

CONSTRUCTION REQUEST FOR PROPOSAL

RFP# 22-50

Russell Street Improvements

City of Ann Arbor
Public Services / Engineering Unit



Due Date: June 9, 2022 by 10:00 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 INFORMATION3

SECTION II: SCOPE OF WORK..... 10

SECTION III: MINIMUM INFORMATION REQUIRED 11

SECTION IV: ATTACHMENTS 17

SECTION I - GENERAL INFORMATION

A. OBJECTIVE

The purpose of this Request for Proposal (RFP) is to select a firm to provide construction of Russell Street Improvements as described in the plans and specifications

This is a Federally funded project. The contractor and subcontractors must comply with HUD procurement provisions in CFR 24 Part 85.36, Equal Employment Opportunity requirements, the Copeland "Anti-Kickback" Act, the Davis-Bacon Act, Contract Work Hours and Safety Standards Act, Section 3 of the Housing and Urban Development Act and other requirements as set forth in the bid documents. Minority and Women Owned Business Enterprises and Section 3 Business Concerns seeking bid opportunities under this project are encouraged to respond.

B. 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 May 23, 2022 at 5:00 p.m. (local time), and should be addressed as follows:

Scope of Work/Proposal Content questions shall be e-mailed to **Christopher Wall, PE**, cwall@a2gov.org

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.

C. PRE-PROPOSAL MEETING

No pre-proposal meeting will be held for this RFP. Please contact staff indicated above with general questions regarding the RFP.

D. 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 in ink. 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.

E. 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.

F. SEALED PROPOSAL SUBMISSION

All proposals are due and must be delivered to the City on or before June 9, 2022 by 10:00 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**
- **one (1) additional proposal copy**
- **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 #22-50 Russell Street Improvements** 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 accessible to the public at all hours. 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.

G. 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.

H. 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.

I. 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.

J. 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 Highway will apply.

K. 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.

L. 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.

M. 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.

N. PROPOSAL PROTEST

All proposal protests must be in writing and filed with the Purchasing Manager within five (5) business days of the award action. 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.

O. SCHEDULE

The following is the schedule for this RFP process.

Activity/Event	Anticipated Date
Written Question Deadline	May 23, 2022, 5:00 p.m. (Local Time)
Addenda Published (if needed)	Week of May 23rd, 2022
Additional Addenda (if needed)	Week of May 30, 2022
Proposal Due Date	June 9, 2022, 10:00 a.m. (Local Time)
Selection/Negotiations	June 10-16, 2022
Expected City Council Authorizations	August 4, 2022

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

P. IRS FORM W-9

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

Q. 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.

R. 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.

S. 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.

T. 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.

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.

V. 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

Please see the construction plan set and specifications for 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 1:314(9) of the City Code which sets forth requirements for evaluating construction 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 assurance 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. Documentation of an on-going, Michigan OSHA-approved safety-training program for employees to be used on the proposed job site.
2. Evidence of the bidder's worker's compensation Experience Modification Rating ("EMR"). 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 the OSHA 10-hour training course for safety established by the U.S. Department of Labor, Occupational Safety & Health Administration.
4. The safety record of bidder and major subcontractors, including OSHA, MIOSHA, or other safety violations.

C. Workforce Development – 20 Points

1. The ratio of masters or journeypersons to apprentices proposed to be used on the construction project job site, if apprentices are to be used on the project.
2. Documentation as to bidder's pay rates, health insurance, pension or other retirement benefits, paid leave, or other fringe benefits to its employees.
3. 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.

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 are able to achieve this goal.

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 No.</u>	<u>Item Description</u>	<u>Unit</u>	<u>Est. Qty.</u>	<u>Unit Price</u>	<u>Total Price</u>
130	Protective Fencing	Ft	100	\$	\$
135	Stump, Remove	Ea	5	\$	\$
140	Exploratory Excavation, (0-10 ft. deep) (Trench Det 1, Modified)	Ea	2	\$	\$
201	Certified Payroll Compliance and Reporting	LSUM	1	\$	\$
202	General Conditions, Max \$80,000	LSUM	1	\$	\$
203	Audio-visual Recording	LSUM	1	\$	\$
204	Fence, Remove	Lft	185	\$	\$
205	Pavt Mrkg, Polyurea, 4 inch, White	Ft	300	\$	\$
206	Pavt Mrkg, Polyurea, 12 inch, White	Ft	80	\$	\$
207	Pavt Mrkg, Polyurea, 24 inch, White	Ft	12	\$	\$
210	Sign, Type B, Temp, Prismatic, Furn & Oper	Sft	328	\$	\$
211	Barricade, Type III, High Intensity, Furn & Oper	Ea	4	\$	\$
212	Plastic Drum, Fluorescent, Furn & Oper	Ea	50	\$	\$
213	Sign, Portable, Changeable Message, NTFICIP-Compliant, Furn & Oper	Ea	2	\$	\$
215	Sign Cover	Ea	2	\$	\$
217	Pedestrian Type II Barricade, Temp	Ea	4	\$	\$
219	Pedestrian Path, Temp	Ft	20	\$	\$
220	Pedestrian Ramp, Temp	Ea	1	\$	\$
226	Minor Traffic Devices, Max \$35,000	LSUM	1	\$	\$
227	Traffic Regulator Control	LSUM	1	\$	\$
229	Erosion Control, Inlet Filter	Ea	10	\$	\$
230	Sewer, Any Size or Depth, Rem	Ft	675	\$	\$
231	Dr Structure, Any Size or Depth, Rem	Ea	8	\$	\$
233	Curb and Gutter, Any Type or Size, Rem	Ft	100	\$	\$
234	Sidewalk and Ramps, Remove	Sft	965	\$	\$
235	Driveway Approach, Remove	Sft	2830	\$	\$
236	Pavement, Remove	Syd	160	\$	\$
237	Machine Grading, Modified, Russell	Sta	5	\$	\$
238	Sidewalk Grading	Ft	175	\$	\$
239	Sidewalk Ramp Grading	Ea	3	\$	\$

Item No.	Item Description	Unit	Est. Qty.	Unit Price	Total Price
240	Non-Hazardous Contrm'd Mat'l Handling & Disposal	Cyd	10	\$	\$
241	Subgrade Undercutting, Type IIB	Cyd	100	\$	\$
242	Structure Covers, Special	Lbs	6000	\$	\$
243	6 inch, Wrapped Underdrain	Ft	1300	\$	\$
244	Aggregate Base Course, 21AA, Modified	Ton	950	\$	\$
245	Maintenance Gravel, 21AA, Modified	Ton	100	\$	\$
246	Sand Subbase Course, Class II - C.I.P.	Cyd	90	\$	\$
251	Curb and Gutter, Conc, AA Det SD-R-1, Special	Ft	1300	\$	\$
252	Driveway Opening, Conc, Detail M, P-NC	Ft	200	\$	\$
253	Concrete Pavement, 8-inch with integral curb	Syd	160	\$	\$
255	Sidewalk, Concrete, 4 inch, Special	Sft	4500	\$	\$
256	Sidewalk Ramp, Concrete, 6 inch, Special	Sft	300	\$	\$
257	Sidewalk Retaining Wall, 6 inch to 24 inch	Sft	270	\$	\$
259	Drive Approach, Conc, 6 inch, Non-Reinf, P-NC	Sft	1200	\$	\$
261	Detectable Warning Surface, Modified	Ft	20	\$	\$
265	Hand Patching, Modified	Ton	5	\$	\$
267	HMA, EL	Ton	500	\$	\$
270	No Parking Sign	Ea	4	\$	\$
272	Irrigation Systems, Protection and Maintenance	LSUM	1	\$	\$
274	Project Clean-Up and Restoration, Special - Russell	LSUM	1	\$	\$
276	Topsoil Surface, 4 inch	Syd	4000	\$	\$
277	Seeding and Mulching	Syd	4000	\$	\$
278	Storm Control Structure, R1	Each	1	\$	\$
285	D.I. CL 50 Water Main, w/Poly Wrap, 8 inch, Tr Det I, Mod	Ft	10	\$	\$
287	Reducer, 8 inch x 6 inch	Ea	1	\$	\$
288	Tee, 8 inch x 8 inch x 8 inch	Ea	1	\$	\$
289	Fire Hydrant Assy, w/Extensions, Complete	Ea	1	\$	\$
294	6 inch Water Main, Abandon	Lft	10	\$	\$
298	Fire Hydrant, Rem	Ea	1	\$	\$
320	RCP, Sewer, C76, CL-IV, 12 inch, Tr Det I	Ft	140	\$	\$

Item No.	Item Description	Unit	Est. Qty.	Unit Price	Total Price
322	RCP, Sewer, C76, CL- IV, 36 inch, Tr Det l	Ft	500	\$	\$
362	Type II Manhole (6 ft. Dia.) (0-10 ft. deep)	Ea	5	\$	\$
363	Type II Manhole (6 ft. Dia.) Add'l Depth	Vf	9	\$	\$
367	Double Inlet	Ea	4	\$	\$
460	Excavate & Backfill for Water Service Tap and Lead	Lft	36	\$	\$
566	Adjust Structure Cover	Ea	4	\$	\$
567	Adjust Monument Box or Gate Valve Box	Ea	4	\$	\$
703	Silt Fence	Ft	500	\$	\$
810	Cercis Canadensis, 6 Foot Clump	EA	1	\$	\$
810	Nyssa Sylvatica, 2-inch	EA	2	\$	\$
810	Ostrya Virginiana, 2-inch	EA	2	\$	\$
810	Quercus Macrocarpa, 2.5-inch	EA	3	\$	\$

Total Contract Price \$ _____

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 – Non-Discrimination Ordinance Declaration of Compliance Form

Attachment E – Living Wage Declaration of Compliance Form

Attachment F – Vendor Conflict of Interest Disclosure Form

Attachment G – Non-Discrimination Ordinance Poster

Attachment H – Living Wage Ordinance Poster

Attachment I – Prevailing Wage Declaration of Compliance

Sample Certified Payroll Report Template

Required Bid and Contract Documents for Washtenaw County CDBG Program

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 **Russell Street Improvements, RFP#22-50** 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)
Vendor Conflict of Interest Form
Prevailing Wage Declaration of
Compliance Form (if applicable)
Bid Forms
Contract and Exhibits
Bonds

General Conditions
Standard Specifications
Detailed Specifications
Plans
Addenda

ARTICLE II - Definitions

Administering Service Area/Unit means **Public Services/Engineering Unit**

Project means **Russell Street Improvements, RFP#22-50**

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: **Christopher Wall, PE** whose job title is **Project**

Manager. 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 entire work for this Contract shall be completed per the Detailed Specification for Progress Clause.
- (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 as described in the Detailed Specification for Progress Clause. 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

Stephen K. Postema, 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:

Stephen K. Postema, 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:

Stephen K. Postema, 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.

Section 44

CONTRACTOR'S AFFIDAVIT

The undersigned Contractor, _____, represents that on _____, 20____, it was awarded a contract by the City of Ann Arbor, Michigan to _____ under the terms and conditions of a Contract titled _____. The Contractor represents that all work has now been accomplished and the Contract is complete.

The Contractor warrants and certifies that all of its indebtedness arising by reason of the Contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the project, as well as all other claims arising from the performance of the Contract, have been fully paid or satisfactorily settled. The Contractor agrees that, if any claim should hereafter arise, it shall assume responsibility for it immediately upon request to do so by the City of Ann Arbor.

The Contractor, for valuable consideration received, does further waive, release and relinquish any and all claims or right of lien which the Contractor now has or may acquire upon the subject premises for labor and material used in the project owned by the City of Ann Arbor.

This affidavit is freely and voluntarily given with full knowledge of the facts.

Contractor Date

By _____
(Signature)

Its _____
(Title of Office)

Subscribed and sworn to before me, on this _____ day of _____, 20____
_____, _____ County, Michigan

Notary Public
_____ County, MI
My commission expires on:

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 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

DETAILED
SPECIFICATION
FOR
**COORDINATION AND COOPERATION
WITH OTHERS AND
WORK BY
OTHERS**

The Contractor is reminded as to the requirements of article 104.08 of the 2020 edition of the MDOT Standard Specifications, "Cooperation by the Contractor."

The Contractor shall directly coordinate his/her work with the City of Ann Arbor.

The Contractor is hereby notified that the City of Ann Arbor Signs and Signals Unit will be installing signage along the project corridor near the end of the construction sequence.

DTE will be removing existing light poles on the south side of the road and installing temporary lighting prior to the beginning of construction. DTE will be installing new conduit and light poles on the south side of Russell Street during the contract period.

No additional compensation will be paid to the Contractor, and no adjustments to contract unit prices will be made, due to delays and/or the failure of others in the performance of their work, nor for delays due to the encountering of existing utilities that are, or are not, shown on the Plans.

The following Utility Owners may have overhead and/or underground facilities located within the Right- of-Way:

The City of Ann Arbor
DTE - MichCon (Michigan
Consolidated Gas Company) DTE -
Edison (Detroit Edison Company)
Comcast
AT&T
MCI/Veri
zon
Business

**On all projects:
"3 Working Days before you Dig - Call MISS DIG - Toll Free" Phone No. 1-800-482-7171.**

The Owners of public or private utilities which will not interfere with the completed project and which do not present a hazard to the public or an extraordinary hazard to the Contractor's operations will not be required to move their facilities on or from the street right-of-way.

Stoppages created solely by the operations of the utility companies which delay utility revisions on any portion of this project may be considered as a basis of claim for an extension of time for project completion.

Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
DISPOSING OF EXCAVATED MATERIAL

The Contractor shall dispose of, at the Contractor's expense, all excavated material. Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
**INSURANCE
REQUIREMENTS**

In addition to the insurance requirements noted in Section 28 of the General Conditions, the following agencies must be listed as additional insured:

DETAILED
SPECIFICATION
FOR
**PROTECTION OF
UTILITIES**

Damages to utilities by the Contractor's operations shall be repaired by the utility owner at the Contractor's expense.

Delays to the work due to utility repairs are the sole responsibility of the Contractor.

The Contractor shall keep construction debris out of utilities at all times. The Contractor shall be back charged an amount of \$50.00 per day for each manhole/inlet/utility pipe that contains construction debris caused as a result of the Contractor's (including subcontractors and suppliers) work.

The Contractor is solely responsible for any damages to the utilities or abutting properties due to construction debris.

Certain sanitary and storm sewers within the influence of construction may have been cleaned and videotaped prior to construction. The City may also choose to videotape utility line(s) during or after the work of this Contract to inspect them for damages and/or construction debris. If such inspection shows damage and/or debris, then all costs of such inspection, cleaning, repairs, and etc, shall be the Contractor's sole responsibility. If such inspection is negative, the City will be responsible for the costs of such inspection.

Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
**SOIL EROSION
CONTROL**

The Contractor shall maintain and remove soil erosion and sedimentation control measures, including but not limited to, fabric filters at all drainage structures, all in accordance with all applicable City (and other governmental agencies) codes and standards, as directed by the Engineer, Supervising Professional, as detailed in the Standard Specifications, and as shown on the Plans.

Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
**VACUUM TYPE STREET AND UTILITY STRUCTURE
CLEANING EQUIPMENT**

The Contractor shall furnish and operate throughout the construction period, vacuum type street cleaning and utility structure cleaning equipment (Vac-All, Vector, etc.) approved by the Engineer, as and when directed by the Engineer for dust control, for dirt/debris control, and for street cleaning immediately prior to, and for street and utility structure cleaning after any and all paving. The cleaning equipment shall be of sufficient power to remove dust, dirt, and debris from the pavement and from utility structures in and adjacent to the construction area.

Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
SITE CLEAN-UP

Immediately after completion of construction, the Contractor shall clean the entire area within the influence of construction, including but not limited to all pavement, sidewalks, lawn areas, and underground utility structures, of all materials which may have accumulated prior to or during the construction.

Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
MATERIALS AND SUPPLIES CERTIFICATIONS

The following materials and supplies shall be certified by the manufacturer or supplier as having been tested for compliance with the Specifications:

- HMA materials
- Hot-poured Joint Sealants
- Cements, coatings, admixtures
and curing materials Sands and
Aggregates
- Steel and Fabricated metal
- Portland Cement
- Concrete Mixtures
- Reinforcing Steel
for Concrete
- Reinforcing Fibers
for Concrete
- Pre-cast
Concrete
products
- Sanitary
Sewer Pipe
- Storm
Sewer Pipe
- Water
Main
Pipe
- Corrugat
ed Metal
Pipe
- High Density
Polyethylene
Pipe Timber for
retaining walls
- Modular Concrete Block
for retaining walls Edge
Drain and Underdrain
Pipe
- Geotextile Filter Fabric and Stabilization Fabric/Grids

The Contractor shall submit all certifications to the Engineer for review and approval a minimum of three business days prior to any scheduled delivery, installation, and/or construction of same.

Costs for this work will not be paid for separately, but shall be included in the bid price of the Contract Item "General Conditions."

DETAILED
SPECIFICATION
FOR
CONTRACT DRAWINGS/PLANS

The Contractor shall carefully check and review all Drawings/Plans and advise the Engineer of any errors or omissions discovered. The Drawings/Plans may be supplemented by such additional Drawings/Plans and sketches as may be necessary or desirable as the work progresses. The Contractor shall perform all work shown on any additional or supplemental Drawings/Plans issued by the Engineer.

DETAILED
SPECIFICATION
FOR EXISTING
SOIL BORING AND PAVEMENT SECTION DATA

Data pertaining to existing soil borings and pavement sections which may be included in these Contract Documents are provided to help the Engineer and Contractor determine the soil conditions existing within the construction area. The City in no way guarantees existing conditions to be the same as shown in the data. The Contractor is solely responsible for any and all conclusions he/she may draw from the data.

DETAILED
SPECIFICATION
FOR
**WORKING IN THE
RAIN**

The Contractor shall not work in the rain unless authorized in writing by the Engineer. The Engineer may delay or stop the work due to threatening weather conditions.

The Contractor shall not be compensated for unused materials or downtime due to rain, or the threat of rain.

The Contractor is solely responsible for repairing all damages to the work and to the site, including road infrastructures, road subgrades, and any adjacent properties, which are caused as a result of working in the rain.

DETAILED
SPECIFICATION
FOR
**WORKING IN THE
DARK**

The Contractor shall not work in the dark except as approved by the Engineer and only when lighting for night work is provided as detailed elsewhere in this contract.

The Engineer may stop the work, or may require the Contractor to defer certain work to another day, if, in the Engineer's opinion, the work cannot be completed within the remaining daylight hours, or if inadequate daylight is present to either properly perform or inspect the work.

The Contractor will not be compensated for unused materials or downtime, when delays or work stoppages are directed by the Engineer for darkness and/or inadequate remaining daylight reasons.

The Contractor is solely responsible for repairing all damages to the work and to the site, including road infrastructures, road subgrades, and any adjacent properties, which are caused as a result of working in the dark.

DETAILED
SPECIFICATION
FOR
QUANTITIES AND UNIT PRICES

Quantities as given are approximate and are estimated for bidding purposes. Quantities are not guaranteed and may vary by any amount. While it is the City of Ann Arbor's intent to complete the project substantially as drawn and specified herein, quantities may be changed or reduced to zero for cost savings or other reasons. **The City of Ann Arbor reserves the right to change the quantities and no adjustment in unit price will be made for any change in any quantity.**

DETAILED
SPECIFICATION
FOR
GENERAL CONSTRUCTION NOTES

The following notes pertain to all Plan sheets issued as part of this Contract, and these notes shall be considered part of each Plan sheet or Detailed Information Sheet.

1. All work shall conform to latest revision of the City Standard Specifications.
2. The Contractor shall maintain access to all drives throughout the course of construction. Drives shall never be closed during non-working hours, unless otherwise authorized in writing by the Engineer.
3. The Contractor shall completely restore all existing site features to better than, or equal to, their existing condition.
4. The Contractor shall be aware that there are above-ground and below-ground utilities existing in and on these streets which include, but are not limited to: gas mains and service leads; water mains and service leads; storm sewer mains and service leads; sanitary sewer mains and service leads; telephone poles, wires, cables and conduits; electrical poles, wires, cables and conduits; cable television wires, cables and conduits, and other various utilities. The Contractor shall conduct all of its work so as not to damage or alter in any way, any existing utility, except where specified on the Plans or where directed by the Engineer. The City has videotaped and cleaned all sanitary and storm sewers, including storm sewer inlet leads, and has found all of these facilities to be in good condition, with the exception of those shown on the Plans for repairs or replacement.
5. The Contractor is solely responsible for any delays, damages, costs and/or charges incurred due to and/or by reason of any utility, structure, feature and/or site condition, whether shown on the Plans or not, and the Contractor shall repair and/or replace, at its sole expense, to as good or better condition, any and all utilities, structures, features and/or site conditions which are impacted by reason of the work, or damaged by its operations, or damaged during the operations of its subcontractors or suppliers.
6. No extra payments or adjustments to unit prices will be made for damages, delays, costs and/or charges due to existing utilities, structures, features and/or site conditions not shown or being incorrectly shown or represented on the Plans.

7. The Contractor is solely responsible for furnishing the appropriate equipment and qualified personnel for the size and condition of the site and the requirements of the proposed work. Damage to buildings, amenities, utilities, paving, and facilities within and adjacent to the work area, and to work already performed by the Contractor shall be the responsibility of the Contractor to repair as needed, at no cost to the project.

DETAILED
SPECIFICATION
FOR
**CONCRETE
DURABILITY**

DESCRIPTION

The Contractor shall furnish a Portland cement concrete mixture for this project that has been tested under this specification and shown to be resistant to excessive expansion caused by alkali-silica reactivity (ASR) and provides adequate air entrainment for freeze thaw durability. The Contractor shall construct the project with practices outlined in this specification.

MATERIALS

Submit a job mix formula (JMF) to the Engineer for approval prior to concrete work commencing. The materials provided for use on this project shall conform to the following requirements:

Portland cement	ASTM C 150
Fine Aggregate	ASTM C 33*
Coarse Aggregate	ASTM C 33*
Fly Ash, Class F	ASTM C 618 Slag Cement, Grade 100, 120 ASTM C 989
Silica Fume	ASTM C 1240
Blended Cements	ASTM C-595 Air Entraining Admixtures ASTM C-260
Chemical Admixtures	ASTM C-494
White Membrane Cure	ASTM C-309 Type 2

* Fine and coarse aggregates shall consist of natural aggregates as defined in the 2020 MDOT Standard Specifications Section 902.02.A.

The Contractor shall provide documentation that all materials to be incorporated into proposed mixed designs meet the requirements of this section.

Portland Cement

Furnish Type IL Portland cement in accordance with section 901 of the MDOT Standard Specifications for Construction meeting the chemical and physical requirements specified in ASTM C595/C595M, Standard Specifications for Blended Hydraulic Cements. Ensure the Type IL Portland

cement proposed for substitution is from the same Approved Manufacturer as the Type I Portland cement in the approved JMF.

At least 7 days prior to concrete production, the concrete producer must provide test data (specified below) generated from a four cubic yard (minimum) trial batch of concrete using Type IL Portland cement for the Engineer's review and approval. The trial batch must represent a current approved JMF for either a standard MDOT Grade 3500, Grade 3500HP, Grade 4500, or Grade 4500HP concrete mixture produced using Type I Portland cement, as described in section 1004 of the Standard Specifications for Construction. Ensure the materials and mixture proportions for the Type IL JMF are the same as those documented in the above-mentioned JMF using Type I Portland cement. Minor adjustments to chemical admixture dosages are permitted in efforts to achieve the specified fresh concrete properties.

Trial batch compliance for applications other than Portland cement concrete mixtures will be in accordance with the contract.

The Engineer will review the trial batch test data to determine if the fresh and hardened concrete properties of the Type IL JMF meet specification requirements for the respective MDOT Grade of concrete represented by the trial batch. If the Engineer determines that the trial batch test data are in conformance with specification requirements, then the Type IL Portland cement will be permitted to be substituted in lieu of the Type I Portland cement for all approved concrete mixtures generated at the concrete production facility for the project. If the Engineer determines that the trial batch test data do not meet specification requirements for the respective MDOT Grade of concrete, the Contractor will not be permitted to substitute Type IL Portland cement in lieu of Type I Portland cement. Mix design and JMF documentation for concrete mixtures using Type IL Portland cement will then be required in accordance with subsection 1003.03.C of the Standard Specifications for Construction or the contract, where applicable.

Once Type IL Portland cement is approved for use on the project, reinstatement of Type I Portland cement into the JMF is not permitted. Substitution of other material types or sources, including admixtures, as documented in the initial Type I JMF is not permitted.

