend ASTM C1567 tests be performed on the blended materials of aggregate and cement to determine the potential for Alkali Silica Reactivity (ASR). The blend should provide less than 0.1 percent expansion. A mix design should be submitted documenting the results of the ASTM C1567 test program. Ground granulated blast furnace slag (GGBFS) may be used as a mitigation agent for ASR at a cement replacement rate of 25 to 40 percent. The cement type should be Type I/II with air content specified at 5 to 8 percent. The water cement ratio shall be less than 0.45, and slump range shall be 2.0 inches to 4.0 inches (3.0 inches \pm 1-inch).

We recommend control joints be spaced a maximum of 12 feet, based on the design thickness of 6.0 inches. The length to width ratio of slabs should not exceed 1.25. Expansion joints (0.5-inches wide) should be installed at every 50 feet (longitudinal direction). At each expansion joint, 12-inch-long, 5/8-inch diameter expansion smooth dowels should be installed at 12 inches on-center. At construction joints (0.5 inches wide), 18-inch long deformed epoxy-coated tie bars (no. 5 diameter) should be installed at 12 inches on-center.

The concrete surface shall drain positively, and the surface slope should not exceed 2.0 percent. We recommend a broom finish and installing a uniform curing compound meeting the requirements of ASTM C309 Type 2, at a rate of one gallon per 225 square-feet. We recommend saw cutting be performed as soon as possible after concrete placement, without damaging the finish of the pavement. We recommend the use of soft-cut saws so that sawing can be performed within four hours after concrete placement. We recommend a saw cut depth of 2 inches. We recommend all joints be sealed with hot poured rubber per MDOT requirements. Traffic should not be allowed on the concrete until the concrete has reached 75 percent of the design strength.

ENGINEERED FILL REQUIREMENTS

Any fill placed within the pathway areas should be an approved material, free of frozen soil, organics, or other deleterious materials. The fill should be spread in level layers not exceeding 9 inches in loose thickness and be compacted to a minimum 95 percent of the maximum unit weight determined in accordance with the MDOT Density Control Handbook for the type of soil.

The sands encountered at the boring locations are generally considered suitable for reuse as engineered fill. We recommend imported fill be required to consist of granular material meeting the gradational requirements of MDOT Class II sand.

We appreciate the opportunity to be of service. If you have questions regarding this letter or if you require additional information, please contact us.

Sincerely,

SME

PREPARED BY:



Scott T. Roosa, PE
Senior Consultant

REVIEWED BY:



Zachary L. Miller, PE
Senior Project Engineer

Attachments: Important Information about This Geotechnical-Engineering Report
Preliminary Plans with Exploratory Locations
Boring Logs (B1 to B3)
USACE DCP Data Sheets (B1 to B3)
Boring Data Sheets (HA1 to HA4, HA9)
Boring Log Terminology
General Comments
Laboratory Testing Procedures

Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

conspicuously that you’ve included the material for information purposes only. To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

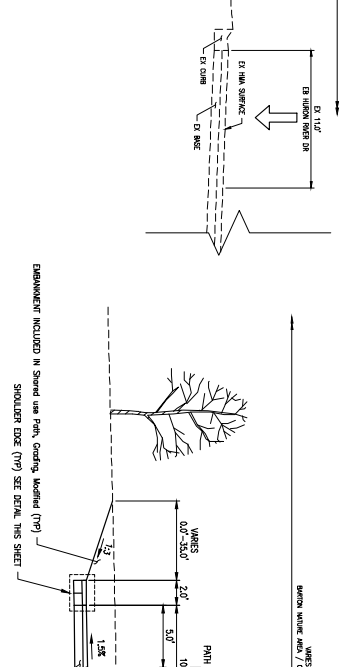
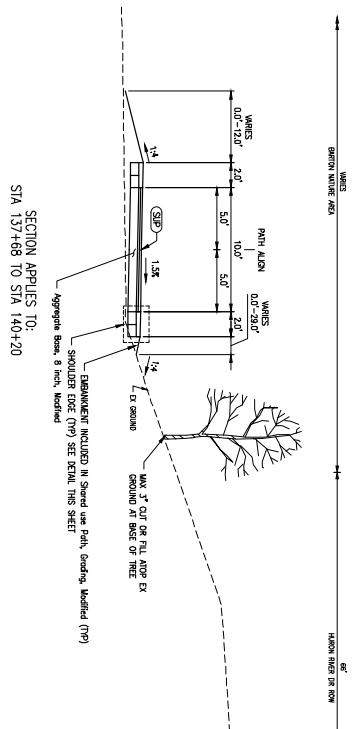
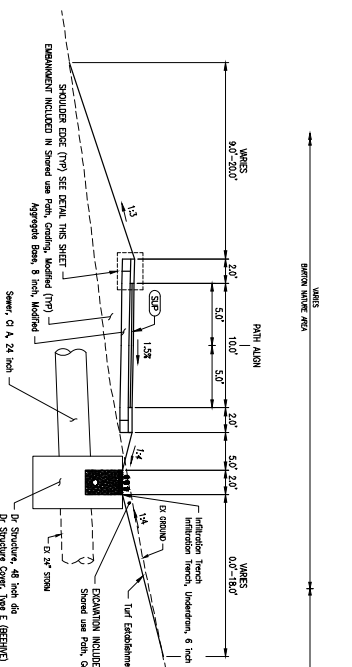
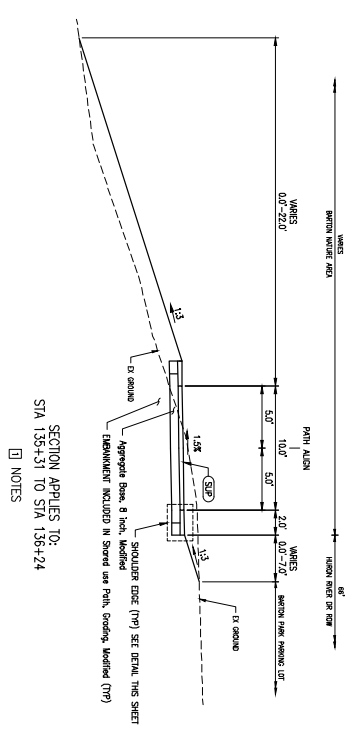
While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* **Confront the risk of moisture infiltration** by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



Telephone: 301/565-2733

e-mail: info@geoprofessional.org www.geoprofessional.org

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SECTION APPLIES TO:
STA 137+68 TO STA 140+20

SECTION APPLIES TO:
STA 136+24 TO STA 136+24

SECTION APPLIES TO:
STA 136+24 TO STA 137+68

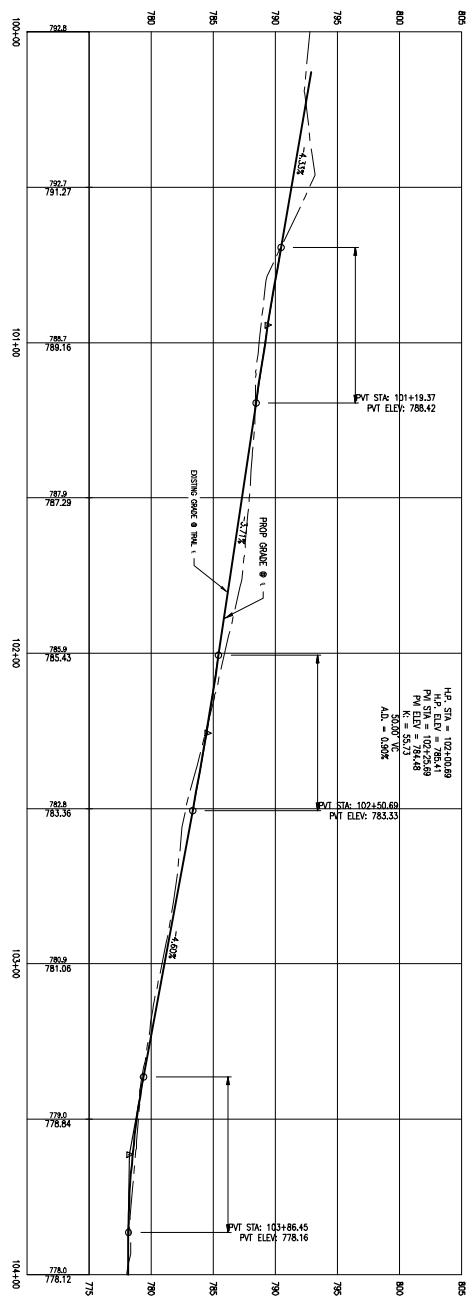
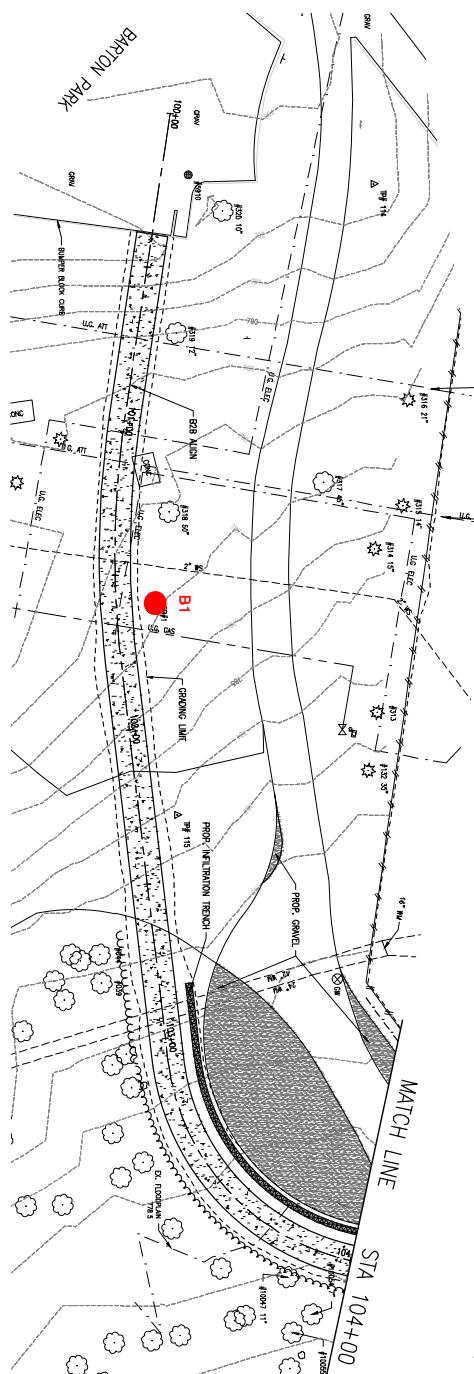
SECTION APPLIES TO:
STA 140+98 TO STA 143+37

LEGEND
 [] NOTE NUMBER
 [] PAVEMENT CALLOUT

SHEET	DATE	PROJECT NUMBER	ENG	PROJECTION	CHD	CALITY	BY	CHK	APP	SCALE	HORIZ	VERT	UNIT	DATE
6	02/17/23	137-000	ME	CP	K	AS	ME	ME	ME	1"=10'	1"=10'	1"=10'	1"=10'	02/17/23
CITY OF ANN ARBOR PRS & WASHTENAW COUNTY PRC BARTON - BANDEMER TUNNEL & TRAIL TYPICAL CROSS SECTIONS														
<h1>APDX-13</h1>														

OHM
 PROJECT SHEET NUMBER
 137-000-111 (P.20) (2024)7
 CHALMERS@OHM.COM

PROJECT CODE #114	PROJECT CODE #115
PROJECT CODE #116	PROJECT CODE #117
PROJECT CODE #118	PROJECT CODE #119
PROJECT CODE #120	PROJECT CODE #121
PROJECT CODE #122	PROJECT CODE #123



H.P. STA. = 102+00.89
 P.V. STA. = 102+50.89
 P.M. STA. = 102+50.89
 P.M. ELEV. = 784.48
 A.D. = 0.0002



NOTES

FENCE & THIS SHEET	SIA	OFFSET

SIGN DETAILS

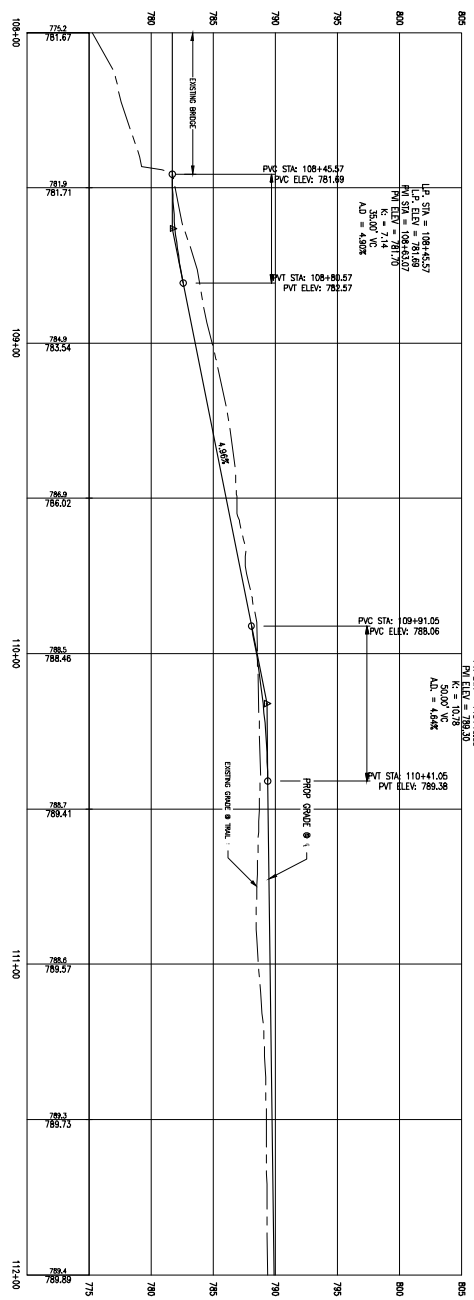
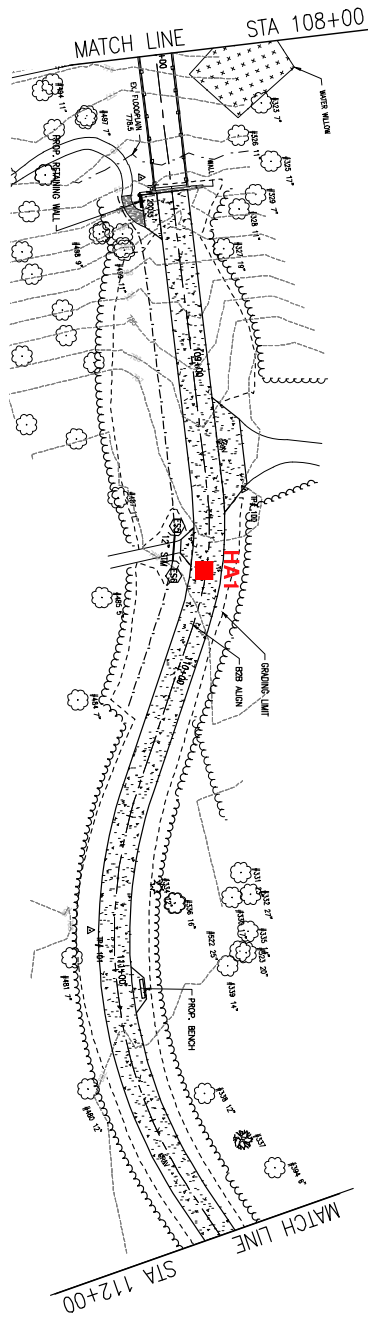
● APPROXIMATE BORING LOCATION



OHM
 AMERICAN SURVEYING SERVICES
 3400 Plymouth Road
 Farmington Hills, MI 48334
 P: (248) 322-0171 | F: (248) 322-0447
 OHM@OHMENGINEERING.COM

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DATE	BY	DESCRIPTION
02/17/2023	JM	ISSUED FOR PERMITS
02/17/2023	JM	ISSUED FOR PERMITS
02/17/2023	JM	ISSUED FOR PERMITS



NOTES

FENCE & THIS SHEET	STA	OFFSET

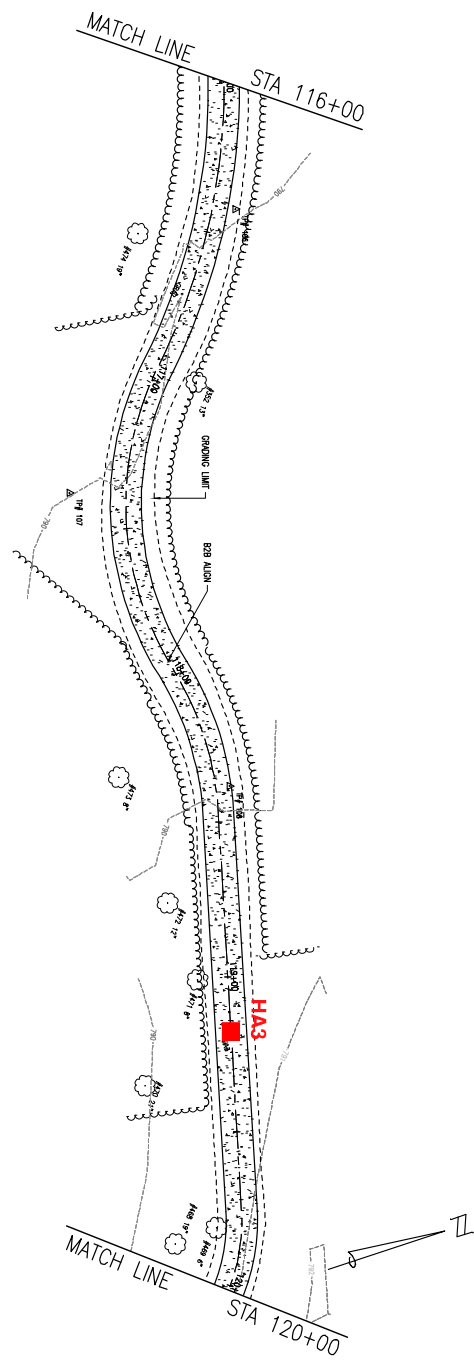
SIGN DETAILS

APPROXIMATE HAND AUGER BORING LOCATION



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PROPOSED CONC. FLOOR	ELEV. 790.00
EXISTING CONC. FLOOR	ELEV. 790.00
PROPOSED CONC. FLOOR	ELEV. 790.00
EXISTING CONC. FLOOR	ELEV. 790.00
PROPOSED CONC. FLOOR	ELEV. 790.00
EXISTING CONC. FLOOR	ELEV. 790.00



815	790.5	790.51	790.1	790.39	790.7	790.15	790.2	790.04	790.9	790.1	790.2	790.52	790.7	790.83	790.8	791.13
810																
805																
800																
795																
790																