Alkali-Silica Reactivity

The Contractor shall supply to the Engineer preliminary concrete mix designs including a list and location of all suppliers of concrete materials. The Contractor shall evaluate the mixtures for the potential for excessive expansion caused by ASR and provide documentation to the Engineer. The Contractor's evaluation shall include a review of any previous testing of the material sources intended to be used for both the fine and coarse aggregates

for the concrete mixtures. The previous testing may be from other projects or records provided by the material suppliers.

Aggregates shall be tested under ASTM C-1260. If the expansion of the mortar bars is less than 0.10%, at 14 days, the aggregates shall be considered innocuous and there are no restrictions for ASR mitigation required with this material.

Previous aggregate test data may be used. If no previous test data is available, for the concrete mix, that shows that it is resistant to ASR, a concrete mixture that will mitigate the potential for ASR must be designed using either method 1 or 2 as described below.

Method 1. Substitution of a portion of the cement with Class F Fly Ash, Slag Cement Grade 100 or 120 or a ternary mix (blended cement) containing a blend of Portland cement and slag cement, or Class F fly ash, or silica fume.

The maximum substitution of cement with the fly ash permitted shall be 25% by weight of total cementitious material (cement plus fly ash). Additional requirements for the Fly Ash, Class F are that the Calcium Oxide (CaO) percent shall be less than 10 % and the available alkalis shall not exceed a maximum of 1.5%. A copy of the most recent mill test report shall be submitted to verify. Note: a Class C fly ash with a minimum total oxides ($\text{SiO}_2 + \text{Al}_2\text{O}_3 + \text{Fe}_2\text{O}_3$) of 66% and a minimum SiO_2 of 38% may be used in lieu of Type F fly ash.

The maximum substitution of cement with the Slag Cement permitted shall be 40% by weight of total cementitious material (cement plus Slag Cement). The minimum replacement rate with Slag Cement shall be 25%.

For a ternary blend the total replacement of supplementary cementitious materials is 40% with a blend consisting of a maximum of 15% type F fly ash, and/or 8% silica fume and/or slag cement.

For method 1, the effectiveness of the proposed mix combination to resist the potential for excessive expansion caused by ASR shall be demonstrated using current or historic data. To demonstrate the effectiveness of the proposed mix the Contractor shall construct and test mortar bars per ASTM C1567 (14 day test) using both the fine and coarse aggregate along with the proposed cementitious material for the concrete mixture. If a mortar bar constructed of these materials produces an expansion of less than 0.10%, concrete mixture will be considered to be resistant to excessive expansion due to ASR.

If a mortar bar constructed produces an expansion of 0.10% or greater, concrete mixtures containing these materials shall not be considered resistant to the potential for excessive expansion due to ASR and shall be rejected. Additional testing, including alternate proportions or different materials will be required.

Method 2. Use low alkali cement and maintain the total alkali content from the cementitious at no more than 3.0 lbs/cyd (Na₂Oeq). The total alkali contribution is calculated by the quantity contained in the Portland cement only.

Requirements for Low Alkali Cement are that the alkali content does not exceed 0.60% expressed as Na₂O equivalent. Equivalent sodium oxide is calculated as: (percent Na₂O + 0.658 x percent K₂O).

For either method 1 or 2, if the Contractor intends to change any component material supplied after the mix design has been approved all concrete work will be suspended with no cost to the project or extensions of time, unless approved, until evaluation of the new mixtures and testing of the new materials demonstrates that it is resistant to excessive expansion due to ASR.

The Engineer and Contractor shall monitor the concrete that is delivered to the project site so as to insure that the approved mix design is being followed. The supplier shall include on the delivery ticket for each batch of concrete delivered to the job, the identification and proportions of each material batched.

When concrete is placed during cold weather, defined for the purposes of this Detailed Specification to be, air temperatures below 40° F, the use of accelerators, heated aggregates, silica fume and/or additional forms of cold weather protection will be required. Cold weather will not eliminate the requirement for furnishing and placing a concrete mix that is considered resistant to ASR attack.

Prior to cool weather placement, defined for the purposes of this detailed specification to be, air temperatures between 40° and 60° F, the set time of the proposed mix shall be verified under anticipated field conditions. This information shall be used when scheduling pours and saw crews.

Air Entrainment

Air entrainment shall be accomplished by addition of an approved air entraining agent. Air content as determined by ASTM C 231 or ASTM C 173, shall be determined on each day of production as early and as frequently as necessary until the air content is consistently acceptable. If during the period of time while adjustments are being made to the concrete to create a mixture

that is consistently acceptable, concrete is produced that does not meet the requirements of this Detailed Specification, the Engineer may reject the material and direct it to be removed from the jobsite. Any rejected material shall be removed from the jobsite at the Contractor's sole expense. Quality Control testing performed by the Contractor to ensure compliance with the project specifications shall be performed on the grade ahead of the placement operation.

Paver placement: During production, the plastic concrete material shall be tested for acceptance at a point ahead of the paver. The air content of the concrete mixture that the Contractor shall provide shall be known as the Acceptance Air Content (AAC). The Contractor shall also provide additional entrained air in the concrete mixture to account for the air loss which occurs in the concrete mixture experienced during transportation, consolidation and placement of the concrete. The "air loss" shall be added to the air content of the concrete mixture as established on the approved concrete mix design. The AAC for the project will be 6.0% plus an amount equal to the air loss.

For up to the first four loads, the air content measured on-site prior to placement shall be at least 8.0% and no more than 12.0%. To establish the initial AAC on the first day of paving, the air content of the first load shall be tested at the plant. After initial testing at the plant the Contractor shall provide at least two sample sets to determine the actual air loss during placement. A sample set shall consist of two samples of concrete from the same batch, one taken at the point of discharge and the other from the in-place concrete behind the paver. The air loss from the two sample sets shall be averaged and added to 6.0% to establish the AAC (rounded to the next higher 0.5%). After the testing and adjustment procedure(s) have been completed, the project acceptance air tests shall be taken prior to placement. The Contractor shall provide concrete to the jobsite that has an air content of plus 2.0%, or minus 1.0%, of the AAC.

After the AAC has been established, it shall be verified and/or adjusted through daily checks of the air loss through the paver. The Contractor shall check the air loss through the paver a minimum of two times a day. A Revised AAC shall be required to be established by the Contractor if the average air loss from two consecutive tests deviates by more than 0.5% from the current accepted air loss. The testing operations performed by the Contractor to establish a revised AAC shall be performed to the satisfaction of the Engineer. The Contractor shall be solely responsible for any delays and/or costs that occur to the project while establishing revised AACs.

Hand placed concrete: The air content for non-slip-form paving shall be 7.0% plus 1.5%, or minus 1.0%, at the point of placement.

CONSTRUCTION METHODS

Aggregate Control

Gradation control – The supplier shall provide a detailed stockpile management plan, describing their process control procedure for shipping, handling, and stockpiling of each aggregate including workforce training.

Moisture control – All aggregate materials must be conditioned to a moisture content of not less than saturated surface dry (SSD) prior to batching. A watering process using an effective sprinkler system designed and operated by the Contractor shall be required on all coarse aggregate material stockpiles.

The Contractor shall provide verification that these processes have been performed by the supplier. The Engineer reserves the right to independently verify that the supplier has complied with these standards.

Mixing

Central mix plants - The total volume of the batch shall not exceed the designated size of the mixer or the rated capacity as shown on the manufacturer's rating plate.

Drum Mix Plants: After all solid materials are assembled in the mixer drum; the mixing time shall be a minimum of 60 seconds and a maximum of 5 minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall start after the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. Any additional slump water required shall be added to the mixing chamber by the end of the first 25% of the specified mixing time. Mixers shall not be used if the drum is not clean or if the mixing blades are damaged or badly worn

Ribbon mixers: After all solid materials are assembled in the mixer; the mixing time shall be a minimum of 30 seconds and a maximum of 2.5 minutes. The mixing time may be decreased if the ASTM C-94 11.3.3 mixer efficiency tests show that the concrete mixing is satisfactory. The Engineer may require an increase in the minimum mix time if the mixer efficiency test determines that the concrete is not being mixed satisfactorily. The minimum mixing time shall be indicated by an accurate

timing device which is automatically started when the mixer is fully charged. Mixers shall be operated at the speed recommended by the manufacturer as mixing speed. The mixer shall be charged so that a uniform blend of materials reached the mixer throughout the charging cycle. After any additional slump water is added to the mixing chamber the mixing shall continue for a minimum of 10 seconds. Mixers shall not be used if the mixer is not clean or if the mixing blades are damaged or badly worn.

Truck Mixers -The capacities and mixing capabilities shall be as defined in ASTM C 94, and each unit shall have an attached plate containing the information described therein. The plate may be issued by the Truck Mixer Manufacturer. The mixer capacity shall not be exceeded, and the mixing speeds shall be within the designated limits. Truck mixers shall be equipped with a reliable reset revolution counter. If truck mixers are used for mixing while in transit, the revolution counter shall register the number of revolutions at mixing speed.

An authorized representative of the concrete producer shall certify that the interior of the mixer drum is clean and reasonably free of hardened concrete, that the fins or paddles are not broken or worn excessively, that the other parts are in proper working order, and that the unit has been checked by the representative within the previous 30 calendar day period to substantiate this certification. The current, signed certification shall be with the unit at all times.

The required mixing shall be between 70 and 90 revolutions. The mixing shall be at the rate designated by the manufacturer and shall produce uniform, thoroughly mixed concrete.

The Engineer may inspect mixer units at any time to assure compliance with certification requirements, and removal of inspection ports may be required. Should the Engineer question the quality of mixing, the Engineer may check the slump variation within the batch. Should the slump variation between two samples taken, one after approximately 20% discharge and one after approximately 90% discharge of the batch, show a variation greater than 3/4 inch (20 mm) or 25% of the average of the two, whichever is greater, the Engineer may require the mixing to be increased, the batch size reduced, the charging procedure be modified or the unit removed from the work.

The practice of adding water on the site shall be discouraged. After the slump of the concrete in the first round of trucks has been adjusted on-site, the amount of water added at the plant shall be adjusted accordingly for that day's work. All additions of water on site shall be approved by the Engineer.

Curing

Apply liquid curing compound in a fine atomized spray to form a continuous, uniform film on the horizontal surface, vertical edges, curbs and back of curbs immediately after the surface moisture has disappeared, but no later than 30 minutes after concrete placement. With approval of the Engineer, the timing of cure application may be adjusted due to varying weather conditions and concrete mix properties.

The cure system shall be on site and tested prior to concrete placement.

Apply a curing compound at a rate of application not less than 2 gallons per 25 square yards. The Contractor shall keep the material thoroughly mixed per the Manufacturer's recommendations. The curing compound shall not be diluted.

The finished product shall appear as a uniformly painted solid white surface. Areas exhibiting a blotchy or spotty appearance shall be recoated immediately.

COMPLIANCE WITH STANDARDS

The Engineer will review and approve all material test reports and mix designs supplied by the Contractor before any placement of concrete. The Engineer will visually inspect the placed concrete and review the concrete test reports prior to final acceptance.

Acceptance sampling and testing will be performed using the sampling method and testing option selected by the Engineer. Acceptance testing will be performed at the frequency specified by the Engineer. Quality control measures to insure job control are the responsibility of the Contractor. The Engineer's testing and/or test results will not relieve the Contractor from his/her responsibilities to produce, deliver, and place concrete that meets all project requirements. The Engineer's test results are for acceptance purposes only.

If the results of the testing are not in compliance with the project specifications, the Engineer shall determine appropriate corrective action(s). Time extensions will not be granted to the Contractor during the time that the Engineer is determining the necessary corrective actions.

If, in the Engineer's judgment, the rejected material must be replaced, the material in question will be removed and replaced at the Contractor's sole expense. The removal costs will be deemed to include all relevant and associated costs including, but not limited to; re-mobilization, traffic control, re-grading the aggregate base course, if required, placement of material meeting the project specifications, and all other expenses. Time extensions

will not be granted to the Contractor for any required repair work to meet the requirements of this specification.

If the Engineer decides that the material in question can remain in place, an adjustment to the contract unit price(s) may be made of up to 100% of the bid price(s) for the affected items of work.

MEASUREMENT AND PAYMENT

The cost associated with complying with the requirements as described herein, including any required remedial action(s), shall be included in the cost of other items of work and shall not be paid for separately.

CITY OF ANN
ARBOR NOTICE
TO BIDDERS
**EXISTING IN SITU
SOILS**

The Contractor shall be aware that soils within the City of Ann Arbor and Washtenaw County contain levels of naturally-occurring, regulated, elemental metals.

The City of Ann Arbor is unaware of any previous activities that would have contaminated the existing soils by a hazardous substance as a result of human activity.

In accordance with the applicable project requirements, all excavated material shall become the property of the Contractor. Any excavated material that cannot be incorporated into the project work, in accordance with the material requirements of the work being performed, must be properly disposed of off-site by the Contractor. Consequently, in-situ excavated soils that do not exhibit odors, discoloration, or other indications of contamination are not required to be disposed of in a landfill and may be disposed of by the Contractor by the method of their choice. The City of Ann Arbor suggests a disposal method that minimizes future human contact with the soil or the soil's contact with a water course or ground water sources. The Contractor shall ultimately be responsible for any disposal method they choose.

The Contractor's submittal of a bid for this project shall be considered prima facie evidence that they have considered these facts and have included all necessary resources to perform all work of this project and to properly dispose of excavated soils from this project off-site.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
UTILITIES COORDINATION

WT:CT:RJM

1 of 4

05/16/22

The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Article 104.08 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in Article 107.12 of the 2020 edition of the MDOT Standard Specifications for Construction.

The following utility owners have facilities located within the rights-of-way surrounding the project:

DTE Energy – Gas
3150 E. Michigan Ave
Ypsilanti Township, MI 48198
Contact:
Darryl Ellington 313-995-6078
Zach White 313-405-6024

ATT – Phone
550 South Maple Road
Ann Arbor, MI 48103
Contact:
Mike Jarema 734-277-7855
Toya Troupe 734-996-2167

DTE Energy – Electric
Western Wayne Service Center
8001 Haggerty Road
Belleville, MI 48111
Contact: Anthony Ignasiak 734-397-4112

Comcast - Cable
27800 Franklin Road
Southfield, MI 48034
Contact: Ron Sutherland 313-999-8300

MCI – Fiber Optic
2800 North Glenfille Road
Richardson, TX 75082
Contact: Dean Boyers 972-729-6016

City of Ann Arbor
4251 Stone School Road
Ann Arbor, MI 48108

Contact 734-794-6350:
Dan Wooden – Water
Travis Conley – Sanitary
Kevin Schneider - Storm
Matt Waldsmith - Forestry
Contact 734-794-6361
Marc Moreno – Signs & Signals

DTE Energy – Street Lighting
8001 Haggerty Road
Bellville, MI 48111
Contact: Lance Alley 734-397-4188

Windstream- Fiber Optics
1295 S Linbden Road, Suite B
Flint, MI 48532
Contact: Greg Serich 810-244-3500

Consumers Energy
1000 Grand Oaks Dr.
Howell, MI 48843
Contact: Bob McLachlan 517-242-7878

Lumen
19675 W 10 Mile Road
Southfield, MI 48075
Contact: Dave Huckfeldt 517-812-2592

Fiberlink, Inc
PO Box 701
Lapeer, MI 48446
Contact:
Tina Snoblen (810) 667-2891

University of Michigan
1201 Kipke Drive, Room 1080
Ann Arbor, MI 48109
Contact: Terry Ramsey 734-647-2031

For protection of underground utilities, the Contractor shall call “MISS DIG” toll free at 1-800-482-7171 or call 811 a minimum of 3 working days prior to excavation within the project limits. The Contractor must also notify utility owners who may not be part of the “MISS DIG” system.

The Contractor shall also contact and notify the University of Michigan to locate and mark their utilities that may exist within the project limits.

The Contractor shall notify the City of Ann Arbor a minimum of 3 days prior to beginning construction.

The owners of public or private utilities which will not interfere with the completed project and which do not present a hazard to the public or an extraordinary hazard to the Contractor's operations will not be required to move their facilities on or from the street right-of-way or project limits.

Work By Others.- During the life of this contract, other public authorities and utility companies may be performing work within or adjacent to the project limits, including, but not limited to; construction of adjacent projects, underground utility work, permanent signing and traffic signals work, traffic control improvements, street maintenance and snow removal, etc. The Contractor shall cooperate and coordinate construction activities with these agencies in accordance with Article 104.08 of the 2020 edition of the MDOT Standard Specifications for Construction.

Existing Utilities, Site Features, and Investigations.- The existing utilities structures, features, and site conditions above and underground are indicated on the Drawings from the best available information. These include, but are not limited to; pipelines, conduits, and the like.

It is the Contractor's sole responsibility to perform their own site investigations and research and to incorporate in their bid sufficient amounts for all utilities coordination work.

If any utilities, structures, features, and/or site conditions are discovered or suspected by the Contractor to be different than indicated on the Drawings, the Contractor is obligated to notify the Engineer immediately in writing so an addendum may be issued and/or the bid date may be revised.

Agreements, permits, reports, and other investigations and information utilized in the development of the project are available for review by prospective bidders prior to submittal of their bid. Making this information available for review does not relieve the Contractor from the responsibility of performing their own site investigations, and the Contractor is responsible for any and all conclusions that are drawn from this data.

Electronic copies of the full versions of the available project documents can be obtained by contacting:

City of Ann Arbor
Public Services Area - Project Management Services Unit
301 East Huron Street; P.O. Box 8647
Ann Arbor, MI 48107-8647

8:00 a.m. to 5:00 p.m. (only)

The Contractor's submittal of a bid shall be considered prima facie evidence that they have reviewed all available information and performed all needed investigations and that their bid contains the needed resources to complete the project for the lump sum and unit prices contained herein.

Reference the Detailed Specification for "Extension of Time, Additional Compensation" for provisions regarding delays.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROGRESS CLAUSE

WT:CT

1 of 3

04/13/22

DESCRIPTION

Examination of Plans, Specifications, and Work Site: Bidders shall carefully examine the Bid Form, plans, specifications and the work site until the Bidder is satisfied as to all local conditions affecting the contract and the detailed requirements of construction. The submission of the bid shall be considered prima facie evidence that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and all requirements of the contract.

This contract requires storm sewer, minor water main, concrete curb and gutter, concrete sidewalk, concrete drive approaches, concrete paving, bituminous paving and landscaping work on Third and Mosley streets.

The entire work under this Contract shall be completed in accordance with, and subject to, the scheduling requirements as outlined below, and all other requirements of the Contract Documents.

1. The Contractor shall not begin the work before the applicable date(s) as describes herein without approval from the Project Engineer, and in no case before the receipt of the fully executed Contract. City Council approval is expected on **August 4, 2022**.
2. The Contractor shall begin the work of this project on or before **August 5, 2022**, and only upon receipt of the fully executed Contract and Notice to Proceed. Appropriate time extensions shall be granted if the Notice to Proceed is delayed beyond this date.
3. All contract work must be substantially complete and open to traffic by **December 9, 2022** or within **one hundred twenty (120)** calendar days from the date specified in the Notice to Proceed. Substantial completion includes, but is not limited to: installation of storm sewer system, water service, hydrant, curb and gutter, sidewalk, driveway approaches, concrete paving and HMA paving. and complete all the remaining work under this Contract for Russell Street including, but not limited to permanent placement of hot mix asphalt and/or concrete, and the removal of any and all traffic control devices. Final completion of the project, including landscaping acceptance will be on **November 15, 2023**.

Time is of the essence in the performance of the work of this contract. The Contractor is expected to mobilize sufficient personnel and equipment and work throughout all authorized hours to complete the project by the final completion date. Should the Contractor

demonstrate that they must work on some Sundays in order to maintain the project schedule, they may do so between the hours of 9:00 a.m. and 5:00 p.m. with prior approval from the City. There will be no additional compensation due to the Contractor for work performed on Sundays.

Prior to the start of any construction, the Contractor shall submit a detailed schedule of work for the Engineer's review and approval. Work shall not be started until a schedule is approved in writing by the Engineer. The proposed schedule must fully comply with the scheduling requirements contained in this Detailed Specification. The Contractor shall update the approved work schedule upon request by the Engineer and present it to the Engineer within seven days of said request.

The Engineer may delay or stop the work due to threatening weather conditions. The Contractor shall not be compensated for unused materials or downtime due to rain, or the threat of rain. The Contractor is solely responsible for repairing all damages to the work and to the site, including road infrastructures, road subgrades, and any adjacent properties, which are caused as a result of working in the rain.

The Contractor shall not work in the dark except as approved by the Engineer and only when lighting for night work is provided as detailed elsewhere in this contract. The Engineer may stop the work, or may require the Contractor to defer certain work to another day, if, in the Engineer's opinion, the work cannot be completed within the remaining daylight hours, or if inadequate daylight is present to either properly perform or inspect the work. The Contractor will not be compensated for unused materials or downtime, when delays or work stoppages are directed by the Engineer for darkness and/or inadequate remaining daylight reasons. The Contractor is solely responsible for repairing all damages to the work and to the site, including road infrastructures, road subgrades, and any adjacent properties, which are caused as a result of working in the dark.

Failure to complete all work as specified herein within the times specified herein, including time extensions granted thereto as determined by the Engineer, shall entitle the City to deduct from the payments due the Contractor, **\$1,00.00** in Liquidated Damages, and not as a penalty, for delays in the completion of the work for each and every calendar day beyond the "Calendar Days to Complete" for each sub-phase, as required by this Detailed Specification.

Liquidated Damages will be assessed until the required work is completed in the current construction season. If, with the Engineer's approval, work is extended beyond seasonal limitations, the assessment of Liquidated Damages will be discontinued until the work is resumed in the following construction season.

Work day, hour, and other work restrictions imposed by the City of Ann Arbor:

The work hours described may be modified or changed by the Engineer due to Holidays, Special Events, or Traffic Volumes.

Contractors operations shall be limited by local municipality work time, noise, and dust ordinance unless approved by the local municipality and the Engineer in writing, as shown below:

- Monday – Friday: 7am-8pm
- Saturday: 7am-8pm; Notice given to City of Ann Arbor no less than 48 hours and no more than 5 days.
- Sunday: only with approval from the City of Ann Arbor
- No work may be done on Holidays

No work, unless approved by the Engineer, shall be performed during:

- Labor Day
 - 3:00 pm Friday September 2, 2022 – 7:00 am Tuesday, September 6, 2022
- Thanksgiving
 - 3:00 pm Wednesday, November 23, 2022 – 7:00 am Monday, November 28, 2022

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
**MAINTAINING TRAFFIC
AND
CONSTRUCTION SEQUENCING**

WT:CT:RJM

1 of 5

05/16/22

General.- Traffic shall be maintained in accordance with Sections 104.11, 810, 811, 812, 919, and 920 of the Michigan Department of Transportation (MDOT), 2020 Standard Specifications for Construction and in accordance with the 2011 edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) as amended, except as herein provided.

The Contractor shall furnish, erect, maintain and, upon completion of the work, remove all traffic control devices and barricade lights within the project and around the perimeter of the project for the safety and protection of through and local traffic. This includes, but is not limited to; advance, regulatory, and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the project and at right-of-way lines of intersecting streets; and moving traffic control devices for construction operations.

Materials.- The materials and equipment shall meet the requirements specified in the sections designated of the MDOT 2020 Standard Specifications for Construction and all Detailed Specifications contained in these Contract Documents.

Permits.- Prior to the start of construction, the Contractor shall obtain a "Right-of-Way" Permit from City of Ann Arbor Planning and Development Services and a "Lane Closure" Permit from City of Ann Arbor Engineering. The fees for these permits will be waived. The lane closure permit must be obtained at least 48 hours in advance of any proposed street or lane closing.

Work Restrictions.- All tree removals and clearing must be performed between October 1st and March 31st to comply with environmental restrictions. Tree removals shall be removed prior to construction by the City of Ann Arbor.

Construction Influence Area (CIA).- The CIA shall include the area within the Right-of-way of Russell Street and portions of S. Maple Road. The CIA shall also include the affected portions of the private streets and driveways along, and contiguous with these roadways that contain advance warning and/or regulatory signs, pavement markings, plastic drums, traffic delineators, and all other project related traffic maintenance items.

In addition, the CIA shall include the rights-of-way of all roadway segments used for detours and all locations where the Contractor's traffic control devices, pavement markings and signs are used.

Police and Fire.- The Contractor shall notify local police, fire departments and emergency response units a minimum of three business days (72 hours) prior to the

closure of any roads, or traffic shifts causing restricted movements of traffic or restricted access.