L.P. STA = 118+03.96
 L.P. ELEV = 790.04
 P.V. STA = 118+03.00
 P.V. ELEV = 790.15
 K = 58.87
 A = 0.52

P.V. STA = 117+90.10
 P.V. ELEV = 790.06

P.V. STA = 119+91.17
 P.V. ELEV = 791.08

**APPROXIMATE HAND
 AUGER BORING
 LOCATION**

NOTES

FENCE & THIS SHEET	OFFSET

SIGN DETAILS

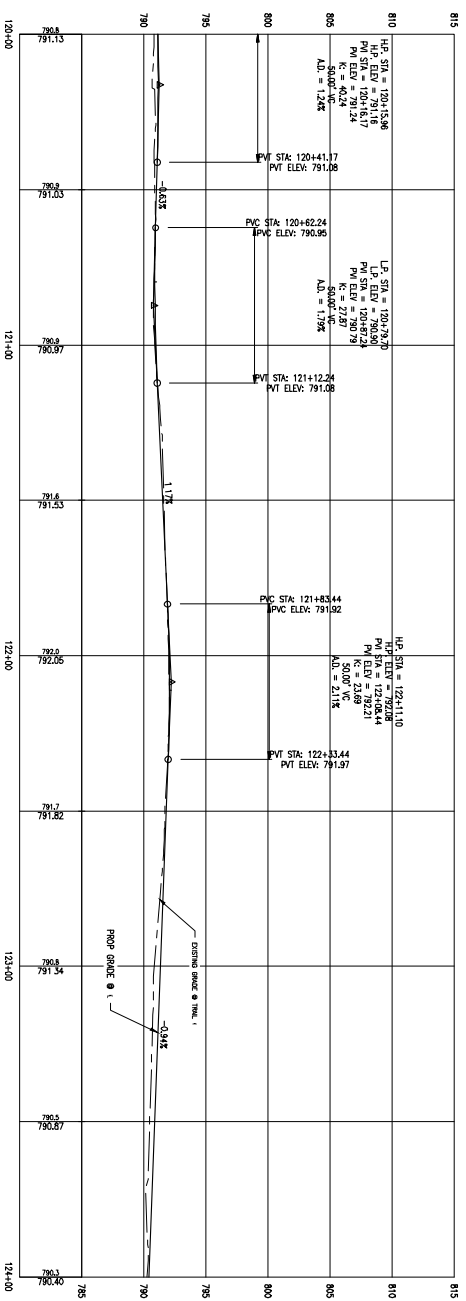
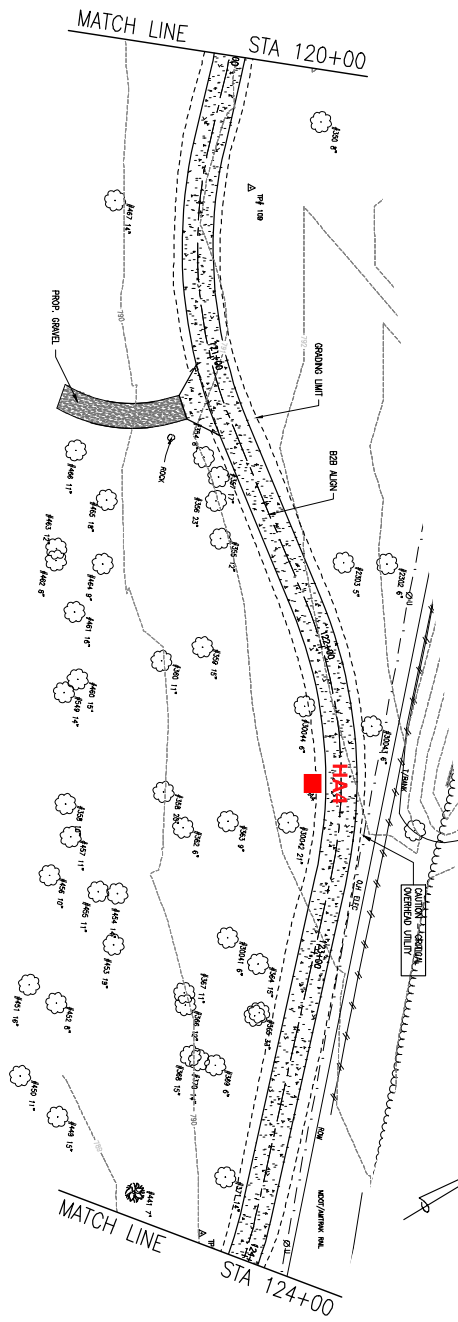


CITY OF ANN ARBOR PRS & WASHTENAW COUNTY PRC
 BARTON - BANDEMER TUNNEL & TRAIL
 CONSTRUCTION PLAN
 STA 116+00 TO STA 120+00

APDX-18

OHM
 ADVANCED SURVEYING & MAPPING
 3400 Plymouth Road
 Livonia, MI 48150
 P: (734) 322-0111 | F: (734) 322-0447
 OHM@OHMDIVERS.COM

PROJECT CODE	110
PROJECT NAME	110
PROJECT CODE	110
PROJECT NAME	110



NOTES

Blank area for notes.

FENCE & THIS SHEET	SIA	OFFSET

SIGN DETAILS

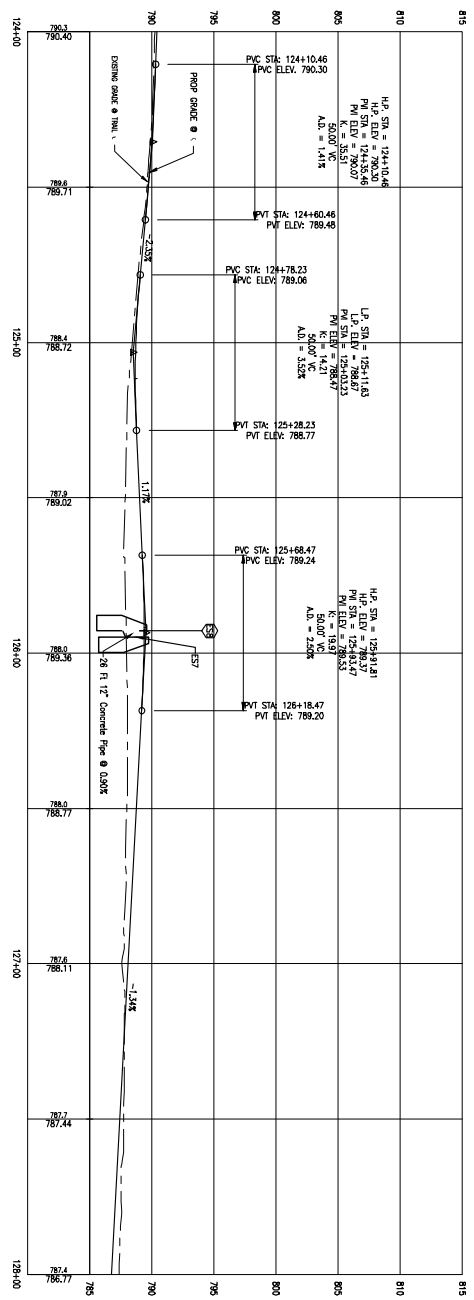
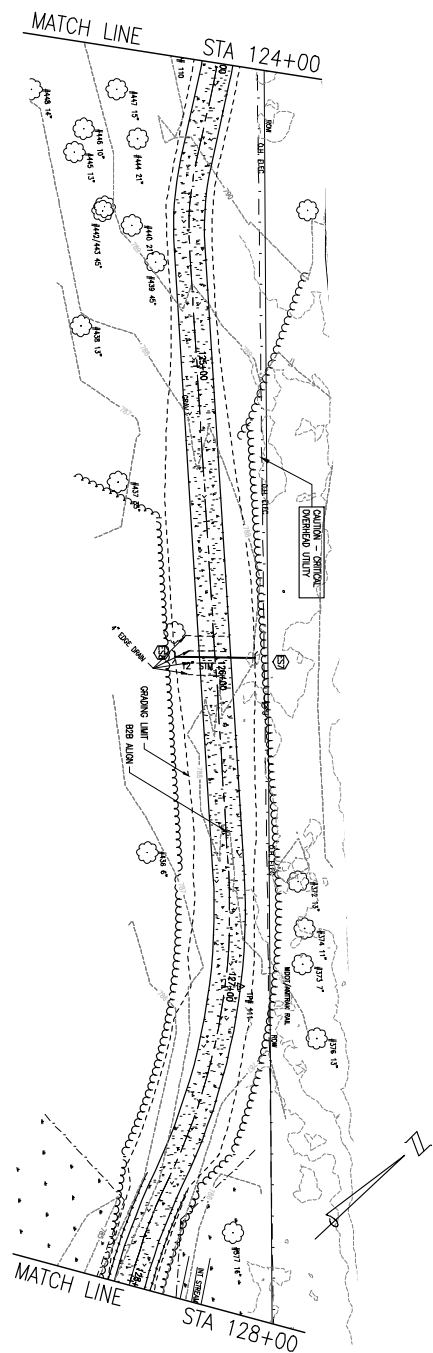
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APPROXIMATE HAND AUGER BORING LOCATION



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PROJECT CODE: P111
 PROJECT NAME: BARTON - BANDEMER TUNNEL & TRAIL
 SHEET NO.: 28
 DATE: 07/20/20



② STA 125+04.88, ±12.7' L
 C.M. End Section, Conc., 12 inch
 12' MIN. SW 788.03

③ STA 125+02.82, 12.8' R
 C.M. End Section, Conc., 12 inch
 12' MIN. NE 787.80

NOTES

1. APPROXIMATE HAND AUGER BORING LOCATION

FENCE & THIS SHEET	SIA	OFFSET

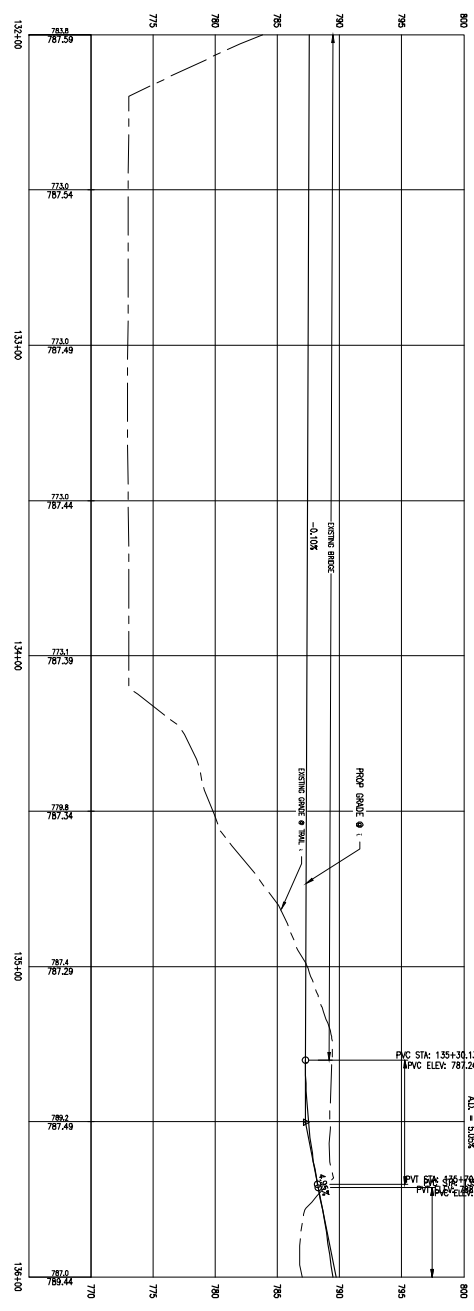
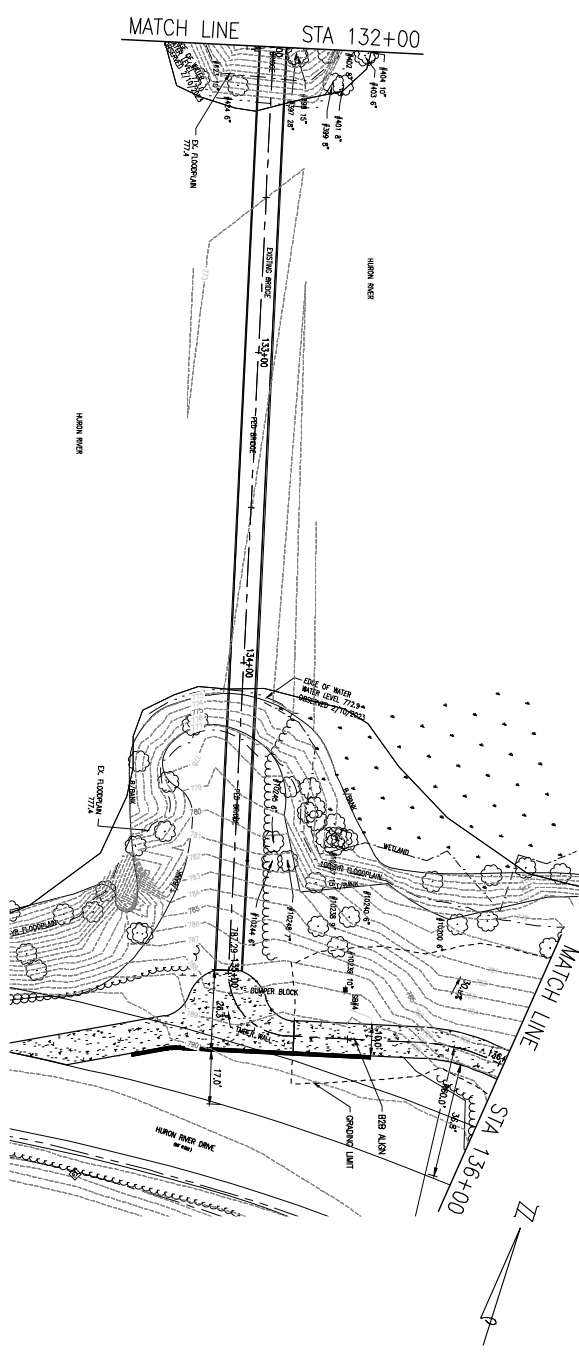
SIGN DETAILS