Work Performed by City of Ann Arbor Signs and Signals Unit.-

Sign Reinstallation

As necessary during construction, the Contractor shall be responsible for logging the legend and location of any signs that:

1. Must be removed to facilitate the construction process;
2. Are to be permanently removed, or;
3. Are to be permanently relocated.

City of Ann Arbor Signs and Signals will remove and store the signs. After construction is complete, but before opening any roadway to traffic, Signs and Signals will reinstall all signs in their proper, permanent location. The City of Ann Arbor shall also install permanent No Parking Signs along the entire length of Russell Street within the project limits to prohibit on-street parking. To coordinate sign removal and installation/reinstallation, the Contractor shall notify the Signs and Signals Unit at least five (5) working days (Monday-Friday) in advance of when the sign work will need to be completed. It is the responsibility of the Contractor to ensure that City of Ann Arbor Signs and Signals Unit is scheduled, kept apprised of the progress of construction, and notified a second time immediately (4 working hours) prior to the need to complete the sign work. The removal and installation/reinstallation of all signs shall be completed by the City of Ann Arbor Signs and Signals Unit.

No additional or extra compensation will be paid for any delays caused by the City of Ann Arbor Signs and Signals Unit.

Maintenance of Traffic, General.- Unless otherwise indicated on the drawings, residential side streets shall not be closed to through traffic except during construction operations of short duration and only with written approval of the Engineer.

Mailboxes requiring relocation due to construction shall be removed and reset immediately by the Contractor in a temporary location approved by the Engineer and meeting the requirements of the United States Postal Service. This work shall be included in the contract pay item "Machine Grading, Modified, ____".

The Contractor shall not obstruct the remaining traffic lanes in any manner from 7:00 to 9:00 a.m. and from 3:30 to 6:00 p.m. At other times the temporary obstruction of traffic for loading and unloading of trucks will be permitted if the Contractor provides traffic regulators (flag persons) in conformance with Part VI of the MMUTCD. During temporary obstructions, a minimum of two traffic regulators are required. The cost of traffic regulators (flag control) shall be included in the contract pay item "Traffic Regulator Control."

The Contractor shall coordinate his operations with all Utilities, Contractors and/or sub-Contractors performing work on this and other projects within, or adjacent to, the Construction Influence Area (CIA).

Access to residences must be maintained at all times except during the period of concrete curb and approaches for private drives, and during HMA paving immediately adjacent to private drive approaches, at which time driveway closures shall occur only at the approval of the Engineer and shall be coordinated with each affected resident. Walks, driveways, and entrances to buildings shall not be blocked. Vehicular and pedestrian access shall be maintained to all properties.

Signs and Pavement Markings.- When lane closures are in place, the Contractor shall completely cover all conflicting warning, regulatory and guide signs in accordance with Section 812.03.D.2 of the Standard Specifications for Construction, 2020 edition, and all applicable details therein.

Sequence of Construction.- This Detailed Specification does not describe the full range of materials and processes needed to complete the work under this Contract. It is intended to indicate major project requirements and assist the Contractor in developing, for the review and approval of the Engineer, the Progress Schedule for the project. It is the Contractor's responsibility to review this sequence and all other supporting drawings and Detailed Specifications to determine, on their own, prior to submittal of a bid, a detailed construction process that follows this sequence. If the Contractor determines they cannot perform the work in this sequence, as indicated in the drawings and all other requirements indicated in the Contract Documents, they shall immediately present an alternative construction sequence and approach to the Engineer as part of their bid submittal. The alternative construction sequence will be subject to review and approval by the Engineer. No additional payment shall be provided to the Contractor due to changes to the construction sequence.

The Contractor must submit a detailed Progress Schedule at the Pre-construction Meeting. The Engineer will review the Progress Schedule and ask for any needed revisions in order to bring the Progress Schedule into conformance with the Contract Documents. Unless an alternative sequence is requested by the Contractor, and approved in writing by the Engineer, the work shall be performed in the order as indicated on the Progress Schedule. No work shall commence until such time as the progress schedule has been accepted by the Engineer.

This sequence of construction is intended to maximize work progress while minimizing damage in, on, and around the working areas of the project.

Some of the work tasks listed below may be performed concurrently, at the discretion of the Contractor, and as approved by the Engineer. Additional sequencing requirements may be specified elsewhere within the Contract Documents and/or Drawings. The work to be performed includes, but is not limited to, the following:

1. Audiovisual recording of the entire project site including Russell Street and the Russell/S. Maple Road intersection and right-of-way adjacent to the work zone, in accordance with Detailed Specification "Audiovisual Recording" and as required elsewhere in the Contract Documents.

2. Implementation of the required temporary traffic control devices and sidewalk closures in accordance with the Drawings, as detailed in the specifications, and as directed by the Engineer.

3. Implementation of soil erosion and sedimentation control (SESC) measures as indicated on the Drawings, as detailed in the specifications, and as directed by the Engineer. The Contractor shall install only those devices necessary to perform the work of the particular stage or to meet the appropriate federal, state, or local regulations.

4. Perform required clearing and removal of brush marked for removal and downed trees impacting work zones in accordance with the Drawings, as detailed in the specifications, and as directed by the Engineer. All required tree removals will be completed by the City of Ann Arbor prior to March 31st in order to comply with environmental restrictions. The Contractor shall remove any remaining brush or materials within the removal area at the time of construction.

5. Install hydrant and excavate and backfill for new water service lead.

6. Install storm sewer and outlet structures as shown on the plans.

7. Furnish, install and compact proposed aggregate, concrete curb and gutter, concrete sidewalk, concrete drives and HMA paving as called for on plans.

8. Perform clean-up and required restoration of the project site in accordance with the Drawings, as detailed in the specifications, and as directed by the Engineer.

9. Upon completion of the work and receipt of approval of the Engineer to re-open the roadway to vehicular traffic, remove all temporary traffic control devices and SESC measures.

Work Restrictions.- The Contractor shall plan their work in accordance with the requirements and restrictions herein, as described in other relevant Detailed Specifications, as indicated on the Drawings, and as directed by the Engineer.

1. The hours of work shall be as described in the City of Ann Arbor Public Services Department Standard Specifications.

Bituminous Paving.- The Contractor shall perform the work of this Contract while maintaining traffic in accordance Contract Documents as specified herein. No traffic shall

be allowed on newly placed asphalt surfaces until rolling has been satisfactorily completed and the surface has cooled sufficiently to prevent damage from traffic. This is to be accomplished by traffic regulators (flag persons) and by relocating traffic control devices to prevent traffic from entering the work area until such time that traffic can be safely maintained without damaging the new construction. The Contractor shall provide traffic regulators in sufficient number to maintain traffic as described herein, and to keep traffic off sections being surfaced, and provide for safe travel at all times as directed by the Engineer.

Each pressure distributor, paver and roller shall be equipped with at least one approved flasher light which shall be mounted on the equipment so as to give a warning signal ahead and behind.

For all phases of the project and for each lift of bituminous, the Contractor shall pave the main portion of the roadway and then pave the intersections and returns.

Temporary Pavement Markings.- The Contractor shall place temporary pavement markings Type NR, as directed by the Engineer, and in accordance with the requirements of the MMUTCD, when the final pavement markings are not placed prior to opening to traffic. These markings shall be removed prior to the installation of the final pavement markings. The installation and removal of these pavement markings shall be included in "Minor Traffic Devices."

Measurement and Payment.- All costs for complying with the requirements of this Detailed Specification will not be paid for separately, but shall be included in the bid price of the affected items of work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROTECTIVE FENCING

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of taking all reasonable measures to protect all existing trees and vegetation designated to remain and be protected within the project limits and the construction influence area, in accordance with Sections 201.03.A.2 and Section 808 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as specified herein. The work shall also consist of installing protective fencing at the limits of the construction area as shown on the plans or in areas directed by the Engineer.

b. Materials. - Fabric shall be orange, vinyl, snow fence material, 4 feet tall. Posts shall be 6 foot long, T-shaped, metal posts or 2 inch square hardwood stakes.

c. Means and Methods of Protection.- Install protective fence at the limits of the construction area as shown on the plans or as directed by the Engineer.

The Contractor shall not operate equipment within the tree protection fence of any existing tree without the approval of the Engineer.

Construction material, supplies, or equipment shall not be stockpiled or stored within the limits of the tree protection fence.

Vehicles and personnel are not permitted within the limits of the tree protection fence.

The Contractor shall not attach chains, cables, ropes, nails, or other articles to any tree at any time.

Tree roots exposed during construction that are 1-1/2 inch or greater in diameter must be pruned. All pruning operations shall be reviewed and approved by the Engineer. All root pruning shall be performed with sharp tools and shall provide clean cuts that do not unnecessarily damage the remaining bark or root. The Contractor shall not perform any backfilling operations until all root maintenance has been performed.

Any damage to trees owned by the City of Ann Arbor or other trees designated to be protected due to the Contractor's activities or activities of the Contractor's subcontractors or suppliers shall be repaired under the direction of the City Forester by an approved forestry specialist. The costs of these repairs shall be the sole responsibility of the Contractor.

Should the Contractor's operations damage a plant's roots to the extent that it must be removed, the Contractor shall either replace the plant with a commensurate number of plants, 2½" caliper trees of the species as determined by the City, or compensate the City of Ann Arbor for the cash value of the plant or tree as determined by the City of Ann Arbor's Forester. The City of Ann Arbor shall be solely responsible for determining which

compensation method is used.

The City Forester shall supervise the replacement of any trees at the sole expense of the Contractor.

Remove tree protection fence when directed by the Engineer.

d. Measurement and Payment.- The completed work shall be paid for at the contract unit price for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Protective Fencing.	Foot

“Protective Fencing will be measured in length, by feet of protective fence used, and will be paid for at the contract unit price which shall be payment in full for all labor, materials, and equipment needed to accomplish this work. No additional payment will be made for maintenance or reinstallation of fence during the construction period. No additional payment will be made for repair or replacement of vegetation as noted above.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CERTIFIED PAYROLL COMPLIANCE AND REPORTING

WT:CT:RJM

1 of 4

05/16/22

a. Description.- This specification 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 provided 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 measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
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
DETAILED SPECIFICATION
FOR
GENERAL CONDITIONS, MAX. \$_____

WT:CT:RJM

1 of 3

05/16/22

a. **Description.**- This work shall consist of performing all needed preparatory work and operations needed to begin the work of the project. All elements of this item of work are to be performed in accordance with the City of Ann Arbor Standard Specifications for Construction (current edition), as shown on the plans, and as directed by the Engineer.

b. **Materials.**- None specified.

c. **Methods of Construction.**- This item shall include all work described and required by the Plans and Specifications for which no item of work is listed in the Bid Form, including but not limited to:

- Scheduling and organization of all work, subcontractors, suppliers, material testing, inspection, and construction surveying and staking;
- Coordination of, and cooperation with, other contractors, agencies, departments, and utilities;
- Coordination with City forces to stockpile and load used castings on City vehicles;
- Protection and maintenance of all existing utilities, including support, protection, capping, repair, replacement, connection or re-connection of existing pipes, and utilities damaged by the Contractor's operations;
- Maintaining and removing all soil erosion and sedimentation controls (as specified herein or as shown on project plans) for which no pay item exists;
- Maintaining the site, and all areas within the Construction Influence Area, in a well-graded and drained state at all times during the course of the project. De-watering and drainage of all excavations as required to maintain a stable, open hole;
- The continuous maintenance of the temporary road surface within the Construction Influence Area throughout the duration of the construction. This includes any needed grading to maintain the surface in a smooth condition free of potholes, ruts, bumps, or other objectionable conditions.
- Temporary sheeting, bracing, and shoring of excavations in accordance with the applicable MIOSHA Standards;
- Maintaining driveway openings, sidewalks, bike paths, mail deliveries, and solid waste/recycle pick-ups. This includes the placement and maintenance of

- maintenance aggregate in driveway openings and across sidewalk ramps all as needed and as directed by the Engineer;
- Using quantities of dust palliative, maintenance aggregate, and hot patching mixture for use as temporary base, surfacing, and dust control at utility crossings, side roads and driveways;
 - Storing all materials and equipment off lawn areas;
 - Temporary removal/re-location, storage, and re-installation/re-setting of existing street name, guide, and regulatory signs, mailboxes, newspaper tubes, etc. which conflict with the proposed construction;
 - Site clean-up on a daily basis during the course of the project's construction;
 - Coordination efforts to furnish the various required HMA mixtures as directed by the Engineer;
 - Coordination efforts to furnish and operate various-size vehicles/equipment as directed by the Engineer
 - Furnishing and operating vacuum-type street cleaning equipment a minimum of once per week, or more frequently, if directed by the Engineer;
 - Furnishing and operating vacuum-type utility structure cleaning equipment,
 - Furnishing and operating both vibratory plate and pneumatic-type ("pogo-stick") compactors;
 - Furnishing and operating a backhoe during all work activities;
 - Furnishing and operating a jackhammer and air compressor during all work activities;
 - Noise and dust control in accordance with the applicable City of Ann Arbor Ordinances;
 - Mobilization(s) and demobilization(s) of all needed materials, equipment, and personnel;
 - Furnishing of all required shop drawings, informational submittals, and material certifications for all needed materials and supplies incorporated into the project;
 - The proper off-site disposal of all excavated materials and debris;
 - Removal of shrubs, brush, and trees less than 6" diameter (DBH) as shown on the plan sheets or as directed by Engineer;

- Trimming of trees and brush to accommodate intersection sight distance as shown on plans;
- Fencing to protect excavation over 1' in depth during non-work hours. The fencing must be a minimum of 36" high, be constructed of orange HDPE material, and reasonably secured to prevent unwanted access;
- All miscellaneous and incidental items such as overhead, insurance, and permits; and,
- Meeting all requirements relating to Debarment Certification, Davis Bacon Act, and Disadvantaged Business Enterprise, and providing the necessary documentation.

d. **Measurement and Payment.**- This item of work will be paid for on a pro-rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum, minus any deductions incurred for inadequate performance. This amount will not be increased for any reason, including extensions of time, extras, and/or additional work.

The completed work as measured for this item of work will be paid for at the contract unit price for the following contract item (pay item):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
General Conditions, Max. \$ _____	Lump Sum

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the City of Ann Arbor Standard Specifications for Construction and as modified by this Detailed Specification.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
AUDIOVISUAL RECORDING

WT:CT:RJM

1 of 4

05/16/22

a. Description.- This work shall include providing a recording of the physical, structural, and aesthetic conditions of the construction site and adjacent areas as provided herein.

The audiovisual recording shall be:

1. Of professional quality, providing a clear and accurate audio and visual record of existing conditions.
2. Prepared during the 3 week period immediately prior to the Preconstruction Meeting.
3. Furnished to the Engineer a minimum of 2 weeks prior to bringing any materials or equipment within the areas described in this Detailed Specification.
4. Furnished to the Engineer either at, or prior to, the Preconstruction Meeting.
5. Carried out under the supervision of the Engineer.

The Contractor shall furnish 2 copies of the completed recording to the Engineer at, or prior to, the Preconstruction Meeting. An index of the recording, which will enable any area of the project to be easily found on the recording, shall be included. The Contractor shall retain a third copy of the recording for their own use.

Any portion of the recording determined by the Engineer to be unacceptable for the documentation of existing conditions shall be recorded again, at the Contractor's sole expense, and submitted to the Engineer prior to mobilizing onto the site.

b. Production.- The audiovisual recording shall be completed in accordance with the following minimum requirements:

1. **DVD Format/No Editing.-** The audiovisual recording shall be performed using equipment that allows audio and visual information to be recorded simultaneously and in color. The recording shall be provided on compact discs in DVD format. The quality of the recording shall be equal to or better than the standard in the industry. The recording shall not be edited.
2. **Perspective/Speed/Pan/Zoom.-** To ensure proper perspective, the distance from the ground to the camera lens shall not be less than 12 feet and the recording must proceed in the general direction of travel at a speed not to exceed 48 feet per minute (0.55 miles per hour). Pan and zoom rates shall be controlled sufficiently so that playback will ensure quality of the object viewed.
3. **Display.-** The recording equipment shall have transparent time and date

stamp and digital annotation capabilities. The final copies of the recording shall continuously and simultaneously display the time (hours:minutes:seconds) and the date (month/date/year) in the upper left-hand corner of the frame. Accurate project stationing shall be included in the lower half of the frame in standard station format (i.e. 1+00). Below the stationing, periodic information is to be shown, including project name, name of area shown, direction of travel, viewing direction, etc.

On streets or in areas where there is no project stationing, assumed stationing shall be used, starting with 0+00 and progressing from west to east or from north to south.

4. Audio Commentary/Visual Features.- Locations relative to project limits and landmarks must be identified by both audio and video means at intervals no longer than 100 feet along the recording route. Additional audio commentary shall be provided as necessary during the recording to describe streets, buildings, landmarks, and other details, which will enhance the record of existing conditions.

5. Visibility/Ground Cover.- The recording shall be performed during a time of good visibility. The recording shall not be performed during periods of precipitation or when snow, leaves, or other natural debris obstruct the area being recorded.

c. Coverage.- The audiovisual recording coverage shall include the following:

1. General Criteria.- This general criteria shall apply to all recording and shall include all areas where construction activities will take place or where construction vehicles or equipment will be operated or parked, and/or where materials will be stored or through which they will be transported. The recording shall extend an additional 50 feet outside of all areas. The recording shall include all significant, existing man-made and natural features such as driveways, sidewalks, utility covers, utility markers, utility poles, other utility features, traffic signal structures and features, public signs, private signs, fences, landscaping, trees, shrubs, other vegetation, and other similar or significant features.

2. Private Property.- Record all private property that may be utilized by the Contractor in conjunction with this project. These project areas must be disclosed by the Contractor prior to using them for the work of this project.

3. Road Construction Area.- The recording coverage shall:

- A. Extend to 50 feet outside of the right-of-way as indicated on the Drawings.
- B. Extend 50 feet outside the construction limits on all streets, including side streets.
- C. Both sides of each street shall be recorded

4. Private Property Bordering the Project Limits or Work Areas.- Record all

areas bordering the project where work is scheduled to occur or where construction traffic could damage the private property. This is to include buildings, hydrants, pavements, curbs, driveways, decks, landscaping, trees, and all other similar features.

5. **Other Areas.-** The Contractor shall record, at their sole expense, other areas where, in their opinion, the establishment of a record of existing conditions is warranted. The Contractor shall notify the Engineer in writing of such areas.

The Engineer may direct the recording of other minor areas not specified herein at the Contractor’s sole expense.

d. Audiovisual Recording Services.- The following companies are known to be capable of providing the recording services required by this Detailed Specification and shall be utilized, unless the Contractor receives prior written approval from the Engineer to utilize another company of comparable or superior qualifications.

- Construction Video Media
- Midwest Company
- Topo Video, Inc.
- Video Media Corp.
- Paradigm 2000, Inc.
- Finishing Touch Photo and Video

e. Measurement and Payment.- The completed work shall be paid for at the contract unit price for the following contract pay item:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
Audiovisual Recording	Lump Sum

Audiovisual Recording shall include all labor, equipment, and materials required to perform the recording and to provide the finished recording the Engineer.

Payment will be made for Audiovisual Recording following the review and acceptance of the recording by the Engineer. Within 21 days following the receipt of the recording, the Engineer will either accept it and authorize payment, or require that any discrepancies in the recording be addressed prior to making payment.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
FENCE, REM

WT:CT:RJM

1 of 1

05/10/22

DESCRIPTION

This work shall consist of removing existing fence in accordance with Section 204 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, as shown on the plans, and as specified herein.

MATERIALS

The materials used for this work shall conform to Subsection 204.02 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as specified herein.

CONSTRUCTION METHOD

The construction methods used shall conform to Section 204.03 of the Michigan Department of Transportation 2020 Standard Specifications for Construction except as specified herein.

MEASUREMENT AND PAYMENT

The completed work as measured shall be paid at the contract unit price for the following contract items (pay items):

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Fence, Rem.....	Foot

Payment for removing fence shall include all labor, material, and equipment required to remove the existing fence as shown on the Plans or as determined by the Engineer. Work shall include, but is not limited to, all removal, of fence, gates, posts, rails, tension wire, bracing, post caps, post extensions, barbed wire, and all other attached parts; protection of existing improvements; furnishing, installing, and removing temporary fencing; removal and disposal of unsuitable material; and all items necessary to complete the job, whether specifically mentioned or implied. Measurement for removing fence will be in linear feet, determined by field measure along the bottom of the fence with no deduction for gate openings.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PAVEMENT MARKINGS

WT:CT

1 of 2

05/10/22

DESCRIPTION

This work consists of providing and placing permanent pavement markings in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMTUTCD), latest version published at time of advertisement. Provide pavement markings that conform to the Plans, Section 811 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction, MDOT Pavement Marking Standard Plans, City of Ann Arbor Special Details, and as specified herein.

MATERIALS

The materials used for this work shall conform to Subsection 811.02 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as specified herein.

Provide the Material Safety Data Sheets to the Engineer for required materials and supplies. Dispose of unused material and containers in accordance with the Federal Resource Conservation Recovery Act (RCRA) of 1976 as amended, and 1994 PA 451, Part 111 Hazardous Waste Management. Provide samples of permanent marking materials upon request.

CONSTRUCTION METHOD

The construction methods used shall conform to Section 811.03 of the Michigan Department of Transportation 2020 Standard Specifications for Construction except as specified herein.

MEASUREMENT AND PAYMENT

The completed work as measured shall be paid at the contract unit price for the following contract items (pay items):

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Pavt Mrkg, Polyurea, 4 inch White.....	Foot
Pavt Mrkg, Polyurea, 12 inch, White.....	Foot
Pavt Mrkg, Polyurea, 24 inch, White.....	Foot

Payment for pavement markings of the type, width and color specified includes all labor, material, and equipment necessary for pavement markings, actually placed, and shall include, but is not limited to, all preparation of surface, layout, removing any old markings, applying proposed pavement markings and glass beads, providing temporary

barricading, cleanup, and all items necessary to complete the job, whether specifically mentioned or implied. Measurement for pavement markings will be in linear feet, determined by field measurement of the actual lines placed.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
TRAFFIC CONTROL ITEMS

WT:CT

1 of 3

05/10/22

DESCRIPTION

This work shall consist of protecting and maintaining vehicular and pedestrian traffic, in accordance with Sections 812 and 922 of the 2020 MDOT Standard Specifications for Construction; Part 6 of the Michigan Manual of Uniform Traffic Control Devices, Latest Revised Edition (MMUTCD); and the City Standard Specifications, except as modified herein.

MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS

General

Materials and equipment shall meet the requirements specified in the above-designated sections of the MDOT Standard Specifications.

The Contractor shall maintain traffic such that no vehicle shall be required to drive into active work areas. Patch areas which extend more than halfway across the roadway shall always be removed and replaced to provide a minimum of half the pavement width for maintaining traffic.

The Contractor shall maintain pedestrian traffic at all times. For maintaining normal pedestrian traffic while performing sidewalk and driveway repair, **Pedestrian Type II Barricade, Temp** shall be placed by the Contractor, as directed by the Engineer. "Sidewalk Closed" and/or "Cross Here" signs shall be placed, by the Contractor, when directed by the Engineer.

All temporary traffic/pedestrian control devices furnished by the Contractor shall remain the property of the Contractor. The City shall not be responsible for stolen or damaged signs, barricades, barricade lights or other traffic maintenance items. The Contractor shall replace missing traffic control devices immediately, at no additional cost to the City.

All existing signs, and signs erected by the City of Ann Arbor on this project shall be preserved, protected, and maintained by the Contractor. Existing City owned signs which are damaged by the Contractor during the work will be repaired by the City at the Contractor's expense.

Parking violation citations issued to the Contractor, subcontractor and material suppliers, including their employees, shall be enforced under appropriate City Code.

The Contractor shall replace missing or damaged traffic control devices, as

directed by the Engineer. When traffic control devices have been damaged by, or due to, the negligence of the Contractor, his subcontractors or material suppliers, the traffic control devices shall be replaced at the Contractor's expense.

Barricade, Type III, High Intensity, Furn & Oper; Sign, Type B, Temp, Prismatic, Furn & Oper; Plastic Drum, Fluorescent, Furn & Oper; Sign, Type B, Temp, Prismatic, Furn & Oper; Sign, Portable, Changeable Message, NTFICP-Compliant, Furn & Oper; Pedestrian Type II Barricade, Temp

The Contractor shall furnish and operate these items as shown on the Plans or as directed by the Engineer.

Type II pedestrian barricades shall have standard orange-and-white stripes on both sides of the barricade.

Enough signs shall be provided by the Contractor to ensure the safety of the workers and the general public in accordance with the current MMUTCD.

"Construction Ahead" warning signs shall be placed, as indicated on the Plans, or as directed by the Engineer, prior to the start of work, regardless of the nature, magnitude or duration of the work.

MEASUREMENT AND PAYMENT

General

All temporary traffic/pedestrian control devices furnished by the Contractor shall remain the property of the Contractor. The City shall not be responsible for stolen or damaged signs, barricades, barricade lights or other traffic maintenance items. The Contractor shall replace missing traffic control devices immediately, at no additional cost to the City.

Costs for transporting barricades and other traffic control devices shall be included in the bid prices for the individual items of work.

Plastic Drum, Fluorescent, Furn & Oper; Barricade, Type III, High Intensity, Furn & Oper

There will be a one-time payment for the maximum number of channelizing devices and barricades in place (operated) at any one time, as directed by the Engineer.

Sign, Type B, Temp, Prismatic, Furn & Oper

Payment for Type B signs shall be for the maximum quantity used, subject to approval by the Engineer.

Pedestrian Type II Barricade, Temp

Payment for furnishing and operating type II pedestrian barricades shall be for the maximum quantity in-place at any one time during the work of the entire project (all streets).

Sign, Portable, Changeable Message, NTFCIP-Compliant, Furn & Oper

Measurement for furnishing and operating lighted arrow board will be for the maximum quantity in-place at any one time during the work of the entire project (all streets).

The completed work as measured for these items of work will be paid for at the Contract Unit Price for the following Contract (Pay) Items:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Barricade, Type III, High Intensity, Furn & Oper	Each
Plastic Drum, Fluorescent, Furn & Oper	Each
Sign, Type B, Temp, Prismatic, Furn & Oper.....	Sft
Sign, Portable, Changeable Message, NTFCIP-Compliant, Furn & Oper.....	Each
Sign Cover.....	Each
Pedestrian Type II Barricade, Temp	Each

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PEDESTRIAN PATH, TEMP

WT:VCM/CEW

1 of 2

11/20/19

a. Description. This work consists of furnishing, installing, maintaining, and removing a temporary pedestrian path as identified in the proposal or on the plans. Temporary pedestrian paths, or segments thereof, will be repaired or replaced as directed by the Engineer.

b. Materials. Provide materials to construct a temporary pedestrian path in accordance with the contract, the *Public Right of Way Accessibility Guidelines (PROWAG)*, the *MMUTCD*, as directed by the Engineer, and the following requirements:

1. Ensure the materials used to construct the temporary pedestrian path yields a continuous hard surface that is firm, stable and skid resistant. Ensure the path does not warp, buckle or otherwise become uneven, and materials support the weight of pedestrians as well as motorized scooters and wheelchairs. Suitable materials to construct the path include asphalt materials, Oriented Strand Board (OSB), plywood, dimensional lumber, reclaimed, or other as approved by the Engineer. Compacted soils, aggregate and sand are prohibited.

2. If asphalt materials are not used to construct the path, provide an antiskid coating, or surface treatment as directed by the Engineer.

c. Construction. Construct the temporary pedestrian path in accordance with *PROWAG*, the *MMUTCD*, the contract, the direction of the Engineer, and the following:

1. The useable surface of the path must be a minimum of 48 inches wide, additional width may be provided to preclude the use of Temporary Pedestrian Passing Spaces (paid for separately). A minimum width of 60 inches is required if Temporary Pedestrian Passing Spaces are not provided as part of the temporary facility. The maximum cross slope for the path is 2 percent. The path, including transitions to the adjacent surface at both ends, must be free of vertical discontinuities greater than 1/4 inch. Eliminate any vertical discontinuities greater than 1/4 inch up to 1/2 inch or bevel with a slope not steeper than 1:2. If a vertical discontinuity greater than 1/2 inch or a running slope greater than 1:20 occurs on the project, a Temporary Pedestrian Ramp (paid for separately) is required.

A. Ensure an anti-skid surface treatment is applied to the surface of the path, if not constructed with asphalt materials, as directed by the Engineer.

B. If the surface of the path is constructed from OSB, plywood, or dimensional lumber securely connect all sections with appropriate fasteners to ensure a continuous, uniform, and flat surface.

C. The use of rubber mats is allowed. The materials under the mats must be graded smooth and uniform. Gaps between mats greater than 1/2 inch will not be allowed. Mats should not overlap one another creating lips or bumps.

2. Ensure all debris and construction materials is cleared from the path throughout its use. Ensure snow and ice is removed; the use of an approved de-icing agent may be required.

3. Repair or replace the path, or segments thereof, if it becomes uneven, unstable, or displaces due to weather events, construction activities, or other causes as directed by the Engineer.

4. Following the use of the temporary path, the Contractor must remove and dispose all materials used to construct the path, and restore the area as directed by the Engineer.

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
Pedestrian Path, Temp.....	Foot

Pedestrian Path, Temp will be measured along the centerline of the path. **Pedestrian Path, Temp** includes all costs related to installation, maintenance, restoration, and removal of the path and disposal of all associated materials throughout the life of the contract.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PEDESTRIAN RAMP, TEMP

WT:VCM/CEW

1 of 3

11/20/19

a. Description. This work consists of furnishing, installing, maintaining, relocating, and removing a temporary pedestrian ramp as identified in the proposal or on the plans. Use temporary pedestrian ramps to facilitate pedestrian travel on accessible facilities over curbs or other uneven terrain features with a vertical difference of 1/2 inch or greater. Damaged pedestrian ramps will be replaced as directed by the Engineer.

b. Materials. Provide materials to construct a temporary pedestrian ramp in accordance with the *Americans with Disabilities Act (ADA)*, the standard specifications, and the following:

1. Ensure the material used to construct the temporary pedestrian ramp is firm, stable, skid resistant, and forms a continuous hard surface. Ensure the surface does not warp, buckle or otherwise become uneven, and materials support the weight of pedestrians as well as motorized scooters and wheelchairs. Suitable materials to construct the surface of the ramp include asphalt materials, Oriented Strand Board (OSB) or plywood, dimensional lumber, certain reclaimed or other materials as approved by the Engineer. Compacted soils, aggregate and sand are prohibited.

2. Provide a handrail on both sides of the ramp if the ramp is not exposed to vehicle traffic and has a total rise greater than 6 inches, and a length greater than 72 inches. Ensure the handrail is between 1.25 and 1.5 inches wide and configured to be a “graspable” cross-section. See construction subsection 2.A for additional details. When the ramp is exposed to traffic, in lieu of handrails, use a protective edge 2.5 inches minimum height above the ramp surface or 1:10 flare on both sides of the ramp.

3. Ensure the surface of the ramp is free draining; in addition, provide features that allow drainage to move past the ramp installation (i.e. along the gutter pan underneath the ramp if the ramp is installed on a curb).

4. Provide materials to construct detectable edging along open sides of the ramp if required.

5. If asphalt materials are not used to construct the surface of the ramp, provide an antiskid coating or surface treatment approved by the Engineer.

c. Construction. Construct the temporary pedestrian ramp in accordance with the manufacturer’s recommendations (if applicable), *ADA*, the plans, and the following:

1. Ensure the useable surface of the ramp is 48 inches wide and does not deflect due to pedestrian traffic. Ensure an anti-skid surface treatment is applied to the useable area of the ramp if it is not made from asphalt materials. The maximum cross

slope of the ramp is 2 percent. Ensure both ends of the ramp smoothly transitions to the adjacent surface, with 1/4 inch or less vertical difference.

Construct the ramp to maintain a longitudinal slope from 1:10 to 1:12 where possible. Otherwise, a longitudinal slope from 1:8 to 1:10 may be used for a maximum rise of 3 inches. Temporary pedestrian ramps with longitudinal slopes greater than 1:8 are prohibited.

A. Provide a handrail on both sides of the ramp if required as stated herein. Ensure the top of the handrail is between 34 and 38 inches above the surface of the ramp. Ensure a minimum width of 36 inches is maintained between the handrails, with a minimum clearance of 1.5 inches behind and 18 inches above.

Construct the handrail such that the bending stress applied by a bending moment created by a 250-pound force is less than the allowable stress for the materials and the construction of the handrail. Construct the handrail to withstand the shear stress induced by a 250-pound force. Ensure all fasteners, mounting devices and support structures are also able to withstand shear stress induced by a 250-pound force.

2. Construct a detectable edging anytime a handrail is required, and anytime the path changes direction. This includes a turn onto the ramp from the path. Detectable edging must begin a maximum of 2.5 inches above the ramp surface and extend at least 6 inches above the ramp surface.

3. Ensure a clear space (minimum 48 inches by 48 inches) is provided above and below the ramp.

4. Avoid locating ramps in areas of drainage collection, ponding or running water, which can produce slippery or unsafe conditions. If the ramp is located over a gutter pan or other drainage structure, provide features to facilitate water movement around or under the ramp as approved by the Engineer.

5. Ensure all debris and construction material is cleared from the surface of the ramp throughout its use. Ensure snow and ice is removed; the use of an approved de-icing agent may be required. Repair or replace the ramp if it becomes uneven, unstable, or displaces due to weather events, construction activities, or other causes as directed by the Engineer.

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
Pedestrian Ramp, Temp.....	Each

Pedestrian Ramp, Temp includes all labor, equipment, and materials to furnish, install and remove a temporary pedestrian ramp at the locations shown on the plans, as well as all costs for maintaining, clearing debris, deicing, reconfiguring, and relocating the temporary pedestrian ramp throughout the life of the contract.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MINOR TRAFFIC DEVICES, MAX. \$_____

WT:CT

1 of 2

04/13/22

a. Description.- This work shall consist of protecting and maintaining vehicular and pedestrian traffic in accordance with the City of Ann Arbor Standard Specifications for Construction; Section 812 of the 2020 MDOT Standard Specifications for Construction; Part 6 of the Michigan Manual of Uniform Traffic Control Devices, Latest Revised Edition (MMUTCD); this Detailed Specification; and, as shown on the plans and as directed by the Engineer.

This item of work shall include, but not be limited to:

- The furnishing and operating of miscellaneous signs, warning devices, flag-persons, temporary concrete barriers, and drums, channelizing devices, cones as required for the entire duration of the project;
- The operation of additional signs furnished by the City;
- Furnishing and installing meter bags (where required);
- Coordinating with the City to have meter heads removed and reinstalled (where required);
- Coordinating with the City on signal timing and phasing changes;
- Maintaining pedestrian traffic;
- Temporarily covering conflicting traffic controls with Engineer-approved covers;
- Temporarily covering conflicting existing signs as directed by the Engineer with approved sign covers; and,
- Any and all other miscellaneous and/or incidental items that are necessary to properly and safely perform the work.

The Contractor shall maintain vehicular and pedestrian traffic during the work by the use of flag-persons, channelizing devices, and signs as necessary, as directed by the Engineer, and in accordance with MMUTCD.

Typical applications for maintaining pedestrian traffic in accordance with the MMUTCD are included in plan set for this project.

b. Materials.- Traffic maintenance material and equipment shall meet the requirements as specified in Section 812.02 of the 2020 MDOT Standard Specifications for Construction.

c. Construction Methods.- All temporary traffic/pedestrian control devices furnished by the Contractor shall remain the property of the Contractor. The City shall not be responsible for stolen or damaged signs, barricades, barricade lights or other traffic maintenance items. The Contractor shall replace missing traffic control devices immediately and at no additional cost to the City.

All existing signs, and signs erected by the City of Ann Arbor, on this project shall be preserved, protected, and maintained by the Contractor. Existing City-owned signs that are damaged by the Contractor during the work will be repaired by the City at the Contractor's expense.

The Contractor shall temporarily cover conflicting traffic and/or parking signs when directed by the Engineer.

When traffic control devices have been damaged by, or due to, the negligence of the Contractor, his subcontractors or material suppliers, the traffic control devices shall be replaced at the Contractor's sole expense.

The Contractor shall furnish and install the traffic control items as shown on the contract plan sheets and details included therein.

"Road Work Ahead" warning signs shall be placed, as indicated on the Plans, or as directed by the Engineer, prior to the start of work, regardless of the nature, magnitude or duration of the work.

Removable black pavement marking cover tape shall be used to cover conflicting pavement markings as directed by the Engineer.

Temporary pavement markings may be used within transition areas, if requested by the Contractor, and approved by the Engineer. All temporary pavement markings shall be removable.

d. Measurement and Payment.- This item of work will be paid for on a pro-rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum.

The completed work as measured for this item of work shall be paid for at the contract unit price for the following contract item (Pay Item):

<u>Pay Item</u>	<u>Pay Unit</u>
Minor Traffic Devices, Max. _____	Lump Sum
Traffic Regulator Control	Lump Sum

The unit price for these items of work shall include all labor, material, and equipment costs required to perform the work specified herein.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
SOIL EROSION CONTROL INLET FILTER

WT:CT:RJM

1 of 1

05/16/22

a. Description.- This work consists of installing and maintaining inlet filters in accordance with Section 208 of the 2020 Michigan Department of Transportation Standard Specifications for Construction and as shown on the plans. Filters shall be installed in existing and proposed inlets in order to minimize the erosion of soil and the sedimentation of water courses. The related work includes the installation, maintenance and removal of the filter cloth, cleaning as required during the performance of the project work, removing and disposing of accumulated sediment, and replacement of filters if required by the Engineer so as to provide a properly working inlet filter and a well-drained site.

b. Materials.- The inlet filters shall be in accordance with the REGULAR FLOW SILTSACK® manufactured by ACF Environmental (800) 448-3636; FLEXSTORM® Style FX manufactured by Advanced Drainage Systems, Inc. (800) 821-6710; CATCH-ALL® manufactured by Price & Company (866) 960-4300, or Engineer approved equal.

The Contractor shall submit product data sheets and a sample of the filter material for inlet filters for Engineer approval prior to ordering materials.

c. Methods of Construction.- The Contractor shall install, maintain, clean, and re-install and/or replace inlet filters in accordance with the manufacturer's specifications and as directed by the Engineer. The Contractor shall dispose of debris off-site.

d. Measurement and Payment.- The completed work of Soil Erosion Control Inlet Filter will be paid for at the contract unit price for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Erosion Control, Inlet Filter	Each

"Erosion Control, Inlet Filter" will be measured by the unit installed and will be paid for at the contract unit price per each, for which price shall be payment in full for all labor, equipment, and materials needed to furnish, install, maintain, clean and remove the inlet filter, and re-install and/or replace the inlet filter as needed.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
**SEWER, ANY SIZE OR DEPTH, REM
 DR STRUCTURE, ANY SIZE OR DEPTH, REM**

WT:CT:RJM

1 of 1

05/16/22

a. Description.- This work shall consist of furnishing all labor, tools, equipment, and material to remove, and dispose of off-site, sewers, and/or drainage structures, in accordance with Section 203 of the 2020 Michigan Department of Transportation Standard Specifications for Construction, and as specified herein.

b. Materials.-

Granular Material, Class II.....Section 902

c. Construction Methods.- Sewers, manholes, and drainage structures shall be removed, and disposed of off-site, in such a manner as not to damage any new work, or work or material which is to remain in-place. The hole or trench resulting from the removal of the manhole, sewer, or drainage structure shall be backfilled with Granular Material, Class II, in maximum lifts of 12 inches, and be compacted to 95% of its maximum unit weight, if located within the public rights-of-way, railroad rights-of-way, or within the influence paved surfaces or structures. Otherwise, backfill shall be Engineer approved native material, compacted to 90% of its maximum unit weight, in lifts of 12 inches or less, unless otherwise noted on the plans. The resulting hole left in a structure from a sewer to be removed shall be bulkheaded with bricks and mortar to provide a watertight seal and constructed such that the remaining flow in the manhole is not impeded.

As directed by the Engineer and within two days of their removal, the Contractor shall stockpile on-site, in a location that is mutually agreeable to the Engineer and Contractor, the existing structure covers. The City of Ann Arbor's forces will pick-up the structure covers at a time that is convenient to them and mutually agreeable to the Contractor. The Contractor shall provide the equipment and manpower to load the castings on the City's vehicle(s) so that they can be removed from the site by the City.

d. Measurement and Payment.- The completed work shall be paid for at the Contract Unit Price for the following Contract Items:

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Sewer, Any Size or Depth, Rem	Foot
Dr Structure, Any Size or Depth, Rem	Each

Payment for the above items shall include all labor, material and equipment to complete the work of removing sewers and drainage structures of any size or depth as detailed herein.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
REMOVING PAVEMENT AND CONCRETE ITEMS

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of furnishing all labor, tools, equipment, and material to remove, and dispose of off-site, any concrete curb, gutter, curb and gutter, integral curb, sidewalk, sidewalk ramps, pavement, drive openings, and drive approach pavements as shown on the plans, in accordance with section 204 2020 MDOT Standard Specifications for Construction, except as specified herein, and as directed by the Engineer.

b. Materials.

Granular Material, Class II Section 902

c. Construction.- Construction methods shall be as described in section 204 of the MDOT 2020 Standard Specifications for Construction, as described below, and as directed by the Engineer.

The pay item for **“Pavement, Remove”** will include removal of existing pavement regardless of pavement depth, type or material. Also included is bituminous overlay pavement on the concrete pavement or gutter without disturbing the curb and gutter remaining in place.

Prior to the start of work, the Engineer and Contractor together shall identify and field measure all items to be removed. The Engineer shall approve of all removal limits prior to any removals being performed by the Contractor.

The Contractor shall perform full-depth saw cutting at removal limits as necessary to construct the curb and gutter as shown on the Plans, as directed by the Engineer, and as marked for removal.

All saw cutting shall be performed under wet conditions to prevent excessive airborne dust. All resulting slurry and debris shall be cleaned up the satisfaction of the Engineer.

The Contractor shall coordinate with the City Forester prior to the removal of any tree roots.

Excavated/removal areas shall be adequately protected with barricades and/or fencing at all times.

Removed or excavated materials which are not incorporated into the work shall become the property of the Contractor and shall be immediately removed and properly disposed

of off-site. Removed or excavated materials may not be stockpiled overnight on, or adjacent to, the site.

Base, subbase, or subgrade materials removed without authorization by the Engineer shall be backfilled with MDOT Class II Granular Material compacted to 95% of its maximum dry density at no additional cost to the project.

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

Pay Item	Pay Unit
Curb and Gutter, Any Type or Size, Rem	Foot
Sidewalk and Sidewalk Ramps, Remove	Square Foot
Driveway Approach, Remove	Square Foot
Pavement, Remove	Square Yard

All sawcutting required for removals shall be included in the appropriate item of work and will not be paid for separately.

Payment will be based on the area of pavement removed, regardless of thickness, or if it is composite.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

1 of 9

05/16/22

a. Description.- The pay item “Machine Grading, Modified, ___” shall be completed in accordance with Section 205 of the Michigan Department of Transportation 2020 Standard Specifications for Construction (MDOT 2020 SSC) and shall include all work indicated in the MDOT 2020 SSC, shown on the plans, and as specified herein, with the exception that “Subgrade Undercutting, Type __,” “Subgrade Manipulation,” and “Rock Excavation” shall be paid for separately when separate pay items for the respective items are included in the proposal. “Machine Grading, Modified, ___” shall include all the work specified herein for which there is no separate pay item.

The following abbreviated table of contents for Section 205 (Roadway Earthwork) of the MDOT 2020 SSC is provided for reference. It is not a complete table of contents for all Section 205 work required to complete the project.

<u>Section / Title</u>	<u>Page</u>
205.01 Description	127
205.02 Materials	127
205.03 Construction.....	128
A. Preparing Roadway Foundation	128
1. Removing and Salvaging Topsoil	128
B. Rock Excavation	129
E. Subgrade Undercutting.....	130
F. Subgrade Manipulation.....	131
G. Earth Excavation.....	131
H. Roadway Embankment	132
4. Placing and Compacting Embankment.....	134
205.04 Measurement and Payment	140

b. Soils Information.- Soil information provided as part of the contract documents is for informational purposes only and shall not relieve the Contractor of the responsibility of investigating all local conditions before bidding.

c. Materials.- All materials and mixtures shall meet the requirements as specified in Section 205 of the MDOT 2020 Standard Specifications for Construction, except as specified herein.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

2 of 9

05/16/22

d. General Provisions.- The Contractor shall:

1. Maintain access to all drive entrances at all times.
2. Maintain pick-up access for garbage and recycle vehicles at all times.
3. Maintain access to all mail boxes for users and the U.S. Postal Service at all times. The Engineer may direct the temporary relocation of mail boxes. The Contractor may propose the temporary relocation of mail boxes, subject to the approval of the Engineer. In either case, the temporary relocation of mail boxes will not be paid for separately. There are six mailboxes located within the project grading limits that may need to be temporarily relocated and then re-established in their permanent locations.
4. Grade around mailboxes, trees, light poles, power poles, and the like, which are to remain in place. The Contractor shall be responsible for any damage caused to such structures.
5. Coordinate all work with utility companies and others that need to complete work within the project limits.
6. Maintain the work in a finished condition until it is accepted by the Engineer.

e. Pavement Sawcutting.- The work shall include the full-depth saw-cutting of pavement at the construction limits, and elsewhere as required, if not paid for as part of another item of work. Pavement sawcutting will not be paid for separately.

f. Removal of Trees and Vegetation.- The Contractor shall remove and properly dispose of off-site all vegetation; brush; roots; and trees and stumps less than 6 inch in diameter, as shown on the plans, and as directed by the Engineer as required to complete the project.

g. Removal and Salvaging of Topsoil.- The removal, salvaging and stockpiling of topsoil, and all related work, shall be performed in accordance with Section 205.03.A.1 (Removing and Salvaging Topsoil) of the MDOT 2020 SSC.

h. Miscellaneous Removals.- The removal of bituminous, aggregate, and/or concrete materials from around manholes, structures, and utility covers, and the removal of bituminous curbing, bituminous driveway wedges, bituminous surface on existing curb and gutter, and bituminous surfaces around other miscellaneous unremoved areas shall be paid for as “Machine Grading, Modified, ___” and will not be paid for separately.

“Machine Grading, Modified, ___” includes the removal of any surface feature located within the grading limits which must be removed and for which there is no specific pay item established in the proposal for its removal.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

3 of 9

05/16/22

i. Protection of the Grade.- The work shall be kept well drained at all times. Foundation, roadway embankment or subgrade that becomes damaged by rain shall be undercut and backfilled, or otherwise remedied, by the Contractor, at his/her sole expense, as directed by the Engineer.

The Contractor shall be responsible for the maintenance of the foundation, roadway embankment, and subgrade. Any damage caused, by traffic or the Contractor's operations, to the foundation, roadway embankment or subgrade, in the opinion of the Engineer, shall be remedied by the Contractor at his/her sole expense, as directed by the Engineer.

The Contractor shall not use rubber-tired equipment on the foundation, roadway embankment, or subgrade, when its use causes, in the opinion of the Engineer, unnecessary damage to the foundation, road embankment or subgrade. The Contractor shall conduct his/her operations and provide the necessary equipment to ensure the satisfactory completion of the work without damaging the foundation, roadway embankment or subgrade. This may require the transporting and movement of materials over additional distances.

At various times throughout the work, the Engineer may direct the Contractor to use smaller and/or lighter equipment, and to defer certain work tasks, in order to protect the grade and/or adjacent areas. The Contractor shall not be entitled to an extension of time or any additional compensation for the use of smaller equipment, lighter equipment, or work task deferral.

j. Protection of Utilities.- Utility lines may become exposed at, above, or below, the foundation or subgrade elevation during machine grading or subgrade undercutting operations. If this occurs, the Contractor shall excavate around, above and/or below the utility lines, as directed, to complete the machine grading or subgrade undercutting operations. Payment, at contract unit prices, for "Machine Grading, Modified ____" or "Subgrade Undercutting, Type __," whichever applies, will be considered as payment in full for this work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

4 of 9

05/16/22

k. Removal of Cable, Conduits and Pipe.- The Contractor shall remove, and properly dispose of off-site, all abandoned cables, conduit, and pipe encountered at, or above the bottom of any earthwork excavation or undercut. Where the inverts of abandoned, or to be abandoned or removed, conduits or pipe are less than 16 inches below the bottom of any earth excavation or undercut, the conduits and/or pipe shall be removed and the resulting void filled with an Engineer approved material. The fill material shall be compacted to 95% of its maximum unit weight in lifts not exceeding 12 inches. No separate payment will be made for removal of conduit or pipe, or any of the work, described in this section.

l. Foundation Preparation.- Foundation is defined as the original earth grade upon which roadway embankment is placed. The foundation work shall be completed in accordance with Section 205.03.A (Preparing Roadway Foundation) of the MDOT 2020 SSC as shown on the plans, and as specified herein.