■ APPROXIMATE HAND AUGER BORING LOCATION



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DATE: 02/17/2023
 TIME: 10:28:00
 USER: JWB



NOTES

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FENCE & THIS SHEET	STA	OFFSET

SIGN DETAILS

Blank area for sign details.



9/19/23 3:07:31 PM



BORING B1

PAGE 1 OF 1

BORING DEPTH: 7.5 FEET

PROJECT NAME: Barton-Bandemer Trail

PROJECT NUMBER: 080118.00

CLIENT: Bergmann Associates

PROJECT LOCATION: Washtenaw County, Michigan

DATE STARTED: 1/24/23

COMPLETED: 1/24/23

BORING METHOD: Solid-stem Augers

DRILLER: WN/AL

RIG NO.: 281 (CME 45B)

LOGGED BY: TAG

CHECKED BY: STR

ELEVATION (FEET)	DEPTH (FEET)	SYMBOLIC PROFILE	LATITUDE: 42.30822 LONGITUDE: -83.75670 ELEVATION: 787.2 FT	PROFILE DESCRIPTION	SAMPLE TYPE/NO. INTERVAL	RECOVERY LENGTH (INCHES)	SPT BLOWS PER SIX INCHES	HAMMER EFFICIENCY: 79% DATE: 11/11/2021 N ₆₀ -- O	DRY DENSITY (pcf) -- ■				MOISTURE & ATTERBERG LIMITS (%)				REMARKS
									90	100	110	120	PL	MC	LL	SH	
787.0	0.3	TOPSOIL															
786.2	1.0	LEAN CLAY- Gray- Stiff (CL)															
785		Fine to Medium SILTY SAND with Gravel- Brown- Moist- Loose to Medium Dense (SM)			SB1	18	4	7									
5			SB2	18	7	8	9	22									
780	6.0	Sandy LEAN CLAY- Brown and Gray- Stiff- With Silty Sand Seams (CL)			SB3	18	4	14									
779.7	7.5	END OF BORING AT 7.5 FEET.															

GROUNDWATER & BACKFILL INFORMATION
GROUNDWATER WAS NOT ENCOUNTERED
BACKFILL METHOD: Auger Cuttings

NOTES: 1. The indicated stratification lines are approximate. The in-situ transitions between materials may be gradual.
2. The colors depicted on the symbolic profile are solely for visualization purposes and do not necessarily represent the in-situ colors encountered.

9/19/23 3:07:32 PM



BORING B2

PAGE 1 OF 1

BORING DEPTH: 7.5 FEET

PROJECT NAME: Barton-Bandemer Trail

PROJECT NUMBER: 080118.00

CLIENT: Bergmann Associates

PROJECT LOCATION: Washtenaw County, Michigan

DATE STARTED: 1/24/23

COMPLETED: 1/24/23

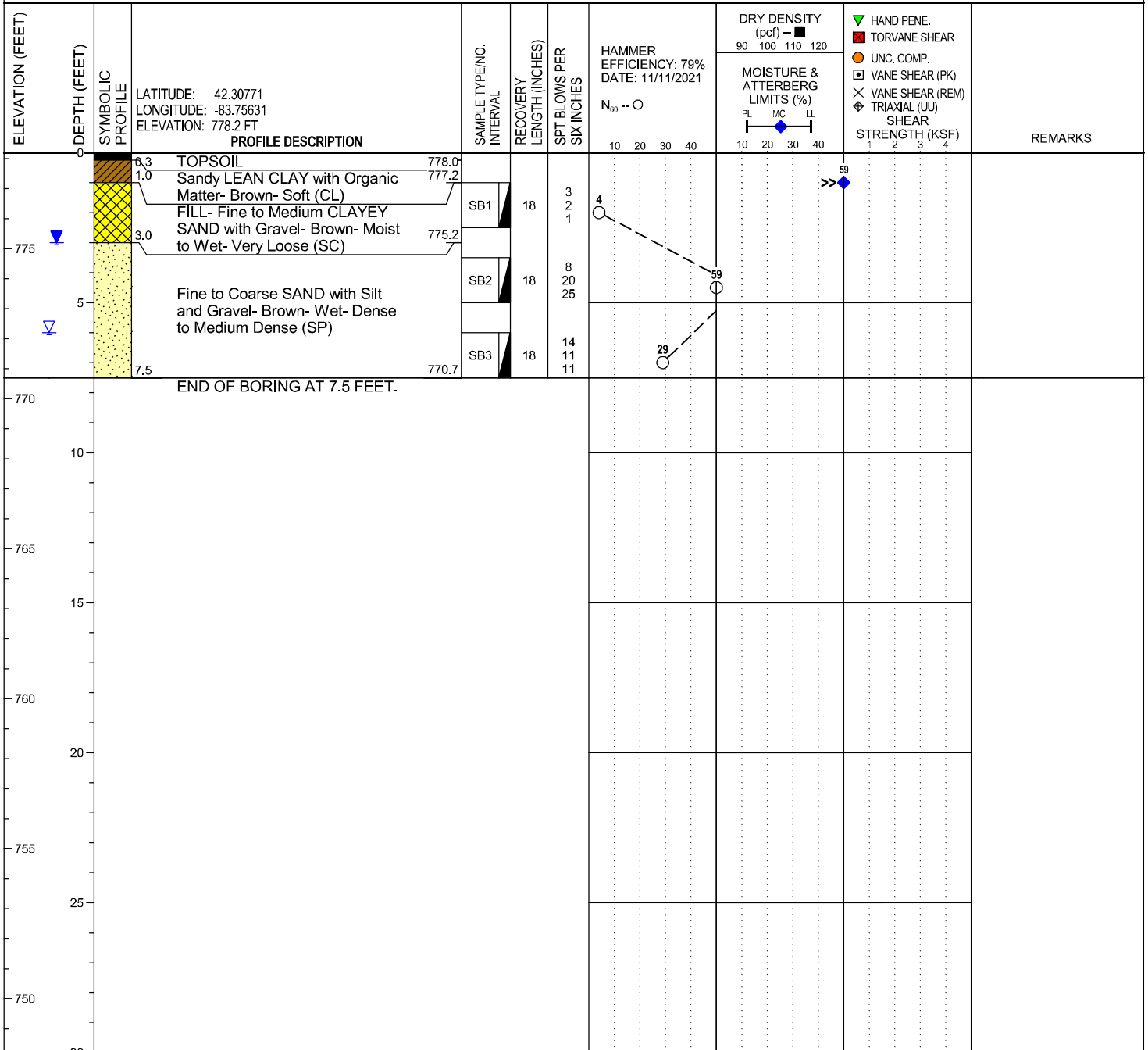
BORING METHOD: Solid-stem Augers

DRILLER: WN/AL

RIG NO.: 281 (CME 45B)

LOGGED BY: TAG

CHECKED BY: STR



GROUNDWATER & BACKFILL INFORMATION		
	DEPTH (FT)	ELEV (FT)
▽ DURING BORING:	6.0	772.2
▽ AT END OF BORING:	3.0	775.2
BACKFILL METHOD: Auger Cuttings		

NOTES: 1. The indicated stratification lines are approximate. The in-situ transitions between materials may be gradual.
2. The colors depicted on the symbolic profile are solely for visualization purposes and do not necessarily represent the in-situ colors encountered.

9/19/23 3:07:33 PM



BORING B3

PAGE 1 OF 1

BORING DEPTH: 7.5 FEET

PROJECT NAME: Barton-Bandemer Trail

PROJECT NUMBER: 080118.00

CLIENT: Bergmann Associates

PROJECT LOCATION: Washtenaw County, Michigan

DATE STARTED: 1/24/23

COMPLETED: 1/24/23

BORING METHOD: Solid-stem Augers

DRILLER: WN/AL

RIG NO.: 281 (CME 45B)

LOGGED BY: TAG

CHECKED BY: STR

ELEVATION (FEET)	DEPTH (FEET)	SYMBOLIC PROFILE	PROFILE DESCRIPTION	SAMPLE TYPE/NO. INTERVAL	RECOVERY LENGTH (INCHES)	SPT BLOWS PER SIX INCHES	HAMMER EFFICIENCY: 79% DATE: 11/11/2021 N ₆₀ -- O	DRY DENSITY (pcf) -- ■				MOISTURE & ATTERBERG LIMITS (%)	STRENGTH (KSF)	REMARKS
								90	100	110	120			
776.6	0.3		TOPSOIL											
775			Sandy LEAN CLAY- Brown- Very Stiff to Stiff (CL)	SB1	18	4	12			16				
5				SB2	18	5	5				15			
770	6.5		Fine to Medium CLAYEY SAND- Brown to Gray- Loose- With Black Silty Sand Partings and Root Fibers (SC)	SB3	18	3	11							
769.4	7.5													
			END OF BORING AT 7.5 FEET.											

GROUNDWATER & BACKFILL INFORMATION		
	DEPTH (FT)	ELEV (FT)
▽ DURING BORING:	6.0	770.9
▽ AT END OF BORING:	6.0	770.9
BACKFILL METHOD: Auger Cuttings		

NOTES: 1. The indicated stratification lines are approximate. The in-situ transitions between materials may be gradual.
2. The colors depicted on the symbolic profile are solely for visualization purposes and do not necessarily represent the in-situ colors encountered.