The foundation shall be compacted to 95% of its maximum unit weight, as measured by the AASHTO T-180 method, to a depth of at least 10 inches. If this cannot be achieved, in the opinion of the Engineer, he/she will direct the Contractor to perform "Subgrade Undercutting, Type ___" or "Subgrade Manipulation," as described herein, on the foundation.

m. Roadway Embankment Construction.- Roadway embankment is defined as the construction of earth on the prepared foundation to form the subgrade. Roadway embankment work shall be completed in accordance with Section 205.03 H (Roadway Embankment) of the MDOT 2020 SSC as shown on the plans, and as specified herein.

Roadway embankment shall be compacted to a minimum of 95% of its maximum unit weight, as measured by the AASHTO T-180 method.

n. Subgrade Construction.- Subgrade is defined as the final earth grade which extends from grading limit to grading limit. The subgrade shall be constructed by performing earth excavation and roadway embankment work in accordance with Section 205.03.G (Earth Excavation) and Section 205.03 H (Roadway Embankment) of the MDOT 2020 SSC, as shown on the plans, and as specified herein.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

5 of 9

05/16/22

The subgrade shall be constructed to the contours and cross-sections shown on the plans, as specified herein, and as directed by the Engineer. To achieve this, the work shall include, but not be limited to:

1. Removal and disposal off-site of any surplus or unsuitable materials.
2. Furnishing from off-site any additional Engineer approved fill materials necessary.
3. Moving existing and/or furnished materials longitudinally and transversely as necessary.
4. Cutting, placing, compacting, and trimming existing and/or furnished materials to construct the roadway embankment and subgrade to the specified tolerances.
5. Stockpiling, and moving again, any cut materials which cannot be immediately placed upon excavation due to construction staging.

The subgrade shall be graded to accommodate all subbases and aggregate bases wherever used, all bioswale and adjacent planting beds, all roadway pavements, curb and gutter, driveways, sidewalks, bicycle paths, other similar structures, bioswale planting mix, topsoil and any other features which the subgrade supports.

The subgrade shall be prepared so as to ensure uniform support for the pavement structure. The finished subgrade shall be placed to within 1 inch below and $\frac{3}{4}$ inch above plan grade. Variations within this tolerance shall be gradual.

The subgrade shall be compacted to a minimum of 95% of its maximum unit weight, as measured by the AASHTO T-180 method, to a depth of 10 inches. If this cannot be achieved, in the opinion of the Engineer, he/she will direct the Contractor to perform "Subgrade Undercutting, Type ___" or "Subgrade Manipulation" as described herein.

The Contractor shall use equipment and methods of construction best suited, in the opinion of the Engineer, to the earthwork operations being performed and the project requirements. The use of various equipment and methods of construction are subject to the approval of the Engineer. The Engineer may disallow the use of certain equipment and methods of construction and require the use of other equipment and/or methods of construction. No additional compensation or extensions of contract time will be allowed for additional measures that are required for the protection of the grade as specified herein.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

6 of 9

05/16/22

o. Test Rolling.- The Contractor shall test-roll the foundation and/or subgrade with a pneumatic tired roller with a suitable body for ballast loading and a gross load capacity that can be varied from 25 and 40 tons. In lieu of this test roller, with the approval of the Engineer, the Contractor may use a fully loaded single axle or tandem axle dump truck.

p. Subgrade Undercutting.- “Subgrade Undercutting, Type ___” shall be performed on the foundation or subgrade in accordance with Section 205.03.E (Subgrade Undercutting) of the MDOT 2020 SSC, as shown on the plans, as specified herein, and as directed by the Engineer.

q. Subgrade Manipulation.- “Subgrade Manipulation” shall be performed on the foundation or subgrade in accordance with Section 205.03.F (Subgrade Manipulation) of the MDOT 2020 SSC, as shown on the plans, as specified herein, and as directed by the Engineer.

Where subgrade manipulation is required, the foundation or subgrade shall be thoroughly scarified, blended, and mixed to a depth of 12 inches. The work shall be accomplished by means of a large diameter disc, motor grader, or other equipment approved by the Engineer. After the foundation or subgrade has been manipulated to the satisfaction of the Engineer and allowed to dry, the soil shall be compacted to 95% of its maximum dry density as measured by the AASHTO T-180 method. The time required for drying the soil will not be a basis for an extension of time.

The cost of Subgrade Manipulation shall be included in the cost of “Machine Grading, Modified, ___,” unless a pay item for “Subgrade Manipulation” is included in the Proposal.

r. Rock Excavation.- Rock excavation shall be performed in accordance with Section 205.03.B (Rock Excavation) of the MDOT 2020 SSC, as shown on the plans, and as directed by the Engineer.

The pay item “Rock Excavation” will apply only to boulders over ½ cubic yard in volume. Boulders will be measured individually and the volume computed from the average dimension measured in three directions. The removal of rocks, concrete and masonry less than ½ cubic yard in volume shall not be included in the pay item “Rock Excavation,” but shall be included in the pay item “Machine Grading, Modified, ___.”

If the proposal does not include a pay item for “Rock Excavation,” rocks measuring over ½ cubic yard in volume shall be paid for as extra work.

s. Lowering Structures.- Prior to cutting the subgrade, the Contractor shall remove structure covers, lower the structures to a point between 8 inches and 12 inches below the

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

7 of 9

05/16/22

proposed subgrade, and cover the structures with a steel plate. Structures shall not be raised prior to placing roadway embankment.

The steel plates for covering structure openings shall conform to the plan detail, be pegged and properly placed to prevent their movement under all traffic, be thick enough to carry all traffic, and prevent the infiltration of debris into the structures.

The Contractor shall lower valve boxes to a point between 8 inches and 12 inches below the proposed subgrade. Valve boxes shall not be raised prior to placing roadway embankment.

The void in the grade above the steel plates used for structure lowerings and valve box lowerings shall be backfilled, and compacted to 95% of its maximum dry density, with an Engineer approved coarse aggregate.

“Machine Grading, Modified ____” shall include all the work associated with lowering structures, including backfilling.

The Contractor shall coordinate the lowering of private utility structures with the private utility companies.

t. Structure Covers.- As directed by the Engineer and within two days of their removal, the Contractor shall stockpile on-site, in a location that is mutually agreeable to the Engineer and Contractor, the existing structure covers. The City of Ann Arbor’s forces will pick-up the structure covers at a time that is convenient to them and mutually agreeable to the Contractor. The Contractor shall provide the equipment and manpower to load the castings on the City’s vehicle(s) so that they can be removed from the site by the City.

u. Structure and Sewer Cleanliness.- All sewers, and structures, including manholes, gate wells, valve boxes, inlet structures and curbs shall be protected from damage and contamination by debris and construction materials. Structures shall be maintained clean of construction debris and properly covered at all times during the construction. The Contractor shall immediately clean any structures and/or sewers that become contaminated with construction debris. The Contractor shall be responsible for all direct and indirect damages which are caused by sewers or structures which have been made unclean or have been damaged by the Contractor.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

8 of 9

05/16/22

v. Contractor's Calculations.- Existing and proposed cross sections are provided in the plans. The Contractor shall perform his/her own computations and is responsible to inspect the site to determine his/her own estimate of the quantities of work involved. Deviations between the existing contours and the existing and proposed cross-sections shown on the plans shall not be cause for additional compensation.

w. Estimated Earthwork Quantities.- The table shown below contains the Engineer's estimate of the earth excavation (cut), the embankment (fill), and topsoil stripping required to prepare the foundation as defined herein for the project. These quantities do not take into consideration the suitability of the soils for their intended use, their possible availability due to construction staging or storage limitations, bulking of the material upon excavation, changes in volumes due to moisture content or soil types, or other similar related issues. The Contractor shall remain responsible for determining the actual amount(s) of work to be performed to complete the project as shown on the plans and as specified herein.

Machine Grading Modified Item of Work	Est. volume of earth excavation (cut), cubic yards	Est. volume of embankment (fill), cubic yards	Topsoil and/or sub-soil to be stripped and removed*, cubic yards
Russell Street	80	350	400

* The estimated volume for topsoil and/or sub-soil stripping has been estimated based upon the assumption that approximately 6" of topsoil and other deleterious soils exist that must be removed prior to exposing suitable soils for road building or other similar purposes. The estimated thickness can, and will, vary throughout the project limits.

x. Measurement and Payment.- The completed work as measured will be paid for at the contract unit price for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Machine Grading, Modified, Russell	Station

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MACHINE GRADING, MODIFIED

WT:CT:RJM

9 of 9

05/16/22

Subsection 205.04.G of the MDOT 2020 SSC, which reads “Machine Grading will be measured by length along the surface edge. The Engineer will measure each side of the road, where work is performed, separately.” is hereby deleted. “Machine Grading, Modified, ___” will be measured once, and only once, along the centerline of the roadway or feature being constructed.

“Machine Grading, Modified, ___” will be measured by length in 100 foot long stations, or portions thereof, along the centerline of the feature being constructed.

The various pay items included herein shall include all labor, materials and equipment required to complete the work.

The Contractor shall include all of his/her costs to complete all of the Machine Grading, Modified work in the Machine Grading, Modified pay items and plan quantities included in the proposal. No additional payment will be made for Machine Grading, Modified work which, although, shown on the plans and specified herein as work which needs to be completed, may not be included in a particular Machine Grading, Modified pay item. Plan quantities will be paid for the work, and will only be adjusted due to changes in the limits of the work, as directed by the Engineer, in writing.

The pay item “Machine Grading, Modified, _____” shall include all the work specified herein, including, but not limited to, the removal and offsite disposal of any surplus or unsuitable materials and the furnishing from off-site any additional Engineer approved fill materials necessary to construct the embankment and subgrade to the contours and cross-sections shown on the plans.

The Contractor is advised that due to the phasing of the project and the probable unsuitability of some or all of the excavated material for use as approved fill material, there may be imbalances between the amount of earth cut which is suitable for reuse as fill, and the amount of earth needed to construct the lines and grades shown on the plans, or as directed by the Engineer. The Contractor shall make provisions for such imbalances and shall include in the bid price for this work the cost of importing/furnishing, placement, and compaction of the material, as well as the cost of stockpiling and re-handling of imported and/or on-site Engineer approved materials as necessary to complete the work of constructing the embankment and subgrade to the cross sections shown on the plans.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
SIDEWALK GRADING

WT:VCM:RJM:CGT

1 of 2

05/16/22

a. Description.-Remove miscellaneous structures and materials and complete all earthwork required to construct the proposed cross sections within the limits shown on the plans or stated in this special provision. All lines and grades will be as shown on the plans and as directed by the Engineer. Complete this work according to the MDOT 2020 Standard Specifications for Construction and this special provision.

b. Materials.- Furnish and place required subbase and embankment material conforming to the MDOT 2020 Standard Specifications for Construction as necessary to achieve the required typical cross sections. Excavated material, if suitable, may be used as embankment material as approved by the Engineer.

c. Construction Method.- Complete this work according to applicable sections of the Standard Specifications for Construction. Sidewalk Grading includes, but is not limited to, the following work:

1. Strip and stockpile topsoil for use in turf establishment.
2. Furnish, place and compact additional material.
3. Removing trees and stumps less than 6 inches in diameter.
4. Removing brush and bushes less than 6 feet in height.
5. Remove rocks or boulders less than 1 cubic yards in volume and backfill and compact any voids with Granular Material CI-II.
6. Remove and relocate mailbox posts and mailboxes.
7. Sawcut existing pavement.
8. Match drive and approach grades to new pavement grades.
9. Remove miscellaneous structures and materials.
10. Furnish and install embankment; grade, shape and compact to proposed grade and cross section.
11. Excavate, grade, compact and shape to the grades and cross section as shown on the plans.
12. Ditching

13. Excavate for subbase material.

14. Excavate, fill, backfill and compact for retaining walls.

15. Dispose of excess and unsuitable material according to Section 205.

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:

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Sidewalk Grading	Foot
Sidewalk Ramp Grading.....	Each

Sidewalk Grading includes all labor, equipment and materials necessary to complete the work as described and will be measured by length in feet along the sidewalk centerline.

Sidewalk Ramp Grading will apply separately to each sidewalk ramp where sidewalk is to be removed and/or graded for construction. The limits are specified on the plans or as directed by the Engineer.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
NON-HAZARDOUS CONTAMINATED MATERIAL

WT:CT:RJM

1 of 2

05/16/22

a. Description. This work shall include all labor, equipment, and materials necessary to handle, transport, and dispose of non-hazardous contaminated material as described herein, as detailed in the soil investigation report, as shown on the plans, and as directed by the Engineer.

All existing granular soils within the project limits have been identified as non-hazardous contaminated material. However, they may be used as embankment or fill materials on the project site if they meet the applicable engineering properties of the work for which they are proposed. The existing granular materials shall not be used elsewhere or disposed of in a manner inconsistent with this Detailed Specification, or applicable federal, state, or local regulations unless otherwise directed by the Engineer.

b. Method of Construction. This work shall be performed in accordance with Sections 204 and 205 of the MDOT 2020 Standard Specifications for Construction, except as modified herein or as directed by the Engineer.

The Contractor shall have all manifests signed by its representative, the Engineer's representative, the authorized representative of the waste hauler and the waste disposal facility.

c. Excavation of Non-Hazardous Contaminated Material. Non-Hazardous contaminated material shall be excavated as shown on the plans and as directed by the Engineer.

d. Temporary Storage of Non-Hazardous Contaminated Material. Excavated non-hazardous contaminated material which is to be temporarily stockpiled shall be placed on plastic sheeting or tarps having a minimum thickness of 6 mils or in trucks, roll-off boxes, or other containers, such that no liquid may escape from the containment. At the end of each work day, the non-hazardous contaminated material shall be covered securely with plastic sheeting of 6 mils thickness or greater.

Excavated non-hazardous material shall be disposed of as soon as approval is received from the disposal site. In no case shall this material be stockpiled for longer than 30 days prior to disposal.

The Contractor is responsible for the necessary coordination such that his/her work activities are not adversely impacted by the stockpiling of contaminated soil. Stockpiled soil shall not impair sight distance or drainage.

e. Disposal of Non-Hazardous Contaminated Material. Disposal of non-hazardous contaminated material shall be at a licensed Type II sanitary landfill. The Contractor shall submit at the preconstruction meeting the name of the Type II landfill to be used for disposal, the sampling and analysis requirements of the landfill, and verification that the use of the proposed landfill will meet the requirements of the County solid waste plan.

f. Measurement and Payment. The completed work as described will be paid for at the contract unit price for the following contract item (pay item):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Non-Hazardous Contaminated Material Handling and Disposal (LM).....	Cubic Yard

Non-Hazardous Contaminated Material Handling and Disposal will be measured by volume in cubic yards, loose measure, as contained in the hauling unit. Under no circumstance will the Contractor be paid for quantities of this material that have not been approved for payment by the Engineer and as measured and tracked by the Engineer and the Contractor. The Contractor will not be paid “standard amounts” that have been determined by the disposal facility; only measured volumes as computed by the Engineer will be paid. Prior to payment, the Engineer shall be given receipts from the disposal facility for the number of cubic yards disposed of at that facility. Payment shall include all costs for materials, labor and equipment needed for storage, loading, transportation, and disposal of the non-hazardous contaminated material. Disposal costs shall include all documentation required by the landfill. Payment for this item shall be the same, regardless of whether or not the Contractor temporarily stores the contaminated material; the Contractor shall not be paid for re-handling of the material due to construction staging, stockpiling, or other related activities.

Payment for excavation of non-hazardous contaminated materials shall be included with the related items of work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
SUBGRADE UNDERCUTTING

WT:CT:RJM

1 of 1

05/16/22

a. Description. This work shall include the removal of unsuitable subgrade material(s) which may be susceptible to frost heaving or differential frost action in the areas and limits identified by the Engineer, and backfilling to replace these material(s) and remedy unstable soil conditions. This work shall be done in accordance with section 205 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction, as directed by the Engineer, and as modified herein.

b. Materials. Provide materials in accordance with Granular Material Class II and 21AA dense-graded aggregate as specified in section 902 of the MDOT 2020 Standard Specifications for Construction.

c. Construction. Construction methods shall be as described in subsection 205.03.E of the Standard Specifications for Construction, and as directed by the Engineer.

After the pavement has been removed, and/or after rough/finish grading, and/or at the time of proof rolling, the Engineer may inspect the grade to determine the need for, and the limits of, undercuts. After undercut areas are excavated to the depths as directed by the Engineer, the areas shall be trimmed, shaped, evenly graded and re-compacted to not less than 95% of the soils maximum unit weight as determined by the AASHTO T-180 test. The Contractor shall properly dispose of all excess materials.

Backfill areas of Subgrade Undercutting, Type IIB with Granular Material Class II or such other such material as directed by the Engineer.

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

<u>Pay Item</u>	<u>Pay Unit</u>
Subgrade Undercutting, Type IIB.....	Cubic Yard

Basis of payment shall be as described in subsection 205.04 of the Standard Specifications for Construction except as herein modified.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
DRAINAGE STRUCTURE COVERS

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of furnishing drainage structure covers as detailed on the plans and as specified herein.

<u>Type of Casting</u>	<u>MDOT Designation</u>	<u>Approx. Pay Weight (lb)</u>	<u>East Jordan Iron Works Casting No.</u>	<u>Neenah Foundry Casting No.</u>
Manhole and Gate Well Frame and Cover	Q	400 LB	1040Z W/ Type A Cover*	R-1642 w/ Type C cover*
Barrier Curb Inlet Frame and Cover	K	500 LB	7045Z W/ Type M1 Grate	R-3031-B w/ Type S grate
Barrier Curb Double Inlet Frame and Cover	K	500 LB	7035Z w/ Type M2 grate	N/A
Gutter Inlet Frame and Cover	R	300 LB	5080Z w/ Type 5000M2 grate	R-3448-C w/ Type S grate
Gutter Double Inlet Frame and Cover	R	300 LB	7034Z W/, Type M grate	N/A
Yard Drain (Bee Hive)	G	200 LB	1040Z, Type 02 grate	R-2560-E1
Water Valve Box Assembly in Pavement			8560	N/A
Monument Box Assembly			8360	N/A

*Frames and covers shall have machined bearing surfaces. Covers shall have two (2), 1 inch, vent holes located opposite each other and 6 inch from the edge of the cover, except for sanitary sewer manholes. Sanitary sewer covers shall be gasketed in flood prone areas as shown on the plans or as directed by the PSAA. Each cover shall have the word "SEWER", or the word "WATER", or a raised letter "W" cast in the surface, whichever is applicable.

b. Materials.- The materials used for this work shall conform to Section 908.05 of the Michigan Department of Transportation 2020 Standard Specifications for Construction except as specified herein.

c. Construction Methods.- The construction methods shall be as specified in the related

items of work for which the drainage structure covers are provided.

d. Measurement and Payment.- The completed work as measured shall be paid at the contract unit price for the following contract items (pay items):

<u>(Contract Item) Pay Item</u>	<u>Pay Unit</u>
Structure Cover, Special	Pound

Payment for this item of work shall include all labor, materials and equipment needed to furnish the drainage structure cover.

Payment will be based upon the weight of the drainage structure cover in U.S. pounds as published in the manufacturers catalog and supporting literature.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
UNDERDRAIN

WT:CT:RJM

1 of 3

05/16/22

a. Description.- The work shall include installing 6-inch geotextile-wrapped perforated or slotted roadway underdrain in a 18-inch wide trench, using 2NS sand for bedding and backfill, and compacting the backfill material to 95% of its maximum unit weight.

b. Material.- The materials shall meet the requirements specified in Section 404 of the 2020MDOT Standard Specifications for Construction, and as specified herein:

Fine Aggregate, 2NS	902
Underdrain Pipe, Perforated or Slotted.....	909.07.B

All pipe shall be of virgin material. No rework except that obtained from the manufacturer's own production of the same formulations shall be used. The pipe shall be homogeneous throughout and shall be free of visible cracks, holes, foreign material, blisters, or other deleterious faults. If new pipe and fittings become damaged before or during installation, it shall be repaired as recommended by the manufacturer or replaced as required by the Engineer at the Contractor's expense, before installation.

Any section of the pipe with a gash, blister, abrasion, nick, scar, or other deleterious fault greater in depth than 10% of the wall thickness shall be discarded. However, a defective area of the pipe may be cut out and the joint fused in accordance with the procedures stated herein. In addition, any section of the pipe having other defects such as concentrated ridges, discoloration, excessive spot roughness, pitting, variable wall thickness, or any other defect of manufacturing or handling as determined by the Engineer shall be discarded.

All pipe furnished shall be accompanied by the manufacturer's certificate of test showing conformity with the Specifications. Each certificate shall identify a specific lot number, quantity of pipe, and show actual test results for the lot furnished. These certificates shall be submitted to the Inspector at the time of unloading.

All pipe furnished shall be subject to inspection on arrival at the job site by the Engineer. The purpose of the inspection shall be to cull and reject pipe or fittings that, independent of physical tests specified under the standard specifications designated herein, fail to conform to the requirements of these Specifications.

The Contractor shall notify the Engineer sufficiently in advance so that an Inspector may be on the job during the unloading of materials. A minimum notice of 24 hours is required for such unloading and inspection.

Rejected pipe shall be plainly marked by the Inspector and immediately removed from the site of the work by the Contractor, without no additional cost.

Geotextile (Filter Fabric) - The geotextile fabric for encasing the roadway underdrain pipe shall be an approved material such as nylon, polypropylene, fiberglass, or polyester and shall be either woven, heat bonded, knitted or of continuous fibers. The geotextile shall completely cover and be secured to the pipe. In an unstretched condition, knitted polyester fabrics shall weight at least 3.0 ounces per square yard and all other geotextiles shall weigh at least 3.5 ounces per square yard. The fabric shall be strong and tough and have a porosity such that the fabric will retain soil particles larger than 0.106 mm (No. 140 sieve) and shall pass aggregate particles finer than 0.025 mm. Geotextiles shall be stored and handled carefully and in accordance with the manufacturer's recommendations and shall not be exposed to heat or direct sunlight to such extent as to significantly affect its strength or toughness. Torn or punctured geotextiles shall not be used.

c. Pipe Jointing.- The polyethylene pipe shall be assembled and joined on-site above the ground using the butt-fusion method. Threaded or solvent-cement joints and connections are not permitted. Electro-fusion fittings may be used where necessary at no additional cost to the City. All equipment and procedures used shall be in strict compliance with the manufacturer's recommendations.

The butt-fused joint shall have true alignment and shall have uniform rollback beads resulting from the use of proper temperature and pressure. The joint shall be allowed adequate cooling time before removal of pressure. The fused joint shall be watertight and shall have tensile strength equal to that of the pipe. All joints shall be subject to acceptance by the Engineer prior to pipe placement. All defective joints shall be cut out and replaced at no cost to the project.

d. Construction Methods.- Geotextile-wrapped underdrain for subbase drainage shall be installed as shown on the plans and as specified in Section 404 of the 2020 MDOT Standard Specifications for Construction, with the following exceptions and additions:

1. The trench shall be constructed to have a minimum width of 18 inches and the underdrain shall be installed at the line grade and depth as indicated on the plans. The contractor shall maintain line and grade by means of a laser.
2. The 6" wrapped underdrain trench shall then be backfilled with 2NS Fine Aggregate compacted to 95% of its maximum unit weight. The first lift of backfill material shall be placed at a maximum thickness of 6 inches. The second and subsequent lifts, or portions thereof, shall be placed at a maximum thickness of 12 inches up to an elevation level with the bottom of the existing aggregate base course, or as directed by the Engineer.
3. Upgrade ends of the pipe shall be closed with suitable plugs to prevent entrance of any material. All couplings, tees and other fitting shall be manufactured and installed so as to prevent infiltration of any material. If during the course of construction, existing edge drains are encountered, their ends shall be plugged to the satisfaction of the Engineer such that material can not enter the pipe(s).