USACE DCP DATA SHEET

PROJECT: Bandemer Barton Trail Tunnel
 PROJECT NO.: 080118.00
 LOCATION: Washtenaw County, Michigan
 CLIENT: Bergmann Associates
 DATE: 1/24/23
 BY: WN/AL

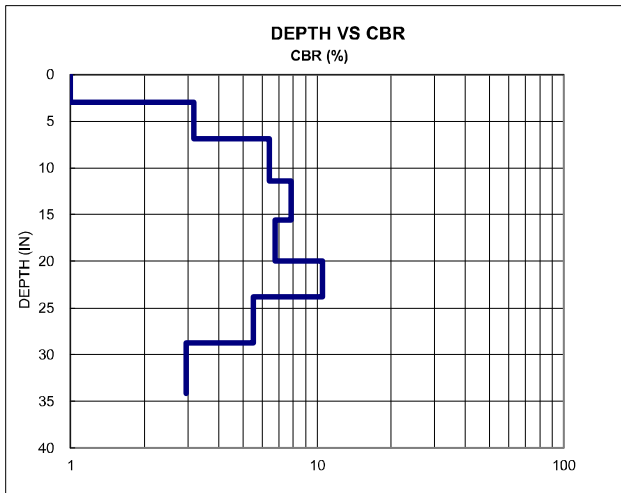
BORING: B1
 GROUND EL.: 787.2 FT

DEPTH TO START OF TEST FROM SURFACE: 0 inches

No. of Blows	Accum. Pen. (mm)	Pen. per Blow Set (mm)	Pen. per Blow (mm)	Hammer Blow Factor	CBR (%)	Depth from Surface (inches)	Comment	Average CBR (%)
0	160	0						
1	235	75	75	1	0.6	3.0	Very Poor Poor	2.1
3	334	99	33	1	3.2	6.9		
5	450	116	23	1	6.4	11.4		
5	555	105	21	1	7.8	15.6		7.3
5	668	113	23	1	6.8	20.0		
5	765	97	19	1	10.5	23.8		
5	890	125	25	1	5.5	28.7		
4	1027	137	34	1	2.9	34.1		

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

NOTES: 1) Refer to corresponding Boring Log for soil and groundwater information.



CBR Ranges for Subgrade Conditions

CBR < 3: Very Poor CBR 5-10: Marginal
 CBR 3-5: Poor CBR > 10: Good

Depth to Groundwater From Surface

During Drilling: See Note 1
 Upon Completion: See Note 1

Depth of Frost From Surface : See Note 1

From	To	Material
		See Note 1



USACE DCP DATA SHEET

PROJECT: Bandemer Barton Trail Tunnel
 PROJECT NO.: 080118.00
 LOCATION: Washtenaw County, Michigan
 CLIENT: Bergmann Associates
 DATE: 1/24/23
 BY: WN/AL

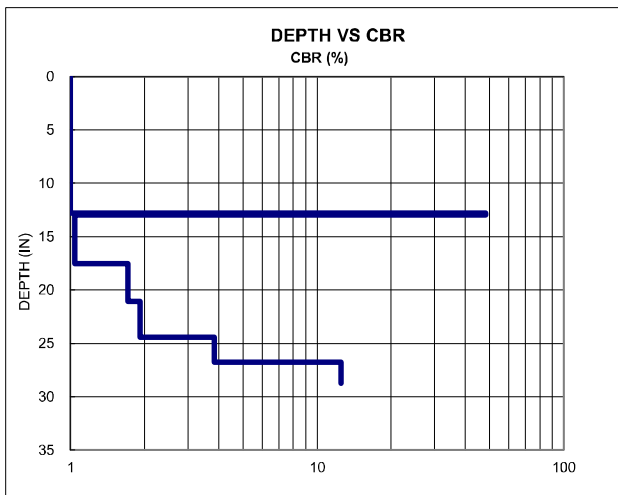
BORING: B2
 GROUND EL.: 778.2 FT

DEPTH TO START OF TEST FROM SURFACE: 0 inches

No. of Blows	Accum. Pen. (mm)	Pen. per Blow Set (mm)	Pen. per Blow (mm)	Hammer Blow Factor	CBR (%)	Depth from Surface (inches)	Comment	Average CBR (%)
0	250	0						
1	350	100	100	1	0.3	3.9	Very Poor	
1	430	80	80	1	0.5	7.1	Very Poor	
1	575	145	145	1	0.2	12.8	Very Poor	
1	580	5	5	1	48.1	13.0		
2	695	115	58	1	1.0	17.5	Very Poor	
2	785	90	45	1	1.7	21.1	Very Poor	
2	870	85	43	1	1.9	24.4	Very Poor	
2	930	60	30	1	3.8	26.8	Poor	1.5
3	980	50	17	1	12.5	28.7		12.5

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

NOTES: 1) Refer to corresponding Boring Log for soil and groundwater information.



CBR Ranges for Subgrade Conditions

CBR < 3: Very Poor CBR 5-10: Marginal
 CBR 3-5: Poor CBR > 10: Good

Depth to Groundwater From Surface

During Drilling: See Note 1
 Upon Completion: See Note 1

Depth of Frost From Surface : See Note 1

From	To	Material
		See Note 1



USACE DCP DATA SHEET

PROJECT: Bandemer Barton Trail Tunnel
 PROJECT NO.: 080118.00
 LOCATION: Washtenaw County, Michigan
 CLIENT: Bergmann Associates
 DATE: 1/24/23
 BY: WN/AL

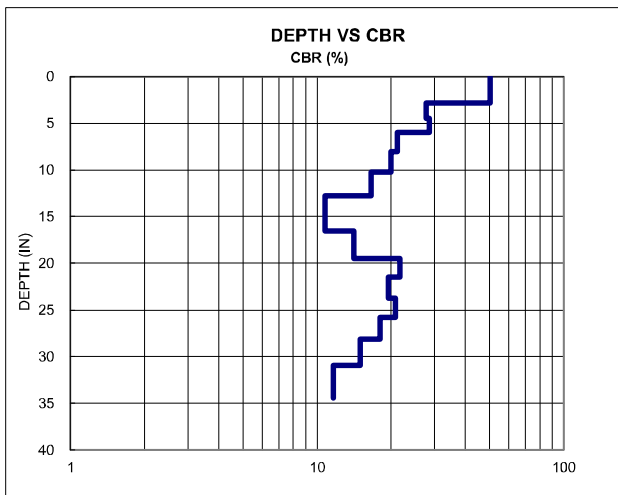
BORING: B3
 GROUND EL.: 776.9 FT

DEPTH TO START OF TEST FROM SURFACE: 0 inches

No. of Blows	Accum. Pen. (mm)	Pen. per Blow Set (mm)	Pen. per Blow (mm)	Hammer Blow Factor	CBR (%)	Depth from Surface (inches)	Comment	Average CBR (%)
0	145	0						
10	193	48	5	1	50.4	1.9		
5	217	24	5	1	50.4	2.8		
5	258	41	8	1	27.7	4.4		
5	298	40	8	1	28.4	6.0		
5	350	52	10	1	21.2	8.1		
5	405	55	11	1	19.9	10.2		
5	470	65	13	1	16.5	12.8		
5	565	95	19	1	10.8	16.5		
5	640	75	15	1	14.1	19.5		
5	691	51	10	1	21.7	21.5		
5	747	56	11	1	19.5	23.7		
5	800	53	11	1	20.8	25.8		
5	860	60	12	1	18.1	28.1		
5	931	71	14	1	15.0	30.9		
5	1020	89	18	1	11.6	34.4		20.3

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

NOTES: 1) Refer to corresponding Boring Log for soil and groundwater information.



CBR Ranges for Subgrade Conditions

CBR < 3: Very Poor CBR 5-10: Marginal
 CBR 3-5: Poor CBR > 10: Good

Depth to Groundwater From Surface

During Drilling: See Note 1
 Upon Completion: See Note 1

Depth of Frost From Surface : See Note 1

From	To	Material
		See Note 1



BORING DATA SHEET

PROJECT NAME: Barton-Bandemer Trail
 PROJECT NO.: 080118.00
 LOCATION: Ann Arbor, Michigan
 CLIENT: Bergmann Associates
 DATE: 7/20/22
 BY: EJK

BORING: HA1

PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	9	9	TOPSOIL- Fine to Coarse SAND with Gravel- Trace Root Fibers- Brown- Moist	(SP)
9	24	15	Fine to Coarse SAND with Clay and Gravel- Frequent Cobbles- Brown- Moist	(SP-SC)
			End of Boring at a Depth of 2 Feet	

Depth to Groundwater From Ground Surface
 Upon Completion: Not Encountered

NOTES:
 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
 2) Observed a boulder at about 16" below existing grade.

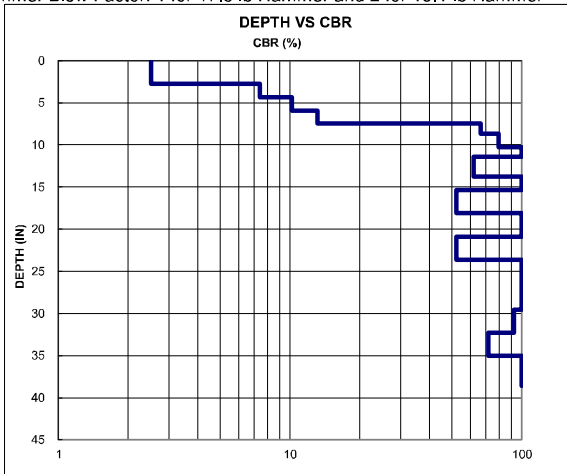
DCP TEST RESULTS

Depth to start of test from ex. ground surface: 0 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	370			2					
2	440	70	35	2	2.8	2.5	Very Poor	Topsoil	
3	480	40	13	2	4.3	7.4	Marginal	Topsoil	
4	520	40	10	2	5.9	10.2	Good	Topsoil	
5	560	40	8	2	7.5	13.1	Good	Topsoil	
16	590	30	2	2	8.7	66.4	Good	Topsoil	15.4
25	630	40	2	2	10.2	79.4	Good	Subgrade	
30	660	30	1	2	11.4	100.0	Good	Subgrade	
30	720	60	2	2	13.8	61.8	Good	Subgrade	
40	760	40	1	2	15.4	100.0	Good	Subgrade	
30	830	70	2	2	18.1	52.0	Good	Subgrade	
50	860	30	1	2	19.3	100.0	Good	Subgrade	
50	900	40	1	2	20.9	100.0	Good	Subgrade	
15	970	70	5	1	23.6	52.0	Good	Subgrade	
20	990	20	1	1	24.4	100.0	Good	Subgrade	
25	1050	60	2	1	26.8	100.0	Good	Subgrade	
30	1080	30	1	1	28.0	100.0	Good	Subgrade	
40	1120	40	1	1	29.5	100.0	Good	Subgrade	
25	1190	70	3	1	32.3	92.2	Good	Subgrade	
20	1260	70	4	1	35.0	71.8	Good	Subgrade	
30	1310	50	2	1	37.0	100.0	Good	Subgrade	
25	1350	40	2	1	38.6	100.0	Good	Subgrade	83.7

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



BORING DATA SHEET

PROJECT NAME: Barton-Bandemer Trail
 PROJECT NO.: 080118.00
 LOCATION: Ann Arbor, Michigan
 CLIENT: Bergmann Associates
 DATE: 7/20/22
 BY: EJK

BORING: HA2

PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	8	8	TOPSOIL- Fine to Coarse SAND with Gravel- Trace Root Fibers- Brown- Moist	(SP)
8	42	34	Fine to Coarse SAND with Silt and Gravel- Frequent Cobbles- Brown- Moist	(SP-SM)
			End of Boring at a Depth of 3.5 Feet	

Depth to Groundwater From Ground Surface
 Upon Completion: Not Encountered

NOTES:
 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.