- 4. Downgrade ends of the pipe shall generally be tapped into existing or new drainage structures. However, it may be necessary to tap underdrain into either existing or new storm sewer, or into existing or new inlet leads as directed by the Engineer.
- 5. The trench bottom and edge drain shall be constructed to the percent of grade indicated on the plans or as determined by the Engineer, with the minimum percent of grade being 0.5%. In addition, the underdrain shall be constructed to have a minimum cover, from top of pipe to finished pavement grade, of 36 inches.
- 6. During the construction of underdrain runs, it may be necessary to terminate construction due to conflicts with buried obstructions or at such time when the minimum cover is reached. The Engineer will review conflicts on a case by case basis and make a decision on whether to continue installing pipe or terminate runs prematurely. The Contract Unit Price will not be adjusted, or additional payments made, for changes in the contract quantity due to Engineer ordered field changes associated when buried obstructions are encountered.

e. Measurement and Payment.- The completed work as measured for "Underdrain, Subbase, 6 inch, Special" and "Underdrain, Bank, 6 inch, Special" will be paid for at the contract unit price for the following contract item (pay item):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
6 inch, Wrapped Underdrain.....	Foot

6 inch, Wrapped Underdrain will be measured in length by feet and will be paid for at the contract unit price, which price shall be payment in full for all labor, equipment and material needed to accomplish this work.

The unit price shall include the cost of the 6-inch perforated, slotted, or HDPE pipe (as appropriate), geotextile wrap, pipe fittings and/or plugs, furnishing 2NS or Class II granular bedding and backfill material (as appropriate), compaction of the trench backfill, taps to new and existing drainage structures, storm sewers, or inlet leads, all excavation, final trimming required to meet the dimensions of the typical and specific cross-sections, and the disposal of all surplus excavated materials.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
SUBBASE AND AGGREGATE BASE

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of constructing subbase and/or aggregate base courses, on either a prepared subgrade or subbase as indicated on the Plans or where directed by the Engineer. This work shall be performed in accordance with Sections 301, 302, and 307 of the 2020 MDOT Standard Specification for Construction except as specified herein.

b. Materials.- The material used for this work shall meet the requirements of Sections 301, 302, 307, and 902 of MDOT 2020 Standard Specification for Construction, except that the aggregate base shall be either 21AA limestone (permanent and temporary applications) with a maximum loss by washing of 8% and any subbase shall be Class II Granular Material.

c. Construction Method.- Subbase and aggregate base courses shall not be placed when there are indications that the mixture may become frozen before the maximum unit weight is obtained, and in no case shall they be placed on a frozen subbase or subgrade.

The subbase and subgrade shall be shaped to the crown and grade specified on the plans and maintained in a smooth condition. The top of the subbase shall be placed to within ½ inch below and ½ inch above plan grade. The top of the aggregate base shall be placed to within ½ inch below and ¼ inch above plan grade. Variations within this tolerance shall be gradual. If in the opinion of the Engineer, the Contractor's equipment is causing or will cause any ruts in or damage to the subbase or subgrade, the equipment shall not be permitted on the subbase or subgrade.

Should the subgrade, subbase or aggregate base become damaged due to the Contractor's equipment or by local traffic, the subgrade, subbase, or aggregate base course shall be restored to the condition required by the Specifications without additional compensation to the Contractor.

No pavement course, concrete curb and gutter, or concrete driveway opening shall be placed until the subbase has been compacted to not less than 95 percent, and aggregate base course to not less than 98 percent of their respective maximum dry densities and until a "Permit to Place" has been issued by the Engineer.

Base course aggregate shall be handled and/or stockpiled on-site in a manner that minimizes segregation. Base course aggregate shall be deposited from trucks or through a spreader in a manner that will minimize segregation of material and that is approved by the Engineer. The re-handling of base course aggregate by the Contractor will not be considered sufficient cause to allow the material to become segregated. The Contractor may be required to wet the materials prior to and/or during placement to minimize segregation and to aid in compaction of the material should it be necessary.

All structures, including manholes, valve boxes, inlet structures and curbs shall be protected from damage and contamination by debris and construction materials. Structures shall be maintained clean of construction debris and properly covered at all times during the construction.

The Contractor may be charged for the cleaning by others of accumulated construction debris in the utility structures, and damages resulting from the uncleaned structures.

d. Measurement and Payment.- The completed work as measured will be paid for at the contract unit prices for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Aggregate Base Course, 21AA, Modified.....	Ton
Sand Subbase Course, Class II – C.I.P.....	Cyd

“Aggregate Base Course, 21AA, Modified” will be measured by weight in tons by certified delivery tickets submitted at the time of delivery to the project site. The item of work will be paid for at the contract unit price, which shall be payment in full for all labor, material and equipment needed to accomplish this work.

The provisions of Section 306.04 regarding excess moisture content, moisture corrections, and pay weights shall apply to this item of work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
MAINTENANCE GRAVEL, 21AA, MODIFIED

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of constructing temporary Maintenance Gravel on either a prepared subgrade or an existing aggregate surface as indicated on the Plans or where directed by the Engineer. This work shall be performed in accordance with Sections 306 of the 2020 MDOT Standard Specification for Construction except as specified herein.

b. Materials.- The material used for this work shall meet the requirements of Section 902 of MDOT 2020 Standard Specification for Construction, except that the Maintenance Gravel shall be 21AA.

c. Construction Method.- Perform the work in accordance with the requirements of Section 306 of the 2020 MDOT Standard Specification for Construction except as specified herein.

The Contractor shall blade and/or scarify and blade the existing aggregate surface in order to remove existing irregularities within the grade prior to placing the Maintenance Gravel material.

The material shall be handled and/or stockpiled in a manner that minimizes segregation. Maintenance Gravel aggregate shall be deposited from trucks or through a spreader in a manner that will minimize segregation of material and that is approved by the Engineer. The re-handling of the aggregate by the Contractor will not be considered sufficient cause to allow the material to become segregated. The Contractor may be required to wet the materials prior to and/or during placement to minimize segregation and to aid in compaction of the material should it be necessary.

All structures, including manholes, valve boxes, inlet structures and curbs shall be protected from damage and contamination by debris and construction materials. Structures shall be maintained clean of construction debris and properly covered at all times during the construction.

The Contractor may be charged for the cleaning by others of accumulated construction debris in the utility structures, and damages resulting from the uncleaned structures.

d. Measurement and Payment.- The completed work as measured will be paid for at the contract unit prices for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Maintenance Gravel, 21AA, Modified.....	Ton

"Maintenance Gravel, 21AA, Modified" will be measured by weight in tons by certified delivery tickets submitted at the time of delivery. The item of work will be paid for at the contract unit price, which shall be payment in full for all labor, material and equipment needed to accomplish this work.

The provisions of Section 306.04 regarding excess moisture content, moisture corrections, and pay weights shall apply to this item of work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONCRETE CURB AND DRIVEWAY OPENINGS

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of constructing concrete curb and gutter, and concrete curb openings in accordance with Section 802 of the Michigan Department of Transportation 2020 Standard Specifications for Construction (MDOT), as shown on the plans, and as specified herein.

b. Materials.- The materials shall meet the requirements as specified in Section 802.02 of the 2020 MDOT Standard Specifications and as specified herein:

Driveway Opening, Conc., Detail M, P-NC; and Driveway, Nonrienf Conc, 6 inch, P-NC; shall be Grade P-NC Concrete. All concrete mixtures shall be made with 6AA coarse aggregate.

All other concrete curb and gutter specified herein shall be MDOT Grade 3500 concrete with 6AA coarse aggregate. The Contractor may elect to add GGBFS to Grade 3500 mixtures in accordance with the requirements of the contract documents. No additional payment will be made for concrete mixtures containing GGBFS.

All concrete mixtures shall contain 6AA coarse aggregates which are either natural or limestone and meet the requirements of Section 902.

It shall be the Contractor's sole responsibility to propose specific concrete mix designs which meet the requirements of this Detailed Specification and the contract documents.

c. Construction Methods - Curb and Gutter, Conc, AA Det SD-R-1, Special, shall be constructed as shown in the City of Ann Arbor Standard Plans, as detailed in this specification, and as shown in the plans.

All driveway openings shall be constructed in accordance with MDOT Standard Detail R-29-H for Concrete Driveway Openings, Details "L" and "M."

Expansion joints of the thickness shown on the details shall be placed as directed by the Engineer.

The preparation of the aggregate base course upon which the curb and gutter and drive openings are to be constructed shall be performed in accordance with the Detailed Specification entitled "Aggregate Base Course, 21AA, Modified".

The concrete curb and gutter and/or driveway openings shall not be constructed on a pedestal or a mound. The aggregate base course shall be constructed the full width of the stage or phase in which concrete curb and gutter or driveway opening is to be constructed.

The concrete items being placed shall not be opened to construction or vehicular traffic until such time as the concrete has reached the required flexural strength. The Contractor shall cast beams in accordance with Section 603.03.B.10, and as approved by the Engineer, and obtain concrete flexural strength in accordance with the requirements of Section 104.11, Table 104-2. Beams cast for open to traffic determinations shall be cured in the same manner and environment as the concrete items which they represent.

Flexural strength beams shall be tested (broken) with a device meeting the approval of the Engineer and be in a state of good repair and shall be calibrated by an accredited testing laboratory or engineering company within a period of two years from the date of the test being performed.

d. Measurement and Payment.- The completed work as measured shall be paid for at the contract unit price for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Curb and Gutter, Conc, AA Det SD-R-1, Special.....	Foot
Driveway Opening, Conc, Detail M, P-NC.....	Foot

The pay items will be measured in length by the foot and will be payment in full for all labor, equipment and material needed to properly complete this work.

At curb openings for sidewalk ramps, the concrete curb and gutter (without the curb face) will be measured and paid for at the contact unit price for curb and gutter.

Driveway Opening, Conc, Detail L, shall not be paid for separately, but shall be included in the concrete curb and gutter or concrete pavement with integral curb pay items.

Where the Engineer directs the use of high early strength concrete for pay items that are not designated as "P-NC" the additional cement shall be paid for separately. No additional payment will be made for cement for pay items that are designated "P-NC".

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONCRETE PLACEMENT AND PROTECTION

WT:CT:RJM

1 of 3

05/16/22

a. Description.- This work shall consist of furnishing all labor, material, and equipment needed to furnish, place, and protect all concrete material in accordance with the requirements of this Detailed Specification. These requirements shall not apply to concrete bridge decks, unless otherwise noted.

b. Materials.- The Concrete shall meet the requirements of Sections 601 and 1004 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.

The Contractor shall propose specific concrete mix designs for the intended project purpose in accordance with the requirements of this Detailed Specification and other applicable Detailed Specification and/or project requirements. The Engineer's acceptance of a mix design shall not relieve the Contractor of their responsibility for the manufacture of the concrete mixture(s), its placement, or performance.

c. Construction Methods.- The Contractor shall perform all concrete placement operations in weather that is suitable for the successful placement and curing of the concrete materials. Concrete shall not be placed during periods of active precipitation.

The Contractor shall complete all needed formwork, base and/or sub-base preparation, and any other related items that are deemed necessary for the proper completion of the work. The Contractor shall not commence the placement of concrete until they receive all needed approvals from the Engineer for placement. The Engineer's approval of the Contractor to place concrete shall not relieve the Contractor of their responsibility for the proper placement and protection of the concrete materials or its long-term performance.

During periods when precipitation is threatening, provide durable, plastic sheeting, approved by the Engineer, in sufficient quantity to cover and protect all freshly placed concrete such that precipitation does not come into contact with the concrete. The Contractor shall arrange the placement of the plastic sheeting such that the surface of any freshly placed concrete is not marred by contact with the plastic; any seams in the plastic sheeting shall be watertight. The Contractor shall place adequate supports along and over the freshly placed concrete to prevent contact of the plastic and concrete. The Contractor shall ensure that sufficient dams or barriers are placed along the edges of the freshly placed concrete to prevent erosion of the underlying materials or damage to the edges of the freshly placed concrete. All measures shall be effective.

Any concrete damaged by precipitation shall be removed and replaced at the Contractor's expense. The Engineer shall decide if the concrete has been damaged and the limits of removal and replacement.

Concrete shall only be placed when the rate of surface evaporation at the site is less than 0.20 pounds per square foot per hour, according to Figure 706-1 of the 2020 Michigan Department of Transportation Standard Specifications for Construction. The Contractor shall provide approved equipment for determining the relative humidity and wind velocity at the site.

Water shall not be added to the placed concrete in order to aid finishing. Any water added to the concrete for slump adjustments shall be done by adding water to the mixing unit and thoroughly re-mixing the concrete for 30 revolutions of the mixing unit at mixing speed. Water shall not be added such that the design water-to-cement ratio of the concrete mixture or the design slump of the concrete mix is exceeded.

Concrete curing shall be performed in accordance with Section 602.03.M of the 2020 MDOT Standard Specifications for Construction. Curing operations shall take precedence over texturing operations and continued concrete placement. All curing compound applied shall provide uniform coverage over the entire surface being protected. The placement of curing compound shall be free of spots, blotches, or uncovered or non-uniformly covered areas. Should any areas be determined to exist by the Engineer, the curing compound shall be immediately re-applied by the Contractor at no additional cost to the project.

d. Weather Limitations.- The Contractor shall take all precautions when placing concrete to protect it from damage due to the elements. Concrete shall not be placed during precipitation events.

Concrete shall be protected from weather and temperature according to the requirements of Section 602.03.T. Concrete shall not be placed when the temperature of the plastic concrete mixture itself is greater than 90° F. In conditions where low temperature protection is required, the Contractor shall cover the concrete with insulated blankets, or other means as approved by the Engineer, to protect the concrete from damage. The concrete shall remain protected until it has reached a compressive strength of at least 1000 psi, or as directed by the Engineer.

e. Protection of Concrete from Construction Traffic, Vandalism and Graffiti.- The Contractor shall take all needed precautions to protect any concrete placed from being damaged by foot traffic, vehicular traffic, Contractor's equipment and personnel, subsequent construction operations, vandalism, and the like.

The Contractor shall provide sufficient personnel to guard and protect newly placed concrete until such time as it has hardened sufficiently to prevent damage. Any concrete curing compound damaged by Contractor foot traffic or equipment shall be immediately recoated by the Contractor at the Engineer's request.

Any concrete which is marked by graffiti, cracks other than at joints, or otherwise damaged before it has sufficiently hardened to prevent damage shall be removed and

replaced in accordance with the appropriate project specifications at the Contractor's sole expense.

w. Measurement and Payment.- The completed work as measured will be paid for at the contract unit price for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Concrete Pavement, ___-inch with Integral Curb	Square Yards

Price paid shall be payment in full for all labor, material and equipment necessary to furnish and place concrete pavement as specified. Payment for concrete pavement will be in square yards, field measured in place.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
CONCRETE SIDEWALK, ADA RAMPS, AND DRIVEWAY APPROACHES

WT:CT:RJM

1 of 3

05/16/22

a. Description.- This work shall consist of constructing concrete sidewalk, ramp, or drive approaches of the types as indicated on the plan sheets, as detailed in the specifications, or as directed by the Engineer. It shall also include constructing concrete drive approaches of the types as indicated on the plan sheets, as detailed in the specifications, or as directed by the Engineer. All work shall be in accordance with Section 801 and 803 of the 2020 MDOT Standard Specifications for Construction and as specified herein.

All ADA ramps shall be installed with detectable warning units. Reference the Detailed Specification entitled "Detectable Warning Tiles" for additional requirements.

b. Materials.- The materials shall meet the requirements as specified in the 2020 MDOT Standard Specifications and as required herein. The grade of concrete for items designated as "P-NC" shall be Grade P-NC concrete.

The grade of concrete for all remaining items covered by this Detailed Specification shall be Grade 3500 as specified in Section 1003 of the 2020 MDOT Standard Specifications for Construction. The Contractor may elect to add GGBFS to Grade 3500 mixtures in accordance with the requirements of the contract documents. No additional payment will be made for concrete mixtures containing GGBFS.

All concrete mixtures shall contain 6AA coarse aggregates which are either natural or limestone and meet the requirements of Section 902 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.

It shall be the Contractor's sole responsibility to propose specific concrete mix designs which meet the requirements of this Detailed Specification.

c. Construction Methods.- The Contractor is responsible to construct all sidewalk, sidewalk ramps, curbs, and all other concrete items within ADAAG compliance. All sidewalk and curb ramps must be constructed in accordance with MDOT Standard Detail R-28-I (or the version in effect at the time of Bid Letting.)

Where concrete sidewalk and/or ADA compliant ramps are to be placed, they shall be placed on a minimum of 4 inches of Granular Material, Class II, compacted to 95% of its maximum dry density.

Concrete drive approaches shall be placed on either aggregate base course or a sand sub-base as shown on the plans or as directed by the Engineer. The required density of the material underlying the concrete drive approach shall be that of the material on which it is placed and required by those specifications.

Prior to placing any concrete, the subgrade shall be completed and trimmed to final elevation. If a cold joint is required, the existing concrete is to be cleaned with compressed air to expose the aggregate in the concrete.

Where indicated on the plans to be performed, the Contractor shall also horizontally sawcut curbs to provide openings for sidewalk ramps as indicated. The Engineer shall define the extent of sawcutting both horizontally and vertically. This work will not be paid for separately, but shall be included in the corresponding price of the ADA ramp to be placed.

The concrete items being placed shall not be opened to construction or vehicular traffic until such time as the concrete has reached the required flexural strength. The Contractor shall cast beams in accordance with Section 603.03.B.10, and as approved by the Engineer, and obtain concrete flexural strength in accordance with the requirements of Section 104.11, Table 104-2. Beams cast for open to traffic determinations shall be cured in the same manner and environment as the concrete items which they represent.

Flexural strength beams shall be tested (broken) with a device meeting the approval of the Engineer and be in a state of good repair and shall be calibrated by an accredited testing laboratory or engineering company within a period of two years from the date of the test being performed.

All ADA ramps shall be installed with detectable warning units. Reference the Detailed Specification entitled "Detectable Warning Tiles" for additional requirements.

d. Measurement and Payment.- The completed work as measured for the following pay items will be paid for at the contract unit prices for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Sidewalk, Concrete, ___ inch, Special	Square Foot
Sidewalk Ramp, Concrete, ___ inch, Special	Square Foot
Drive Approach, Concrete, 6 inch, Non-Reinf, P-NC	Square Foot

The above items will be measured by area in square feet and be paid for at their respective contract unit price, which price shall be payment in full for all labor, equipment and material needed to accomplish this work. The unit price shall also include all costs associated with sawcutting curbs to provide openings for ADA sidewalk ramps as indicated on the plans.

Where the Engineer directs the use of high early concrete for pay items that are not designated as "P-NC", the additional cement shall be paid for separately. No additional payment will be made for cement for pay items that are designated "P-NC".

Excavation for placement of Granular Material, Class II, bedding material shall be included in the item of work "Machine Grading, Modified, ____" and shall not be paid for separately.

Detectable warning units cast in place, shall be paid for in accordance with the Detailed Specification for Detectable Warning Tiles.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
SIDEWALK RETAINING WALL, __ INCH TO __ INCH

WT:CT:RJM

1 of 2

05/16/22

DESCRIPTION

This work shall consist of constructing concrete retaining walls adjacent to sidewalks, in accordance with Section 706 of the 2020 edition of the MDOT Standard Specifications for Construction (MDOT Standard Specifications), except as specified herein, as described in this Detailed Specification, as shown in the typical section, and as directed by the Engineer.

MATERIAL

Concrete mixtures shall be Grade 3500 concrete, or as directed by the Engineer, meeting the requirements specified in Section 1004 of MDOT Standard Specifications. Epoxy Coated Reinforcement Steel meeting the requirements specified in Section 905 of the MDOT Standard Specifications, Geotextile Liner meeting the requirements specified in Section 910 of the MDOT Standard Specifications, and Joint Waterproofing meeting the requirements specified in Section 710 of the MDOT Standard Specifications shall be included in "Sidewalk Retaining Wall, __ inch to __ inch" and not paid for separately.

Foundation Excavation and Backfill, Structure, CIP for the retaining wall meeting the requirements specified in Section 206 of the MDOT Standard Specifications shall be paid for as part of "Sidewalk Grading".

CONSTRUCTION METHOD

The Contractor shall construct the Sidewalk Retaining Walls as shown in accordance with the details contained in the Contract Documents. Construction shall be in accordance with Section 706 of the MDOT Standard Specifications. The construction of the Keyway, Construction, and Expansion Joints shall be included in "Sidewalk Retaining Wall, __ inch to __ inch" and not paid for separately.

MEASUREMENT AND PAYMENT

Payment shall be measured by the face area from top of sidewalk to top of wall of the retaining wall in square feet. The completed work, as described, will be measured and paid for at the contract unit price for the following pay item:

PAY ITEM

PAY UNIT

Sidewalk Retaining Wall, 6 inch to 48 inch Square Feet

Payment for Sidewalk and Retaining Wall for the respective height shall include all labor, equipment and materials to complete this work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
DETECTABLE WARNING SURFACE

WT:CT:RJM

1 of 3

05/16/22

a. Description.- This work shall consist of furnishing and installing cast in place detectable warning units in compliance to the Americans with Disability Act (ADA). All work shall be in accordance with the Detailed Specification for “Concrete Driveway Approaches, Sidewalk and Ramp”, Section 803 of the MDOT 2020 Standard Specifications for Construction, MDOT Standard Detail R-28-J (or most current version in effect at the time of bidding), as indicated on the plans, and as modified herein.

b. Related Documents.- Americans with Disabilities Act (ADA) Title 49 CFR Transportation, Part 37.9 Standards for Accessible Transportation Facilities, Appendix A, Section 4.29.2 Detectable Warnings on Walking Surfaces

American Society for Testing and Materials (ASTM) Test Methods B117, C1028, D543, D570, D638, D695, D790, D2486, D2565, D5420, and E84.

c. Submittals.- Submit manufacturer’s literature describing products, installation procedures and maintenance instructions. Provide cast-in-place detectable surface tiles and accessories as produced by a single manufacturer.

Samples for Verification Purposes: Submit two (2) tile samples minimum 6” x 8” of the kind proposed for use. Samples shall be properly labeled and shall contain the following information: Name of Project; Submitted by; Date of Submittal; Manufacture’s Name; Catalog No.; and Date of Fabrication.

Material Test Reports: Submit current test reports from a qualified, independent, testing laboratory indicating that materials proposed for use are in compliance with requirements and meet the properties indicated. The required tests listed elsewhere in this Special Provision shall be performed by a certified and qualified independent testing laboratory on a cast-in-place tactile warning system. All test reports submitted shall be certified by the testing laboratory and shall clearly state that all tests were completed within 5 years of the date of the submittal. The manufacturer shall certify in writing that the materials provided to the project are manufactured with the same materials and manufacturing procedures as those used in the materials on which the test were performed.

c. Materials.- The detectable warning tiles shall be colored as Federal Number 22144 (frequently referred to as “Colonial Red” or “Brick Red”). The detectable warning tiles shall meet the following material properties, dimensions, and tolerances using the most current test methods:

1. Water Absorption: Not to exceed 0.35% when tested in accordance with ASTM-D570

2. Slip Resistance: 0.80 minimum combined wet/ dry static coefficient of friction on top domes and field area, when tested in accordance with ASTM C1028.
3. Compressive Strength: 18,000 psi minimum, when tested in accordance with ASTM D695.
4. Tensile Strength: 10,000 psi minimum, when tested in accordance with ASTM D638.
5. Flexural Strength: 24,000 psi minimum, when tested in accordance with ASTM D790.
6. Chemical Stain Resistance: No reaction to 1% hydrochloric acid, urine, chewing gum, soap solution, motor oil, bleach, calcium chloride, when tested in accordance with ASTM D543 or D1308.
7. Wear Depth: 300 minimum, when tested in accordance with ASTM C501.
8. Flame Spread: 25 maximum, when tested in accordance with ASTM E84.
9. Gardner Impact: 50 in.-lbs. minimum, when tested in accordance with Geometry "GE" of ASTM D5420.
10. Accelerated Weathering of Tile when tested by ASTM-G155 or ASTM G151 shall exhibit the following result- $\Delta E < 6.0$ as well as no deterioration, fading or chalking of surface when exposed to 3000 hours minimum exposure.
11. Wheel Loading: The cast in place tile shall be mounted on a concrete platform with a ½" airspace at the underside of the tile top plate then subjected to the specified maximum load of 10,400 lbs., corresponding to an 8,000 lb individual wheel load and a 30% impact factor. The tile shall exhibit no visible damage at the maximum load of 10,400 lbs using AASHTO-HB17 single sheet HS20-44 loading "Standard Specifications for Highways and Bridges."
12. Salt and Spray Performance of Tile and Adhesive System when tested to ASTM-B117 not to show any deterioration or other defects after 100 hours of exposure

d. Construction Methods.- Installer's Qualifications: Engage an experienced Installer who has successfully completed tile installations similar in material, design, and extent to that indicated for this Project.