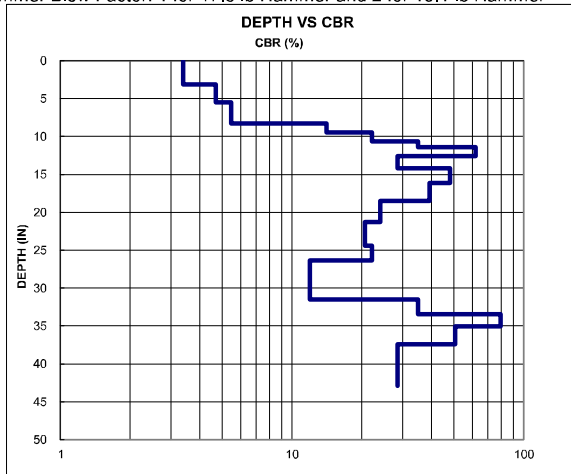
DCP TEST RESULTS

Depth to start of test from ex. ground surface: 0 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	330	0							
3	410	80	27	2	3.1	3.4	Poor	Topsoil	4.4
3	470	60	20	2	5.5	4.7	Poor	Topsoil	
4	540	70	18	2	8.3	5.4	Marginal	Topsoil	
4	570	30	8	2	9.4	14.1	Good	Subgrade	
6	600	30	5	2	10.6	22.2	Good	Subgrade	31.2
6	620	20	3	2	11.4	34.9	Good	Subgrade	
15	650	30	2	2	12.6	61.8	Good	Subgrade	
10	690	40	4	2	14.2	28.4	Good	Subgrade	
20	740	50	3	2	16.1	48.1	Good	Subgrade	
20	800	60	3	2	18.5	39.3	Good	Subgrade	
15	870	70	5	2	21.3	23.9	Good	Subgrade	
15	950	80	5	2	24.4	20.6	Good	Subgrade	
10	1000	50	5	2	26.4	22.2	Good	Subgrade	
15	1130	130	9	2	31.5	12.0	Good	Subgrade	
15	1180	50	3	2	33.5	34.9	Good	Subgrade	
25	1220	40	2	2	35.0	79.4	Good	Subgrade	
25	1280	60	2	2	37.4	50.4	Good	Subgrade	
15	1340	60	4	2	39.8	28.4	Good	Subgrade	
20	1420	80	4	2	42.9	28.4	Good	Subgrade	

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



BORING DATA SHEET

PROJECT NAME: Barton-Bandemer Trail
 PROJECT NO.: 080118.00
 LOCATION: Ann Arbor, Michigan
 CLIENT: Bergmann Associates
 DATE: 7/20/22
 BY: EJK

BORING: HA3

PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	8	8	TOPSOIL- Fine to Coarse SAND with Silt and Gravel- Trace Root Fibers- Brown- Moist	(SP-SM)
8	24	16	Fine to Coarse SAND with Silt and Gravel- Frequent Cobbles- Brown-Moist	(SP-SM)
			End of Boring at a Depth of 2 Feet	

Depth to Groundwater From Ground Surface
 Upon Completion: Not Encountered

NOTES:
 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.

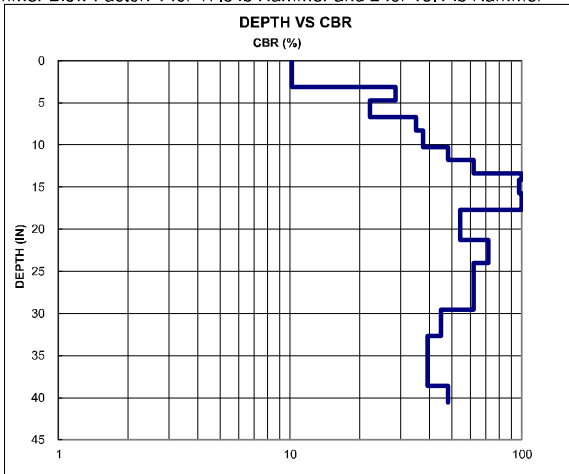
DCP TEST RESULTS

Depth to start of test from ex. ground surface: 0 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	350	0							
4	430	80	20	1	3.1	10.2	Good	Topsoil	21.2
5	470	40	8	1	4.7	28.4	Good	Topsoil	
5	520	50	10	1	6.7	22.2	Good	Topsoil	
6	560	40	7	1	8.3	34.9	Good	Topsoil	
8	610	50	6	1	10.2	37.5	Good	Subgrade	
8	650	40	5	1	11.8	48.1	Good	Subgrade	
10	690	40	4	1	13.4	61.8	Good	Subgrade	58
10	710	20	2	1	14.2	100.0	Good	Subgrade	
15	750	40	3	1	15.7	97.3	Good	Subgrade	
20	800	50	3	1	17.7	100.0	Good	Subgrade	
20	890	90	5	1	21.3	54.2	Good	Subgrade	
20	960	70	4	1	24.0	71.8	Good	Subgrade	
20	1040	80	4	1	27.2	61.8	Good	Subgrade	
15	1100	60	4	1	29.5	61.8	Good	Subgrade	
15	1180	80	5	1	32.7	44.8	Good	Subgrade	
10	1240	60	6	1	35.0	39.3	Good	Subgrade	
15	1330	90	6	1	38.6	39.3	Good	Subgrade	
10	1380	50	5	1	40.6	48.1	Good	Subgrade	

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



BORING DATA SHEET

PROJECT NAME: Barton-Bandemer Trail
 PROJECT NO.: 080118.00
 LOCATION: Ann Arbor, Michigan
 CLIENT: Bergmann Associates
 DATE: 7/20/22
 BY: EJK

BORING: HA4

PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	12	12	TOPSOIL- Fine to Coarse SAND with Silt and Gravel- Trace Root Fibers- Brown- Moist	(SP-SM)
12	24	12	Fine to Coarse SAND with Silt and Gravel- Frequent Cobbles- Brown-Moist	(SP-SM)
			End of Boring at a Depth of 2 Feet	

Depth to Groundwater From Ground Surface
 Upon Completion: Not Encountered

NOTES:
 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.

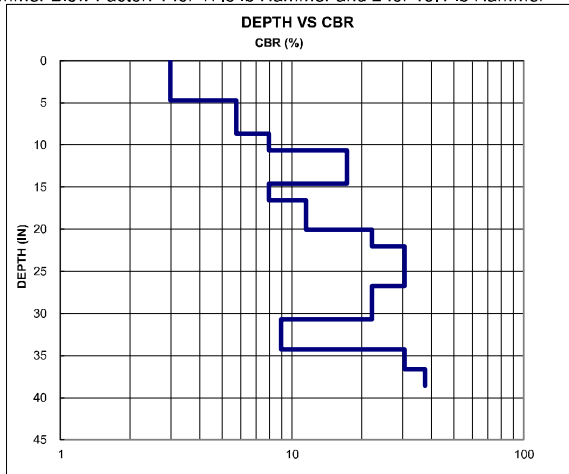
DCP TEST RESULTS

Depth to start of test from ex. ground surface: 0 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	350	0							
2	470	120	60	1	4.7	3.0	Very Poor	Topsoil	
3	570	100	33	1	8.7	5.8	Marginal	Topsoil	
2	620	50	25	1	10.6	7.9	Marginal	Topsoil	
4	670	50	13	1	12.6	17.3	Good	Topsoil	6.8
4	720	50	13	1	14.6	17.3	Good	Subgrade	
2	770	50	25	1	16.5	7.9	Marginal	Subgrade	
5	860	90	18	1	20.1	11.5	Good	Subgrade	
5	910	50	10	1	22.0	22.2	Good	Subgrade	
8	970	60	8	1	24.4	30.6	Good	Subgrade	
8	1030	60	8	1	26.8	30.6	Good	Subgrade	
10	1130	100	10	1	30.7	22.2	Good	Subgrade	
4	1220	90	23	1	34.3	8.9	Marginal	Subgrade	
8	1280	60	8	1	36.6	30.6	Good	Subgrade	
8	1330	50	6	1	38.6	37.5	Good	Subgrade	20.9

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



BORING DATA SHEET

PROJECT NAME: Barton-Bandemer Trail
 PROJECT NO.: 080118.00
 LOCATION: Ann Arbor, Michigan
 CLIENT: Bergmann Associates
 DATE: 7/20/22
 BY: EJK

BORING: HA9

PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	8	8	TOPSOIL- Fine to Coarse SAND with Gravel- Frequent Cobbles- Trace Root Fibers- Brown- Moist	(SP-SM)
8	42	34	Fine to Coarse SAND with Silt and Gravel- Frequent Cobbles- Light Brown- Moist	(SP-SM)
			End of Boring at a Depth of 3.5 Feet	

Depth to Groundwater From Ground Surface
 Upon Completion: Not Encountered

NOTES:
 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.