The contractor shall follow manufacturer specifications for installation, except where they conflict with MDOT Standard Detail R-28-J (or most current edition in effect at the time of bidding), or other project requirements.

e. Measurement and Payment.- The completed work as measured for the following pay items will be paid for at the contract unit prices for the following contract items (pay items):

Contract Item (Pay Item)

Pay Unit

Detectable Warning Surface, Modified Foot

The unit price for this item shall include all labor, material, and equipment costs required to complete the work. Detectable Warning Surface, Modified are paid for by the linear foot of 24-inch wide plates.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
HOT MIX ASHALT (HMA) PAVEMENT REPAIR

WT:VCM:CMT

1 of 1

05/10/22

a. Description. This work consists of miscellaneous repairing areas of failed asphalt pavement and placing new hot mix asphalt (HMA) material as directed by the Engineer and as described herein. Complete pavement repairs prior to placement of the first hot mix asphalt paving course.

b. Materials. Provide materials in accordance with subsection 501.02 of the MDOT 2020 Standard Specifications for Construction, detailed specifications, and as shown on the plans.

c. Construction. Repair pavement in locations as specified by the Engineer and place "Hand Patching, Modified", in accordance with the details on the plans and according to subsection 501.03 of the MDOT 2020 Standard Specifications for Construction. "Hand Patching, Modified" must be placed in the repair area and roller compacted prior to placement of the paving course.

d. Measurement and Payment. Measure and pay for the completed work, as described, at the respective contract unit prices using the following respective pay items:

Pay Item	Pay Unit
Hand Patching, Modified	Ton

Measure **Hand Patching, Modified** weight by the unit ton and pay for it at the contract unit price, which prices includes the cost for all labor, equipment and materials to place HMA, by hand or other methods, the placement of bond coat, and compacting the material.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
ACCEPTANCE OF HMA MIXTURES, CITY OF ANN ARBOR

WT:CT:RJM

1 of 4

05/16/22

a. Description.- This Detailed Specification establishes acceptance criteria for HMA Mixtures on City of Ann Arbor projects. The HMA mixtures shall meet all the requirements of Section 501 of the MDOT 2020 Standard Specifications for Construction, except as modified herein.

b. Contractor Quality Control.- The Contractor must have a quality control plan as required by Section 501.03.M and as stipulated herein. The Quality Control (QC) Plan shall be submitted to the Engineer within 30 days of contract award or 14 days before the placement of any HMA materials, whichever date comes first. The QC Plan shall cover all aspects of HMA production, transportation, placement, and compaction. The Contractor shall have a QC representative on-site at all times during the paving operations to monitor and direct all paving-related operations. The placement of HMA shall not commence until such time as the QC Plan has been accepted by the Engineer. The Engineer's acceptance of the QC Plan shall not be construed as a basis of acceptance of any HMA materials, HMA placement results, or a waiver of any requirement(s) of the project specifications.

c. Materials.- Aggregates, mineral filler (if required), and asphalt binder shall be combined as necessary to produce a mixture proportioned within the specification requirements including aggregate gradation; the mix design criteria including volumetric properties; the Superpave Gyrotory (SGC) compaction criteria; and the uniformity tolerances listed in Table 1. Topsoil, clay, or loam shall not be added to aggregates which are to be used in plant mixed HMA mixtures.

d. Mix Designs.- The Contractor shall submit mix designs for evaluation in accordance with the Michigan Department of Transportation Hot Mix Asphalt Production Manual. All mix designs shall be submitted for review a minimum of 3 weeks prior to the anticipated placement of the HMA. The Contractor's production and paving schedules shall be considered to include the mix design review and approval process. Delays associated with the submittal, or re-submittal, of the required information shall not be a basis for an extension of contract time.

e. Construction.- Target air voids shall be 4% in leveling courses, top courses and shoulders paved in the same operation as the leveling and top courses. Target air voids shall be 3% in base courses and shoulders not paved in the same operation as the leveling and top courses. Pedestrian paths shall have a target air void content of 3%.

After the job-mix-formula (JMF) is established, the parameters identified in Table 1 shall be maintained within the Range 1 tolerance limits of Table 1. However, if deviations are predominately either below, or above, the JMF, the Engineer may order alterations in the plant to bring the mixture into better conformance with the JMF.

Should the HMA furnished fail to meet the Range 1 acceptance criteria for any parameter, the Contractor shall suspend all operations. Contract time will continue during these times when the plant is down. Before resuming any production, the Contractor shall propose, for the Engineer's approval, all necessary alterations to the materials or plant so that the JMF can be maintained. The Engineer, after evaluating for effects on the AWI and mix design properties, will approve or disapprove such alterations.

Acceptance sampling and testing will be performed by the Engineer using the sampling method and testing option selected by the Engineer. Quality control measures to ensure job control are the responsibility of the Contractor.

The crushed particle content of the aggregate used in the HMA mixture shall not be more than 10 percentage points above or below the crushed particle content used in the JMF, nor less than the minimum specified for the aggregates in the contract documents.

Pavement density will be measured by the Engineer with a nuclear density gauge using the G_{mm} from the JMF for the density control target. The required in-place density of the HMA shall be between 92.0 and 96.0 percent of the density control target. The Contractor is responsible for establishing a rolling pattern that will achieve the required in-place density. Should the specified target densities not be met, the material shall be considered to have a Range 2 failure and shall be rejected. If the Engineer determines that the material is suitable to remain in place, a 50% reduction to the unit price of all material affected shall be enacted by the Engineer. Should the Engineer determine that the material cannot remain in place, the affected material will be removed and replaced at the Contractor's sole expense as detailed in the Section entitled "Price Adjustments."

Acceptance Criteria

Table 1 – Uniformity Tolerance Limits for HMA Mixtures

Parameter	Top and Leveling Courses		Base Course	
	*Range 1	Range 2	*Range 1	Range 2
Air Voids	± 0.60	± 1.00	± 0.60	± 1.00
VMA	± 0.60	± 1.00	± 0.60	± 1.00
G_{mm} (maximum specific gravity of mixture)	± 0.013	± 0.020	± 0.013	± 0.020
Fines to Effective Binder Ratio (this parameter is independent of JMF)	0.6 to 1.2	0.6 to 1.4	0.6 to 1.2	0.6 to 1.4
Binder Content	± 0.30	± 0.40	± 0.30	± 0.40
Percent Passing No. 8 and Larger Sieves	± 5.0	± 8.0	± 7.0	± 9.0

Percent Passing No. 30 Sieve	± 4.0	± 6.0	± 6.0	± 9.0
Percent Passing No. 200 Sieve	± 1.0	± 2.0	± 2.0	± 3.0
*This range allows for normal mixture and testing variations. The mixture shall be proportioned to test as closely as possible to the Job-Mix-Formula.				

The tolerances specified in Table 1, with the exception of the Fines to Effective Binder Ratio, reflect variations from the approved job-mix formula.

Extraction and volumetric tests will be performed by the Engineer to confirm conformance to the specifications and the tolerances identified in Table 1. The minimum number of field extractions to be performed shall be in accordance with Table 2. The Engineer may elect to perform a minimum of 3 extractions per mixture, per day, for quantities less than 1000 tons.

Table 2 – Minimum Number of Extractions

Quantity (tons) of Single Mixture Placed per Day	Minimum Number of Extractions per Mixture per Day
<250	0
250 - 1000	2
1000 - 1500	3
1500 - 2000	4
2000 - 2500	5
2500 - 3000	6

e. Rejected Mixtures.- If more than one half the extractions and/or volumetric tests for a single mixture, batched on a single day, exceed the uniformity tolerance of Range 2 for any parameter in Table 1, or do not meet the minimum requirements for crushed particle content specified in the project documents, the mixture will be rejected.

If such mixtures are placed in a pavement, the remaining portions of the failing field samples (split samples) will be tested by an independent, accredited, private laboratory, the MDOT Region Laboratory, or the MDOT Central Laboratory (for the purposes of this contract, any of these laboratories can be considered a 3rd Party testing laboratory) to confirm the field test results. If necessary, to obtain additional HMA material, the Engineer will take pavement cores. The Contractor may only take cores if approved in writing by the Engineer. If the 3rd Party test results do not confirm the original field test results, then no price adjustments will be made for the mixture involved.

If the 3rd Party's test results confirm the original field test results and, if in the Engineer's judgment, the mixture warrants removal, the Contractor shall remove and replace the entire mixture placed on a given day, at the Contractor's expense, with a mixture meeting the specification requirements.

If the 3rd Party's test results confirm the original field test results and, if in the Engineer's judgment, the mixture can remain in place, the contract unit price for the entire mixture placed on a given day will be decreased as described in the Section entitled "Price Adjustments."

If no field extractions are performed on a given day because the quantity being placed is less than 250 tons, and if there is reason to believe that the mixture exceeds Range 2, or if the crushed particle content is less than the established criteria, based on test results from a different day, the price reduction may also be applied, or removal may be required, based on extraction tests performed by the Engineer from pavement cores.

f. Price Adjustments.- If more than one half of the field extractions for a single mixture, batched on a single day, exceed the uniformity tolerance of Range 1, but not Range 2, for any parameter in Table 1, the contract unit price will be reduced by 10 percent. Field tests indicating that mixtures are subject to the 10 percent penalty will be confirmed by 3rd party testing as described in the Section entitled "Rejected Mixtures."

If more than one half of the field extractions for a single mixture, batched on a single day, meet or exceed the uniformity tolerance of Range 2 for any parameter in Table 1, the material shall be removed and replaced at the Contractor's sole expense. These costs shall be deemed to include all costs associated with the material removal and replacement including, but not limited to; costs associated with re-mobilization of labor and equipment; traffic control; removal and disposal of the rejected material; transportation costs to provide material meeting the requirements of the specification; and any other cost associated with the work. Contract time shall continue during the period of time that the rejected material is investigated and re-tested, as well as, during the removal and replacement operations.

If no field extractions are performed on a given day because the quantity being placed is less than 250 tons, and the Engineer believes that the mixture exceeds Range 1 tolerances based on test results from a different day, the price reduction may also be applied, or removal may be required, based on material tests performed by the Engineer's representative from pavement core(s).

The Contractor will be back-charged for additional testing performed by the Engineer associated with mixtures which are rejected or penalized.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
HMA PAVING, CITY OF ANN ARBOR

WT:CT:RJM

1 of 4

05/16/22

a. Description.- Hot Mix Asphalt (HMA) pavement base, leveling, and top courses shall be constructed in accordance with Section 501 of the 2020 MDOT Standard Specifications for Construction, except as modified herein, and as directed by the Engineer.

b. Construction Methods.-

Equipment- All equipment shall conform to Section 501.03.A of the 2020 MDOT Standard Specifications, except as modified herein.

The Contractor shall have a 10 foot long straight edge, rubber-tired backhoe (Case 580 type, or equivalent), air-compressor with the ability to develop a minimum pressure of 100 pounds per square inch and continuous rated capacity of 150 cubic feet per minute of air flow, and jackhammer available during all paving operations. The Contractor shall be required to perform any miscellaneous cleaning, trimming, material removal, and other tasks as required by the Engineer in order to ensure the proper and orderly placement of all HMA materials on this project.

The Contractor shall provide sufficient rollers to achieve the specified asphalt densities.

At various times throughout the work, the Engineer may direct the Contractor to use smaller and/or lighter equipment, and to defer certain work tasks, in order to protect the grade and/or adjacent areas; including hauling units. The Contractor shall not be entitled to any additional compensation for the use of smaller equipment, lighter equipment, or work task deferral.

Cleaning and Bond Coat application- Cleaning and bond coat application shall be performed in accordance with Sections 501.03.C and 501.03.D of the 2020 MDOT Standard Specifications, except as modified herein, and as directed by the Engineer.

The Contractor shall furnish and operate throughout the construction period, vacuum-type street cleaning and utility structure cleaning equipment (Vac-All, Vactor, etc.) approved by the Engineer, and when directed by the Engineer, for street cleaning immediately prior to, and for street and utility structure cleaning after any and all paving. The cleaning equipment shall be of sufficient power to remove dust, dirt, and debris from the pavement and from utility structures in and adjacent to the construction area. The vac-all or similar equipment and shall be approved by the Engineer prior to beginning the work. The equipment used shall have an effective means for preventing any dust resulting from the operation from escaping into the air.

The bond coat shall be applied at a minimum rate of 0.10 gallons/yd². Before placing the bond coat, the existing pavement surface shall be thoroughly cleaned. The Contractor shall also thoroughly clean all joints, cracks, and edges to a minimum depth of one inch with compressed air, vac-all type equipment, or other approved mechanical or hand methods, to remove all dirt, debris, and all foreign material.

HMA Placement- Placement shall conform to Section 501.03.F of the 2020 MDOT Standard Specifications, except as modified herein, and as directed by the Engineer.

HMA placement shall not commence until a "Permit to Place" (no additional costs are required to obtain this permit) has been issued in writing by the Engineer. The Permit to Place shall be issued after the aggregate base course or the adjacent, underlying layer of pavement section has been approved by the Engineer.

The final structure adjustments must be approved by the Engineer prior to the issuance of the "Permit to Place" for the wearing course.

The top course shall be placed with a ¼" lip at the gutter edge of metal.

All HMA thickness dimensions are compacted-in-place.

Paving Operation Scheduling – The Contractor shall schedule the paving operation to avoid longitudinal cold joints that would be required to be left "open" over night.

In all cases, the Contractor shall pave the primary road's through-traffic lanes ("main line") first, from point-of-beginning to the point-of-ending. All other paving including, but not limited to; acceleration and deceleration lanes, intersection approaches, and center left-turn lanes shall be paved following completion of main line paving, unless authorized by the Engineer prior to the placement of any pavement.

Rate of Paver operation - The rate of the paver's travel shall be maintained such that the paving operation will be continuous, resulting in no transverse cold joints, but shall never exceed the rate of 50 feet per minute.

The Contractor shall furnish and operate enough material, equipment, and hauling units so as to keep the paving machine(s) moving continuously at all times. Failure to do so shall be cause for the suspension of the paving operation until the Contractor can demonstrate to the satisfaction of the Engineer, that sufficient resources have been dedicated to perform the work in accordance with the project specifications.

Longitudinal and Transverse Joints- shall conform to Section 502.03.F of the 2020 MDOT Standard Specifications and as specified herein.

For mainline HMA paving, the width of the mat for each pass of the paver shall be not less than 10.5', nor greater than 15', except as noted in the plans and as directed by

the Engineer. The Engineer will direct the layout of all HMA longitudinal joints during construction.

Prior to placing the adjacent paving pass on the leveling and wearing courses of HMA, the Contractor shall cut and remove 6" to 8" of the previously placed pavement at the free edge of the pavement by means of a coultter wheel. The Engineer reserves the right to reject any method(s) for cutting the pavement that does not provide a vertical and satisfactory edge, free of tearing, bending, or other deformations, as determined by the Engineer. Any method(s) employed by the Contractor shall be completely effective. The cut edge shall have a uniform bead of pavement joint adhesive applied to the full-height of the joint. The removal of this HMA material and resulting edge must be approved by the Engineer prior to proceeding with the placement of the succeeding pass of HMA. The base course of HMA and its vertical edge will have bond coat applied in accordance with Section 501.03.D. All costs associated with complying with these requirements will not be paid for separately, but shall be considered to be included in the items of work "HMA, ____" or "HMA, Approach."

Pavement joint adhesive shall be hot-applied, meet, or exceed, the following properties, and be approved by the Engineer prior to performing HMA placement:

- Brookfield Viscosity, 400°F, ASTM D2669 – 4,000 to 10,000 cp
- Cone Penetration, 77°F, ASTM D5329 – 60 to 100
- Flow, 140°F, ASTM D5329 – 5mm maximum
- Resilience, 77°F, ASTM D5329 – 30% minimum
- Ductility, 77°F, ASTM D113 – 30 cm minimum
- Ductility, 39.2°F, ASTM D113 – 30 cm minimum
- Tensile Adhesion, 77°F, ASTM D5329 – 500% minimum
- Softening Point, ASTM D36 - 170°F minimum
- Asphalt Compatibility, ASTM D5329 – pass

Feather Joints – shall be constructed so as to vary the thickness of the HMA from zero inches to the required paving thickness at the rate of approximately 1.5" over a distance of 10 feet, or as directed by the Engineer. The Contractor shall rake the larger pieces of aggregate out of feather joints prior to compaction.

Butt Joints - Construction of butt joints, where directed by the Engineer, shall conform to Section 501.03.C.3 and 501.03.C.4 of the 2020 MDOT Standard Specifications, except as modified herein.

When a butt joint is specified or directed to be placed by the Engineer, remove the existing HMA surface to the thickness of the proposed overlay, or full-depth, as directed by the Engineer, for the full width or length of the joint. The HMA material shall be sawcut to the directed depth along the pavement edge or removal line to prevent tearing of the pavement surface. Cut joints that will be exposed in the completed surface must be cut with a saw or a cold-milling machine or other methods approved by the Engineer. Joints that will be covered by HMA must be cut with a saw, a cold-milling machine, or other methods approved by the Engineer.

Rakers- the Contractor shall provide a minimum of two rakers during the placement of all wearing and leveling courses.

Faulty Mixtures – The Contractor and Engineer shall carefully observe the paving operation for signs of faulty mixtures. Points of weakness in the surface shall be removed or corrected by the Contractor, at his/her sole expense, prior to paving subsequent lifts of bituminous material. Such corrective action may include the removal and replacement of thin or contaminated sections of pavement, segregated HMA, and any sections that are weak or unstable. Once the Contractor or his representative is notified by the Engineer that the material being placed is out of allowable tolerances, or that there is a problem with the paving operation, the Contractor shall stop the paving operation at once, and shall not be permitted to continue placing bituminous material until again authorized by the Engineer. Any costs associated with meeting the requirements specified herein shall not be paid for separately, but shall be included in the item(s) of work being performed at the time the faulty mixture was discovered.

c. Measurement and Payment.- Unused HMA remaining in trucks after the work is completed shall be returned to the plant and re-weighed, and the corrected weight slip shall be provided to the Engineer. No payment will be made for the unused HMA material. All weight slips must include the type of mixture (codes are not acceptable), as well as vehicle number, gross weight, tare weight and net weight.

All costs of meeting the requirements of this Detailed Specification shall be included in the bid prices for HMA items in the proposal and will not be paid for separately.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
HMA APPLICATION ESTIMATE

WT:CT

1 of 1

05/16/22

a. Description.- The work shall be performed in accordance with the requirements of Division 5 of the 2020 Michigan Department of Transportation Standard Specifications for Construction, and as herein specified.

b. Materials.

NAME	PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERFORMANCE GRADE	AWI (min)
Russell Street	HMA, EL HMA, EL	EL (top) EL (base)	165 lb/Syd 275 lb/Syd	1.5" 2.5"	PG 58-28 PG 58-28	260 260
HMA Approach	HMA, EL HMA, EL	EL (top) EL (base)	165 lb/Syd 275 lb/Syd	1.5" 2.5"	PG 58-28 PG 58-28	260 260
Hand Patching	HMA, EL HMA, EL	EL (top) EL (base)	165 lb/Syd 275 lb/Syd	1.5" 2.5"	PG 58-28 PG 58-28	260 260

The Performance Grade asphalt binder range for the HMA mixture shall be as noted above. The Bond Coat material shall be applied in accordance with the requirements of the Special Provision entitled "HMA Paving, City of Ann Arbor." The uniform rate of application shall be a minimum of 0.05 gallons/yd² and be approved by the Engineer. This work will not be paid for separately, but shall be included in the cost of other pay items.

c. Measurement and Payment.- The work shall be measured and paid for as provided elsewhere in the contract documents.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
NO PARKING SIGNS

WT:CT:RJM

1 of 2

05/16/22

a. Description. This work shall consist of installing, maintaining and removing of "No Parking" signs and posts as outlined herein and as referenced on the plans. "No Parking" signs shall be installed in accordance with the section 812 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction Standard Specifications and the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

b. Materials. The City will furnish "No Parking" signs to the Contractor at no cost. The Contractor shall furnish the sign support and mounting hardware materials, which materials shall be in accordance with those specified in section 919 of the MDOT 2020 Standard Specifications for Construction.

c. Construction. Prior to the commencement of any construction activity, the Contractor shall place "No Parking" signs as directed by the Engineer. The Contractor shall obtain a permit for "Temporary Permission of Reserve Parking Lane for Work Related Purposes" from the City's Project Management Services Unit. This permit shall be obtained a minimum of 5 business days prior to the posting of "No Parking" signs.

The Contractor shall securely bolt the signs to the sign supports as directed by the Engineer. The Contractor shall imbed the sign supports at least two feet into the ground, and there shall be a minimum of six feet and maximum of seven feet of clearance maintained between the bottom of the sign and the ground. The signs are to be placed at intervals no more than 75 feet, and as necessary to eliminate parking in the construction area.

The installation of "No Parking" signs shall be in accordance with the permit. "No Parking" signs shall be installed by the Contractor, as directed by the Engineer, at least 48 hours prior to the proposed start-of-work/enforcement date. "No Parking" signs shall be covered by the Contractor, thereby allowing on-street parking, until between 48 and 24 hours prior to the start of the work. "No Parking" signs shall be covered by the Contractor whenever there is no work being performed for a period of time longer than 72 hours. "No Parking" signs shall be returned to the City upon the completion of work. The cost of unreturned signs will be back charged to the Contractor.

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

<u>Pay Item</u>	<u>Pay Unit</u>
No Parking Sign.....	Each

The item "No Parking Sign" will be measured as the maximum number of signs installed on the project at any one time. The unit price includes the removal and return of "No Parking" signs to the City upon completion of the project. The Contractor shall be back charged for the replacement costs for damaged or unreturned signs.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
IRRIGATION SYSTEM, PROTECTING AND MAINTENANCE

WT:CT:RJM

1 of 2

05/16/22

a. Description. This work shall consist of all labor, materials, and equipment necessary to investigate, locate, save and protect from damage, ensure continued and proper operation during the performance of the project work, re-establish operation as necessary, and upon completion of all project work, ensure that all existing sprinkler systems located within the project limits, or those affected by the project, are functioning in a satisfactory manner as determined by the Engineer.

b. Materials. None specified.

c. Construction. The Contractor shall be aware that properties located within the project limits have underground sprinkler systems that irrigate both private property and portions of the public right-of-way. The irrigation systems have been installed by a variety of private installers and may utilize several different materials and/or suppliers of the various components. Portions of the existing irrigation systems have been installed under paved areas, or may be required to be located within such areas at the conclusion of the project's construction.

The contractor shall perform the necessary investigations to determine the precise location of the irrigation systems, and all affected components, prior to the commencement of construction operations, determine all impacts to the systems that will result pursuant to the project's construction, and take the needed actions to ensure that the sprinkler systems will remain functional during the project's construction, and will be re-established in such a manner at appropriate intermediate and final project milestones, that the original functionality of the system is maintained to the greatest extent possible.

The Contractor shall contact all property owners prior to the commencement of the work in order to determine the impacts to their irrigation systems and coordinate the project's work with them to ensure satisfactory operation of the irrigation systems during construction.

All work shall be approved by the Engineer and the affected property owner(s) at the conclusion of the project's work.

This is an allowance type item. This allowance is not for solving problems caused by the Contractor's own neglect, errors, omissions or other deeds of the Contractor's own fault. Protecting existing irrigation systems where it is not necessary to remove it to complete the work is included in the contract unit price for the pay item **General Conditions, Maximum \$_____**.

The Contractor is required to present a detailed scope of work and detailed costs for any Work contemplated under the irrigation system allowance to the Engineer. No Work

is to begin until scope and costs have been finalized and approval by the Engineer in writing.

Thereafter, if the approved price for this work is more or less than the lump sum allowance amount of the lump sum in the Contract, the Contract Lump Sum Price shall be adjusted accordingly by Change Order. The payment shall be made on the basis of the actual approved amount without additional charge or markups for overhead, insurances, bonds, or any other incidental expenses. The Contractor shall be responsible for all coordination involved and for the timely completion of the Work to fit his schedule.

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

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
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Irrigation System, Protection and Maintenance	Lump Sum
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The approved price for this item shall include all labor, material, and equipment costs required to complete the work.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
PROJECT CLEAN-UP AND RESTORATION, SPECIAL

WT:VCM:CGT

1 of 2

05/08/22

a. Description.- This work consists of performing on-going clean-up, removing, and disposing of debris; including soil erosion control fences, protective fences, fallen timber, logs, brush, rocks, boulders, and any other rubbish generated from the Contractor's operations within the project limits or areas impacted by their operations. The Contractor shall perform final restoration and establish the planting areas as described in this Detailed Specification, as indicated on the Drawings, and as directed by the Engineer.