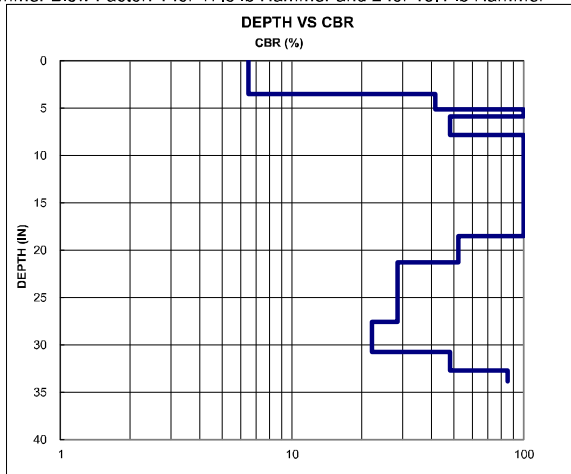
DCP TEST RESULTS

Depth to start of test from ex. ground surface: 0 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	340	0							
3	430	90	30	1	3.5	6.5	Marginal	Topsoil	
7	470	40	6	1	5.1	41.5	Good	Topsoil	
10	490	20	2	1	5.9	100.0	Good	Topsoil	
10	540	50	5	1	7.9	48.1	Good	Topsoil	33.2
30	590	50	2	1	9.8	100.0	Good	Subgrade	
30	650	60	2	1	12.2	100.0	Good	Subgrade	
25	700	50	2	1	14.2	100.0	Good	Subgrade	
40	760	60	2	1	16.5	100.0	Good	Subgrade	
35	810	50	1	1	18.5	100.0	Good	Subgrade	
15	880	70	5	1	21.3	52.0	Good	Subgrade	
10	960	80	8	1	24.4	28.4	Good	Subgrade	
10	1040	80	8	1	27.6	28.4	Good	Subgrade	
8	1120	80	10	1	30.7	22.2	Good	Subgrade	
10	1170	50	5	1	32.7	48.1	Good	Subgrade	
10	1200	30	3	1	33.9	85.3	Good	Subgrade	63.5

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



BORING LOG TERMINOLOGY

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART		
COARSE-GRAINED SOIL (more than 50% of material is larger than No. 200 sieve size.)		
Clean Gravel (Less than 5% fines)		
GRAVEL More than 50% of coarse fraction larger than No. 4 sieve size		GW Well-graded gravel; gravel-sand mixtures, little or no fines
		GP Poorly-graded gravel; gravel-sand mixtures, little or no fines
	Gravel with fines (More than 12% fines)	
		GM Silty gravel; gravel-sand-silt mixtures
		GC Clayey gravel; gravel-sand-clay mixtures
Clean Sand (Less than 5% fines)		
SAND 50% or more of coarse fraction smaller than No. 4 sieve size		SW Well-graded sand; sand-gravel mixtures, little or no fines
		SP Poorly graded sand; sand-gravel mixtures, little or no fines
	Sand with fines (More than 12% fines)	
		SM Silty sand; sand-silt-gravel mixtures
		SC Clayey sand; sand-clay-gravel mixtures
FINE-GRAINED SOIL (50% or more of material is smaller than No. 200 sieve size)		
SILT AND CLAY Liquid limit less than 50%		ML Inorganic silt; sandy silt or gravelly silt with slight plasticity
		CL Inorganic clay of low plasticity; lean clay, sandy clay, gravelly clay
		OL Organic silt and organic clay of low plasticity
SILT AND CLAY Liquid limit 50% or greater		MH Inorganic silt of high plasticity, elastic silt
		CH Inorganic clay of high plasticity, fat clay
		OH Organic silt and organic clay of high plasticity
HIGHLY ORGANIC SOIL		PT Peat and other highly organic soil

OTHER MATERIAL SYMBOLS		

LABORATORY CLASSIFICATION CRITERIA	
GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}^2}{D_{10} \times D_{60}}$ between 1 and 3
GP	Not meeting all gradation requirements for GW
GM	Atterberg limits below "A" line or PI less than 4
GC	Atterberg limits above "A" line with PI greater than 7
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{D_{30}^2}{D_{10} \times D_{60}}$ between 1 and 3
SP	Not meeting all gradation requirements for SW
SM	Atterberg limits below "A" line or PI less than 4
SC	Atterberg limits above "A" line with PI greater than 7

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

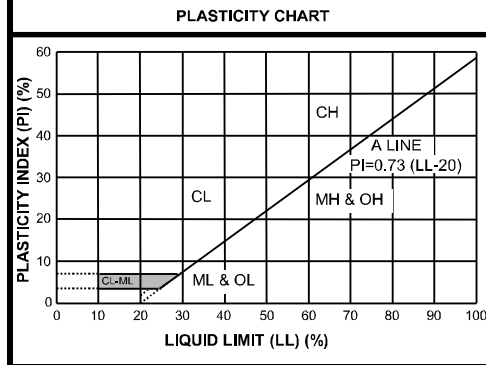
Less than 5 percent.....GW, GP, SW, SP
 More than 12 percent.....GM, GC, SM, SC
 5 to 12 percent.....Cases requiring dual symbols

- SP-SM or SW-SM (SAND with Silt or SAND with Silt and Gravel)
- SP-SC or SW-SC (SAND with Clay or SAND with Clay and Gravel)
- GP-GM or GW-GM (GRAVEL with Silt or GRAVEL with Silt and Sand)
- GP-GC or GW-GC (GRAVEL with Clay or GRAVEL with Clay and Sand)

If the fines are CL-ML:

- SC-SM (SILTY CLAYEY SAND or SILTY CLAYEY SAND with Gravel)
- SM-SC (CLAYEY SILTY SAND or CLAYEY SILTY SAND with Gravel)
- GC-GM (SILTY CLAYEY GRAVEL or SILTY CLAYEY GRAVEL with Sand)

PARTICLE SIZES	
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 and Clay	- Less than (0.074 mm)



VISUAL MANUAL PROCEDURE
When laboratory tests are not performed to confirm the classification of soils exhibiting borderline classifications, the two possible classifications would be separated with a slash, as follows:
For soils where it is difficult to distinguish if it is a coarse or fine-grained soil:
<ul style="list-style-type: none"> • SC/CL (CLAYEY SAND to Sandy LEAN CLAY) • SW/ML (SILTY SAND to SANDY SILT) • GC/CL (CLAYEY GRAVEL to Gravelly LEAN CLAY) • GM/ML (SILTY GRAVEL to Gravelly SILT)
For soils where it is difficult to distinguish if it is sand or gravel, poorly or well-graded sand or gravel; silt or clay; or plastic or non-plastic silt or clay:
<ul style="list-style-type: none"> • SP/GP or SW/GW (SAND with Gravel to GRAVEL with Sand) • SC/GC (CLAYEY SAND with Gravel to CLAYEY GRAVEL with Sand) • SM/GM (SILTY SAND with Gravel to SILTY GRAVEL with Sand) • SW/SP (SAND or SAND with Gravel) • GP/GW (GRAVEL or GRAVEL with Sand) • SC/SM (CLAYEY to SILTY SAND) • GM/GC (SILTY to CLAYEY GRAVEL) • CL/ML (SILTY CLAY) • ML/CL (CLAYEY SILT) • CH/MH (FAT CLAY to ELASTIC SILT) • CL/CH (LEAN to FAT CLAY) • MH/ML (ELASTIC SILT to SILT)

DRILLING AND SAMPLING ABBREVIATIONS	
2ST	- Shelby Tube - 2" O.D.
3ST	- Shelby Tube - 3" O.D.
AS	- Auger Sample
GS	- Grab Sample
LS	- Liner Sample
NR	- No Recovery
PM	- Pressuremeter
RC	- Rock Core diamond bit, NX size, except where noted
SB	- Split Barrel Sample 1-3/8" I.D., 2" O.D., except where noted
VS	- Vane Shear
WS	- Wash Sample

OTHER ABBREVIATIONS	
WOH	- Weight of Hammer
WOR	- Weight of Rods
SP	- Soil Probe
PID	- Photo Ionization Device
FID	- Flame Ionization Device

DEPOSITIONAL FEATURES	
Parting	- as much as 1/16 inch thick
Seam	- 1/16 inch to 1/2 inch thick
Layer	- 1/2 inch to 12 inches thick
Stratum	- greater than 12 inches thick
Pocket	- deposit of limited lateral extent
Lens	- lenticular deposit
Hardpan/Till	- an unstratified, consolidated or cemented mixture of clay, silt, sand and/or gravel, the size/shape of the constituents vary widely
Lacustrine	- soil deposited by lake water
Mottled	- soil irregularly marked with spots of different colors that vary in number and size
Varved	- alternating partings or seams of silt and/or clay
Occasional	- one or less per foot of thickness
Frequent	- more than one per foot of thickness
Interbedded	- strata of soil or beds of rock lying between or alternating with other strata of a different nature

DESCRIPTION OF RELATIVE QUANTITIES	
The visual-manual procedure uses the following terms to describe the relative quantities of notable foreign materials, gravel, sand or fines:	
Trace	- particles are present but estimated to be less than 5%
Few	- 5 to 10%
Little	- 15 to 25%
Some	- 30 to 45%
Mostly	- 50 to 100%

CLASSIFICATION TERMINOLOGY AND CORRELATIONS			
Cohesionless Soils		Cohesive Soils	
Relative Density	N₆₀ (N-Value) (Blows per foot)	Consistency	N₆₀ (N-Value) (Blows per foot)
Very Loose	0 to 4	Very Soft	<2
Loose	5 to 10	Soft	2 - 4
Medium Dense	11 to 30	Medium	5 - 8
Dense	31 to 50	Stiff	9 - 15
Very Dense	51 to 80	Very Stiff	16 - 30
Extremely Dense	Over 81	Hard	> 30
		Undrained Shear Strength (kips/ft²)	
		< 0.25	0.25 or less
		> 0.25 to 0.50	> 0.25 to 0.50
		> 0.50 to 1.0	> 0.50 to 1.0
		> 1.0 to 2.0	> 1.0 to 2.0
		> 2.0 to 4.0	> 2.0 to 4.0
		> 4.0 or greater	> 4.0 or greater

Standard Penetration 'N-Value' = Blows per foot of a 140-pound hammer falling 30 inches on a 2-inch O.D. split barrel sampler, except where noted. N60 values as reported on boring logs represent raw N-values corrected for hammer efficiency only.

GENERAL COMMENTS

BASIS OF GEOTECHNICAL REPORT

This report has been prepared in accordance with generally accepted geotechnical engineering practices to assist in the design and/or evaluation of this project. If the project plans, design criteria, and other project information referenced in this report and utilized by SME to prepare our recommendations are changed, the conclusions and recommendations contained in this report are not considered valid unless the changes are reviewed, and the conclusions and recommendations of this report are modified or approved in writing by our office.

The discussions and recommendations submitted in this report are based on the available project information, described in this report, and the geotechnical data obtained from the field exploration at the locations indicated in the report. Variations in the soil and groundwater conditions commonly occur between or away from sampling locations. The nature and extent of the variations may not become evident until the time of construction. If significant variations are observed during construction, SME should be contacted to reevaluate the recommendations of this report. SME should be retained to continue our services through construction to observe and evaluate the actual subsurface conditions relative to the recommendations made in this report.

In the process of obtaining and testing samples and preparing this report, procedures are followed that represent reasonable and accepted practice in the field of soil and foundation engineering. Specifically, field logs are prepared during the field exploration that describe field occurrences, sampling locations, and other information. Samples obtained in the field are frequently subjected to additional testing and reclassification in the laboratory and differences may exist between the field logs and the report logs. The engineer preparing the report reviews the field logs, laboratory classifications, and test data and then prepares the report logs. Our recommendations are based on the contents of the report logs and the information contained therein.

REVIEW OF DESIGN DETAILS, PLANS, AND SPECIFICATIONS

SME should be retained to review the design details, project plans, and specifications to verify those documents are consistent with the recommendations contained in this report.

REVIEW OF REPORT INFORMATION WITH PROJECT TEAM

Implementation of our recommendations may affect the design, construction, and performance of the proposed improvements, along with the potential inherent risks involved with the proposed construction. The client and key members of the design team, including SME, should discuss the issues covered in this report so that the issues are understood and applied in a manner consistent with the owner's budget, tolerance of risk, and expectations for performance and maintenance.

FIELD VERIFICATION OF GEOTECHNICAL CONDITIONS

SME should be retained to verify the recommendations of this report are properly implemented during construction. This may avoid misinterpretation of our recommendations by other parties and will allow us to review and modify our recommendations if variations in the site subsurface conditions are encountered.

PROJECT INFORMATION FOR CONTRACTOR

This report and any future addenda or other reports regarding this site should be made available to prospective contractors prior to submitting their proposals for their information only and to supply them with facts relative to the subsurface evaluation and laboratory test results. If the selected contractor encounters subsurface conditions during construction, which differ from those presented in this report, the contractor should promptly describe the nature and extent of the differing conditions in writing and SME should be notified so that we can verify those conditions. The construction contract should include provisions for dealing with differing conditions and contingency funds should be reserved for potential problems during earthwork and foundation construction. We would be pleased to assist you in developing the contract provisions based on our experience.

The contractor should be prepared to handle environmental conditions encountered at this site, which may affect the excavation, removal, or disposal of soil; dewatering of excavations; and health and safety of workers. Any Environmental Assessment reports prepared for this site should be made available for review by bidders and the successful contractor.

THIRD PARTY RELIANCE/REUSE OF THIS REPORT

This report has been prepared solely for the use of our Client for the project specifically described in this report. This report cannot be relied upon by other parties not involved in the project, unless specifically allowed by SME in writing. SME also is not responsible for the interpretation by other parties of the geotechnical data and the recommendations provided herein.

LABORATORY TESTING PROCEDURES

VISUAL ENGINEERING CLASSIFICATION

Visual classification was performed on recovered samples. The appended General Notes and Unified Soil Classification System (USCS) sheets include a brief summary of the general method used visually classify the soil and assign an appropriate USCS group symbol. The estimated group symbol, according to the USCS, is shown in parentheses following the textural description of the various strata on the boring logs appended to this report. The soil descriptions developed from visual classifications are sometimes modified to reflect the results of laboratory testing.

MOISTURE CONTENT

Moisture content tests were performed by weighing samples from the field at their in-situ moisture condition. These samples were then dried at a constant temperature (approximately 110° C) overnight in an oven. After drying, the samples were weighed to determine the dry weight of the sample and the weight of the water that was expelled during drying. The moisture content of the specimen is expressed as a percent and is the weight of the water compared to the dry weight of the specimen.

HAND PENETROMETER TESTS

In the hand penetrometer test, the unconfined compressive strength of a cohesive soil sample is estimated by measuring the resistance of the sample to the penetration of a small calibrated, spring-loaded cylinder. The maximum capacity of the penetrometer is 4.5 tons per square-foot (tsf). Theoretically, the undrained shear strength of the cohesive sample is one-half the unconfined compressive strength. The undrained shear strength (based on the hand penetrometer test) presented on the boring logs is reported in units of kips per square-foot (ksf).

TORVANE SHEAR TESTS

In the Torvane test, the shear strength of a low strength, cohesive soil sample is estimated by measuring the resistance of the sample to a torque applied through vanes inserted into the sample. The undrained shear strength of the samples is measured from the maximum torque required to shear the sample and is reported in units of kips per square-foot (ksf).

LOSS-ON-IGNITION (ORGANIC CONTENT) TESTS

Loss-on-ignition (LOI) tests are conducted by first weighing the sample and then heating the sample to dry the moisture from the sample (in the same manner as determining the moisture content of the soil). The sample is then re-weighed to determine the dry weight and then heated for 4 hours in a muffle furnace at a high temperature (approximately 440° C). After cooling, the sample is re-weighed to calculate the amount of ash remaining, which in turn is used to determine the amount of organic matter burned from the original dry sample. The organic matter content of the specimen is expressed as a percent compared to the dry weight of the sample.

ATTERBERG LIMITS TESTS

Atterberg limits tests consist of two components. The plastic limit of a cohesive sample is determined by rolling the sample into a thread and the plastic limit is the moisture content where a 1/8-inch thread begins to crumble. The liquid limit is determined by placing a 1/2-inch thick soil pat into the liquid limits cup and using a grooving tool to divide the soil pat in half. The cup is then tapped on the base of the liquid limits device using a crank handle. The number of drops of the cup to close the gap formed by the grooving tool 1/2 inch is recorded along with the corresponding moisture content of the sample. This procedure is repeated several times at different moisture contents and a graph of moisture content and the corresponding number of blows is plotted. The liquid limit is defined as the moisture content at a nominal 25 drops of the cup. From this test, the plasticity index can be determined by subtracting the plastic limit from the liquid limit.

ATTACHMENT B
GENERAL DECLARATIONS

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, General Information, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered _____, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS _____ DAY OF _____, 202_.

Bidder's Name

Authorized Signature of Bidder

Official Address

(Print Name of Signer Above)

Telephone Number

Email Address for Award Notice

ATTACHMENT C
LEGAL STATUS OF BIDDER

(The bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the State of _____, for whom _____, bearing the office title of _____, whose signature is affixed to this Bid, is authorized to execute contracts.

NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority

• A limited liability company doing business under the laws of the State of _____, whom _____ bearing the title of _____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

* A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):

* An individual, whose signature with address, is affixed to this Bid: _____
(initial here)

Authorized Official

_____ **Date** _____, 202_

(Print) Name _____ Title _____

Company:

Address:

Contact Phone () _____ Fax () _____

Email _____

ATTACHMENT E
LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here No. of employees _____

The Contractor or Grantee agrees:

- (a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$15.90/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$17.73/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

- Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits
- Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Company Name

Street Address

Signature of Authorized Representative

Date

City, State, Zip

Print Name and Title

Phone/Email address

Attachment F

CITY OF ANN ARBOR LIVING WAGE ORDINANCE

RATE EFFECTIVE APRIL 30, 2023 - ENDING APRIL 29, 2024

\$15.90 per hour

If the employer provides health care benefits*

\$17.73 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

V.

W. **ENFORCEMENT**

X. The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

**For Additional Information or to File a Complaint contact
Colin Spencer at 734/794-6500 or cspencer@a2gov.org**



ATTACHEMENT G

Vendor Conflict of Interest Disclosure Form
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All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor’s conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee’s immediate family member has an ownership interest in vendor’s company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor’s Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Conflict of Interest Disclosure*	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <hr style="border: 0; border-top: 1px solid black;"/> <input type="checkbox"/> Interest in vendor’s company <input type="checkbox"/> Other (please describe in box below)

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:		
Vendor Name	Vendor Phone Number	
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorized Representative

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org

ATTACHMENT I

CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below.

You can review the entire ordinance at www.a2gov.org/humanrights.

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

Discriminatory Employment Practices: No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

Discriminatory Effects: No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an 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 any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at www.a2gov.org/humanrights. Then submit it to the Human Rights Commission by e-mail (hrc@a2gov.org), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk's Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at hrc@a2gov.org.

Private Actions For Damages or Injunctive Relief: To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

THIS IS AN OFFICIAL GOVERNMENT NOTICE AND
MUST BE DISPLAYED WHERE EMPLOYEES CAN READILY SEE IT.

MICHIGAN DEPARTMENT OF TRANSPORTATION CERTIFIED PAYROLL

COMPLETION OF CERTIFIED PAYROLL FORM FULFILLS THE MINIMUM MDOT PREVAILING WAGE REQUIREMENTS

(1) NAME OF CONTRACTOR / SUBCONTRACTOR (CIRCLE ONE) (2) ADDRESS

(3) PAYROLL NO. (4) FOR WEEK ENDING (5) PROJECT AND LOCATION (6) CONTRACT ID

(a)	(b)	(c)	(d) DAY AND DATE							(e)	(f)	(g)	(h)	(i)	(j) DEDUCTIONS						(k)
															TOTAL HOURS ON PROJECT	PROJECT RATE OF PAY	PROJECT RATE OF FRINGE PAY	GROSS PROJECT EARNED	GROSS WEEKLY EARNED	TOTAL WEEKLY HOURS WORKED ALL JOBS	
EMPLOYEE INFORMATION	WORK CLASSIFICATION	Hour Type	HOURS WORKED ON PROJECT							TOTAL HOURS ON PROJECT	PROJECT RATE OF PAY	PROJECT RATE OF FRINGE PAY	GROSS PROJECT EARNED	GROSS WEEKLY EARNED	TOTAL WEEKLY HOURS WORKED ALL JOBS	FICA	FEDERAL	STATE	OTHER	TOTAL DEDUCT	TOTAL WEEKLY WAGES PAID FOR ALL JOBS
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00
ETH#GEN: ID #:	GROUP/CLASS #:	S							0											\$0.00	\$0.00
NAME:									0				\$0.00							\$0.00	\$0.00

Date _____

I, _____ (Name of Signatory Party) _____ (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

_____ on the _____ (Contractor or Subcontractor)
 _____; that during the payroll period commencing on the _____ (Building or Work)
 _____ day of _____, _____, and ending the _____ day of _____, _____,
 all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

_____ from the full _____ (Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

- in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

- Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.