The related work of salvaging the existing topsoil, stockpiling the existing topsoil, preparing the earth bed, re-spreading the topsoil, furnishing the seed mixtures, sowing the seed, furnishing, placing, and anchoring the mulch blanket shall conform to the requirements of this Detailed Specification and Section 816, Turf Establishment, of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction.

b. Materials.- The materials shall meet the requirements specified in the 2020 edition of the MDOT Standard Specifications for Construction, except as specified herein:

1. Mulch.- Mulch seeded areas with the appropriate materials for the site conditions to promote germination and growth of seed and to mitigate soil erosion and sedimentation. Mulch blankets shall be as specified in the Detailed Specification for "Turf Establishment".

c. Construction.- Provide project cleanup as an ongoing operation. Perform project cleanup within the right-of-way and any other areas impacted by the project work operations.

Fill all holes and ruts resulting from the work operations with Engineer-approved material. Compact and level all backfill materials and restore ruts and holes to the surrounding contour as directed by the Engineer.

Grade, spread topsoil, remove rocks over 2 inches in diameter, place additional topsoil (as needed), place permanent seeding, and furnish, place, and anchor erosion control straw mulch blanket in all areas disturbed by the Contractor's operations. The Contractor shall be responsible for performing the permanent restoration of the Project area and other areas as part of the work of this Detailed Specification.

Topsoil placement shall occur at the locations called for on the Drawings or as directed by the Engineer. Minimum topsoil thickness in restoration areas shall be 4 inches. The Contractor may be required to truck in additional topsoil.

Damage to seeded areas resulting from erosion shall be repaired by the Contractor at the Contractor's expense. Scattered bare spots in seeded areas will not be allowed over 3 percent of the area nor greater than 6- by 6-inch in size.

Clean existing culverts, ditches, depressions, or other areas that contain sediment or debris from the work operations.

Neatly fill any ruts or depressions resulting from removal of soil erosion control materials with existing materials after their removal. Maintenance of silt fencing and other soil erosion control materials until such time as they are no longer needed, then removal and proper disposal of them from the site, shall be included in the bid price for the related soil erosion control device.

The project site shall be left in a condition that is clean and free of all project-generated debris and to the satisfaction of the Engineer.

d. Measurement and Payment.- The completed work as measured shall be paid at the contract unit price for the following contract pay items:

<u>Contract Pay Item</u>	<u>Pay Unit</u>
Project Clean-Up and Restoration, Special - _____	Lump Sum

The lump sum price for "Project Clean-Up and Restoration, Special - _____" shall include all remaining project clean-up and restoration work, including all labor, material, and equipment costs required to complete the work as specified herein.

CITY OF ANN ARBOR
 DETAILED SPECIFICATION
 FOR
TURF ESTABLISHMENT

WT:VCM:CGT

1 of 3

05/10/22

a. Description.- This work shall consist of furnishing and placing 4” of Engineer-approved topsoil, seeding lawn areas, and placing mulch blankets as indicated on the plans, as detailed in the specifications, or as directed by the Engineer.

The related work of preparing the earth bed, furnishing, and placing the topsoil, furnishing the seed mixtures, furnishing the fertilizer, sowing the seed, furnishing and installing the mulch blanket and watering shall conform to the requirements of this Detailed Specification and Section 816, Turf Establishment, of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction.

b. Materials.- The materials shall meet the requirements specified in Section 917 of the 2020 MDOT Standard Specifications for Construction except as specified herein:

- Seed shall be fresh, clean, dry, new-crop seed complying with the AOSA’s “Rules for Testing Seed”, tested for purity and germination tolerances.

Variety	Proportion By Weight	Purity	Germination
Baron Kentucky Bluegrass	25%	90	80
Kentucky Bluegrass 98/80	15%	98	80
Park Kentucky Bluegrass	15%	90	80
Omega III Perennial Ryegrass	20%	98	90
Creeping Red Fescue	25%	95	90

Maximum weed content shall be 0.30%.

- Fertilizers shall be a Class A. The percentages by weight shall be at a minimum 10N-10P-10K or as required and approved by the Engineer.
- The seed, fertilizer, and adhesive (mulch binder) shall be mixed together and applied at one time.
- Water used shall be obtained from fresh water sources and shall be free from injurious chemicals and other toxic substances.

Mulch Blankets shall meet the requirements of Section 917.15.B.2.b of the 2012 MDOT

Standard Specifications for Construction.

c. Maintenance and Acceptance.- It is the responsibility of the Contractor to establish a dense, vigorous, weed free lawn of permanent grasses, free from mounds and depressions prior to final acceptance and payment of this project. Any portion of a seeded area that fails to show a uniform germination, shall be re-seeded. Such re-seeding shall be at the Contractor's expense and shall continue until a dense, vigorous and weed free lawn is established.

The Contractor shall maintain all lawn areas until they have been accepted by the Engineer. Lawn maintenance shall begin immediately after the grass seed is in place, and shall continue until final acceptance with the following requirements:

- Lawns shall be protected and maintained by watering, mowing, and reseeding as necessary, until the period of time when the final acceptance and payment is made. The Contractor shall establish a uniform, dense, vigorous, and weed-free stand of the specified grasses. Maintenance includes, but is not limited to; deposition of additional topsoil; re-seeding; watering; fertilizing; mowing, and any other work as required to correct all settlement, erosion, germination, and establishment issues until the date of final acceptance by the Engineer.
- Damage to seeded areas resulting from erosion shall be repaired by the Contractor at the Contractor's expense. Scattered bare spots in seeded areas will not be allowed over three (3) percent of the area nor greater than 6"x 6" in size.

When the above requirements have been fulfilled, the Engineer will accept the lawn.

d. Measurement and Payment.- The completed work shall be paid for at the contract unit price for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Topsoil Surface, __ inch	Square Yard
Seeding and Mulching	Square Yard

"Topsoil Surface, __ inch" and "Seeding and Mulching" will be measured by area in square yards and will be paid for at the contract unit prices which shall be payment in full for all labor, materials, and equipment needed to accomplish this work.

Topsoil placement shall occur at the locations called for on the plans or, as directed by the Engineer. The unit price "Topsoil Surface, __ inch" shall include the grading of the area to receive the topsoil, preparing the earth bed, spreading and raking the topsoil to provide a uniform surface free of large clods, lumps, rocks, brush, roots, or other deleterious materials, as determined by the Engineer.

The seeding shall be placed on all lawn areas as called for on the plans, and shall include furnishing and installing seed, fertilizer, mulch blankets, and all required watering necessary for the establishment of the turf. Watering will not be paid for separately.

After initial placement of the topsoil and seed mixture(s), fifty (50) percent of the total quantity placed for each item will be certified for payment. The remaining fifty (50) percent of the total quantities will be held by the Engineer until such time as all lawn areas have been established and accepted by the Engineer.

Final acceptance shall occur no sooner than June 15th of the year after the year in which the lawn areas were initially planted during the previous spring planting season; or, final acceptance will occur no sooner than November 1st of the year after the year in which the lawn areas were initially planted during the previous summer planting season.

In no case shall lawn areas be accepted in the same year in which they were planted.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WATER MAIN AND APPURTENANCES

WT:CT:RJM

1 of 24

05/16/22

a. Description.- The Contractor shall furnish all labor, equipment, pipe, valves, fittings, restrained-joint pipe, restrained-joint gaskets, special gaskets as detailed on the plans and in the specification, polywrap, blow-off assemblies, fire hydrants, fire hydrant extensions, supplemental lighting towers, and all other materials necessary to complete the work as shown on the Plans, as detailed in this Detailed Specification, and as directed by the Engineer.

All water main installation and testing procedures shall be performed in accordance with the plans, the requirements of this Detailed Specification, and as directed by the Engineer. The Contractor shall excavate all trenches and pits to the required dimensions; sheet, brace, and properly support the adjoining ground or structures where necessary to comply with MIOSHA, Section 104.07.B of the MDOT 2020 Standard Specifications for Construction, and other relevant safety standards.

The work for all items shall include, but not be limited to; pavement saw-cutting; excavation and disposal of excavated material; connections to new and existing water mains; the furnishing and installation of solid sleeves and push-on-joint plugs where needed; the furnishing, installation, and removal of sheeting and/or shoring where needed; all items necessary for the protection of the trench and all persons employed in the work during the work day and “after-hours” periods; polywrap; the furnishing, placement and compaction of approved bedding and backfill materials; thrust blocks; additional labor and equipment costs associated with any required nighttime water main work; cleaning, disinfecting, flushing, bacteriological and hydrostatic testing; and any other required items to complete the work as shown on the plans, as detailed in this Detailed Specification, and as directed by the Engineer.

The work of installing a gate valve-in-well shall include installation and backfill of the specified valve, furnishing and installing pre-cast concrete gate wells including the concrete base, straight pre-cast concrete sections, transition sections, and the adjustment of the structure cover. No separate payment will be made for adjusting the structure covers on new gate wells. The gate well cover shall be paid as “Dr Structure Cover.” Upon completion of the work, the Contractor shall clean the Gate Well to the approval of the Engineer.

The cost of adjusting new gate valve-in-boxes shall be included in the unit price for Gate Valve-in-Box and shall not be paid for separately.

The fire hydrant assembly work shall include the hydrant, the 6 inch gate valve-in-box, 3 feet of 6 inch pipe, the thrust block, and any required extensions to install the fire hydrant to the finish grade as shown on the plans.

b. Materials.-

1. Submittals. Prior to beginning construction, the Contractor shall submit the following:
 - A. Product data on all ductile iron pipe, valves, fittings, asbestos concrete pipe to ductile iron pipe fittings, and hydrants.
 - B. Manufacturer's certifications on all pipe, fittings, and precast concrete units indicating that all materials meet the minimum requirements of these specifications.
 - C. Information on equipment and methods to be used for flushing, chlorination, pressure and bacteriological testing.
2. General Specifications.
 - A. Cast Ductile Iron Pipe and Fittings:

Cast ductile iron pipe shall be Iron Grade 60-42-10 and meet the requirements of ANSI/AWWA C151/A21.51 in all respects; with standard thickness cement mortar lining and asphaltic seal coat in accordance with ANSI/AWWA C104/A21.4; and, coated outside with an asphaltic coating in accordance with ANSI/AWWA C151/A21.51. 100% of the ferrous metals used in the manufacture of cast ductile iron pipe shall be recycled from scrap and other sources.

All pipe (except for pipe in bored steel casing) shall be either Pressure Class 350 (Table 50.5 ANSI/AWWA C150/A21.50) as detailed on the plans, or Thickness Class 50 (Table 50.15, ANSI/AWWA C150/A21.50). Pipe in bored steel casing under railroad shall be Thickness Class 56.

Cast ductile iron river crossing pipe shall be Clow Corp. "F-141 River Crossing Pipe", U.S. Pipe "USIFLEX Boltless Flexible Joint Pipe" or equal approved by the Engineer, and shall be thickness Class 56 minimum. The pipe shall have a boltless flexible joint of the ball and socket type, and be designed for, and rated at, a minimum interior working water pressure of 250 psi.

Restrained joint pipe, where called for on the Plans, shall be boltless, factory-manufactured, by the installation of retainer weldment and ductile iron locking segments or rings. Restrained joint pipe shall be Ductile Iron manufactured in accordance with the requirements of ANSI/ AWWA C151/A21.51. Joints for restrained joint pipe shall be in accordance with

ANSI/AWWA C111/A21.11. Restrained joint fittings and the restraining components shall be Ductile Iron in accordance with applicable requirements of ANSI/AWWA C110/A21.10 and/or C153/A21.53 with the exception of the manufacturer's proprietary design dimensions. Push-on joints for such fittings shall be in accordance with ANSI/AWWA C111/A21.11.

Restrained joint pipe shall be TR-Flex restrained joint pipe manufactured by U.S. Pipe; Lok-Ring pipe for pipe diameters 54" through 64" or Flex-ring pipe for pipe diameters less than 54" manufactured by American Ductile Iron Pipe; or, equal as approved by the Engineer. Bolts and nuts for "field-cut" retainer assemblies shall be stainless steel.

Cast ductile iron fittings shall be push-on joint (with the exception of solid sleeves and fire hydrants which shall be mechanical joint), meeting the requirements of ANSI/AWWA C110/A21.10 for short body cast iron fittings. Fittings shall have a cement mortar lining and asphaltic seal coat in accordance with ANSI/AWWA C104/A21.4 and ANSI/AWWA C110/A21.10. The outside of all fittings shall have an asphaltic coating in accordance with ANSI/AWWA C110/A21.10.

Solid sleeves shall be long-pattern sleeves.

B. Gate Valves and Gate Valve Boxes:

All gate valves shall be resilient seated meeting the requirements of AWWA C509. All valves shall be of the push-on joint type, unless used on tapping sleeve assemblies, or noted otherwise on the plans. The valves supplied shall be:

- a. Metroseal 250 Resilient Seated Gate Valve as manufactured by U.S. Pipe & Foundry Company
- b. U. S. Pipe and Foundry Tyton Joint, Resilient Wedge Seated Gate Valve, meeting the requirements of AWWA C 509, AWWA C550, and ASTM D 2794
- c. American Flow Control, Series 2500, Single Resilient Wedge
- d. East Jordan Iron Works FlowMaster Resilient Wedge Valve
- e. Mueller Series, 4" through 12", A-2360-38, Resilient Wedge – SL x SL
- f. Tyler Series DRS 250-22 Double Resilient Wedge

All valves shall come equipped with a two-inch square operating nut, opening right.

Valve Boxes shall be Tyler 6860 Buffalo type, Size D, screw-type, 3 piece, 5-1/4 inch shaft and a No. 6 Base for a valve 8 inches or less and a No. 8 base for 10 and 12 inch valves.

C. Gate Valve Wells:

Pre-cast reinforced concrete bases, bottom sections, manhole risers, grade adjustment rings, concentric cones, eccentric cones, and flat-slab tops shall conform to the requirements of ASTM C-478. Joints on precast gate wells shall meet the requirements of ASTM C-443, rubber O-ring gasket.

Flat-slab top, pre-cast, gate wells shall be designed to accommodate HL-93 Modified Live Load requirements as determined by a Professional Engineer licensed by the State of Michigan, regardless of where they are to be installed. For the purposes of design, a HL-93 Modified Live Load shall consist of 1.2 times the design truck or 1.2 times a single 60 kip load, whichever produces the greater stresses.

D. Fire Hydrants:

Fire hydrants shall be East Jordan Iron Works Model 5-BR Water Master BR 250 with traffic flange. All fire hydrants shall have the following features: a 6 inch push-on joint pipe connection, ANSI/AWWA C111/A21.11; two 2-1/2 inch National Standard hose connections; one 5 inch integral Stortz connection (facing hydrant Stortz on right); one 3-3/8"x7.5" pumper nozzle; 1-3/8 inch pentagon operating and cap nuts (1-3/8 in. point-to-flat at top; 1-7/16 in. point-to-flat at base); open left; breakable flange construction; no barrel drain; and a painted red finish. Depth of bury (bottom of pipe to ground surface) is generally 6 feet but may vary depending on specific site conditions. The Stortz pumper connection must be 21 in. \pm 3 in. above finished grade, and the breakable traffic flange must be between finished grade and 8 in. above finished grade.

Fire hydrant extensions shall be fully compatible with the manufacturer of the fire hydrant assembly provided and be approved by the Engineer. East Jordan Iron Works hydrants shall be provided with a model 5-BR extension kit; and, Waterous Fire Hydrants shall be provided with a F1-K562-6 extension kit.

All fire hydrants must be certified by Underwriters Laboratory (UL) or the National Sanitation Foundation (NSF) for use in a potable water system.

E. Tapping Sleeves and Valves:

Tapping sleeves and valves shall be manufactured of cast iron or stainless steel and designed for water service with a minimum working pressure of 150 psi. The sleeve shall be a full-bodied split sleeve design manufactured by one of the following manufacturers:

- a) Clow No. F-5205;
- b) Mueller Co. No. H-615;
- c) Waterous Series 800;
- d) East Jordan Iron Works MJ Tapping Sleeve with East Jordan FlowMaster RW Valve;
- e) Tyler/Union D.I. MJ Tapping Sleeve;
- f) Ford Meter Box Company Style FTSS;
- g) Power Seal Model No. 3490 AS;
- h) Smith Blair Model No. 622;
- i) JCM 432 All Stainless Steel Tapping Sleeve; and
- j) Price Brothers Company Tapping Sleeve for Prestressed Concrete Steel Cylinder Pipe (only to be used on concrete water mains.)

Tapping Sleeves for Pre-stressed Concrete Steel Cylinder Pipe shall be in accordance with AWWA M-9. The sleeves shall have a separate gland which permits installation of the sleeve prior to cutting of the prestress wires. The gland shall have a fusion epoxy coated (per AWWA C-213) waterway, and a broad gasket set in a retaining groove of a pressure plate gusseted to eliminate flexing. The gland shall be equipped with load bearing set screws to protect the cylinder. Grout under saddle is needed whether saddle is epoxy coated or not. Sleeves shall be furnished with grouting seals and grout horns to facilitate filling the space between the sleeve and the pipe. Tapping sleeves shall be a Price Brothers Company Tapping Sleeve for Prestressed Concrete Steel Cylinder Pipe or approved equal.

Tapping valves shall be double-disk type of the same manufacture as the sleeve, NRS with two-inch square operating nut-opening right, with a mechanical joint outlet.

All tapping sleeves and valves must be certified by Underwriters Laboratory (UL) or the National Sanitation Foundation (NSF) for use in a potable water system.

F. Asbestos Concrete Pipe to Ductile Iron Pipe Coupling:

The asbestos concrete pipe to ductile iron pipe coupling shall be the "Smith-Blair 415 (23.15"—21.60") Gaskets, Alloy bolts and Epoxy" coupling or equivalent.

G. Joints:

Push-on joints shall be single gasket joint meeting the requirements of ANSI/AWWA C111/A21.11.

Mechanical joints for fire hydrants and solid sleeves shall be in accordance with ANSI/AWWA C111/A21.11 and shall be the Mega Lug Series 1100 joint restraint system manufactured by EBAA Iron Sales, Inc. or the Ford Meter Box Co. Uni-flange Retainer (UFR 1400-D-x style.)

Bolts for mechanical joints shall be high strength, low alloy steel bolts, only, meeting the requirements of ANSI/AWWA C111/A21.11. All bolts, nuts, and washers if required, shall be coated with a factory-applied flouropolymer coating meeting the following requirements:

Use Temperature: -100°F to 500°F

Salt Spray – ASTM B117 up to 4000 hours (nuts must not become frozen)

Pencil Hardness – 5H to 6H – ASTM D3363-92A

Kinetic Coefficient of Friction – 0.06 to 0.08

Thickness – nominal 0.001" (1 mil)

Impact – 160 in-lbs as measured by ASTM D2794-93

Adhesion – 5B – ASTM D3359-95

Di-electric Strength – 500V per mil

Elongation – 35% to 50%

Tensile Strength – 4,000 psi

Operating Pressure – up to 100,000 psi

Kesternich Test – Nuts not frozen up to 30+ cycles (DIN 50018)

Corrosion Resistance: as measured by;

ASTM D 1308 Muriatic Acid 31% HCL - 24 hours - No Effect

Sulfuric Acid 93% H₂SO₄ - 24 hours - No Effect

Caustic Soda 100% NaOH - 24 hours - No Effect

Methy Ethyl Keytone MEK - 24 hours - No Effect

ASTM B117Salt Fog - 1,000 hours - No Effect

The flouropolymer coating shall strongly adhere to surface being coated and shall not flake off or be easily removed by rubbing or brushing.

Cast ductile iron river crossing pipe joints shall be a push-on type ball and socket joint utilizing a first grade rubber gasket. The joint shall be capable of 15-degree full turning deflection without separation, leakage, or restriction of the pipe waterway. Joint restraint shall be provided by a boltless means which is locked against accidental disengagement of the restraining component. Pipe shall be furnished with the necessary gaskets, lubricant, and retainer locking accessories.

Restrained, push-on joint, pipe shall be American Pipe's "Fast-Grip" gasket system; U.S. Pipe's "Field-Lok 350" gasket system; or, Griffin Pipe

“Field-Lok 350” gasket system.

The use of retainer glands and set screws shall not be acceptable.

Lubricants used in making up joints shall be supplied by the pipe manufacturer and the joints shall be coupled in accordance with the manufacturer's requirements.

H. Pipe Wrapping:

All Cast Ductile Iron Pipe, Fittings, and Valves (except river crossing pipe) shall be fully wrapped with polyethylene per ANSI/AWWA C105/A21.5 and the details as contained on the plans.

I. Casing Pipe:

Steel casing pipe used for construction at railroad or State highway crossings shall comply with the following minimum requirements unless more stringent requirements are established by the railroad or State. Casing pipes at other locations shall comply with the following minimum requirements unless otherwise indicated on the Plans or in the Specifications.

<u>Nominal Diameter of Casing Pipe (Inches)</u>	<u>Minimum Wall Thickness (Inches)</u>
Under 14	0.250
14, 16, and 18	0.312
20 and 22	0.375
24, 26, 28, and 30	0.500
32 and 34	0.563
36, 38, 40, 42, and 48	0.625

Steel pipe shall be non-spiral pipe and have a minimum yield strength of 35,000 psi. All joints shall be made leakproof using full penetration, continuous welds. Welds shall be ground smooth outside and inside (except inside 22 in. diameter and less) to prevent conflict with the soil or pipe placement. Steel pipe shall meet the requirements of ASTM A 53, Type E or S, Grade B.

Pipe Marking:

The following information shall be clearly marked on each length of pipe:

- a) The pipe designation and class (e.g. A 53, Type S, Grade B.)
- b) The name or trademark of the manufacturer.

- c) Identification of the manufacturing plant.

Inspection:

All casing pipe furnished shall be subject to inspection on arrival at the job site by the Engineer. The purpose of the inspection shall be to cull and reject pipe that, independent of physical tests specified under the standard specifications designated herein, fails to conform to the requirements of these Specifications.

Rejected pipe shall be plainly marked by the Inspector and immediately removed from the site of the work by the Contractor, without cost to the City.

J. Water Main Pipe Marking:

The following information shall be clearly marked and/or cast on each length of pipe:

- a) The pipe designation and class (e.g., D.I., Class 50).
- b) The name or trademark of the manufacturer.
- c) Country where cast.
- d) The year in which the pipe was produced.

The following shall be distinctly cast on each fitting:

- a) The pressure rating of the fitting.
- b) Nominal diameters of openings.
- c) The name or trademark of the manufacturer.
- d) Country where cast.
- e) The number of degrees or fraction of the circle on all bends.
- f) Ductile iron fittings shall have the letters "DI" or "Ductile" cast on them.

K. Manufacturer's Certification:

All pipe furnished shall be accompanied by the manufacturer's certificate of test showing conformity with the Specifications. Each certificate shall identify a specific lot number, quantity of pipe, and show actual test results for the lot furnished. These certificates shall be submitted to the Inspector at the time of unloading.

All materials that will potentially be in contact with the City of Ann Arbor water supply must be certified by Underwriters Laboratory (UL) or the National Sanitation Foundation (NSF) for use in a potable water system. These materials shall include pipe coatings, pipe metals, cement linings, and joint lubricants and gaskets.

L. Inspection:

All pipe furnished shall be subject to inspection on arrival at the job site by the Engineer. The purpose of the inspection shall be to cull and reject pipe or fittings that, independent of physical tests specified under the standard specifications designated herein, fail to conform to the requirements of these Specifications.

The Contractor shall notify the Engineer sufficiently in advance so that an Inspector may be on the job during the unloading of materials. A minimum notice of 24 hours is required for such unloading and inspection. The Contractor shall also notify the Engineer when the material has arrived at the site.

All ductile iron water main pipe shall be stacked on pallets off of the existing grade, with each end plugged or bagged so as to keep the pipe interior clean until final installation.

Cast ductile iron pipe and fittings shall be subject to rejection on account of any of the following:

- a) Variation in any dimension exceeding the permissible variations given in the material specifications.
- b) Any crack or defect in the cement mortar lining which, in the opinion of the Engineer, is non-repairable, including, but not limited to, loose or "hollow" lining.
- c) Any signs of physical damage or poor manufacturing which might render the material unsuitable for its intended use.
- d) Variation of more than 1/16 inch per lineal foot in alignment of pipe intended to be straight.
- e) Damaged ends, where in the judgment of the Engineer such damage would prevent making a satisfactory joint.
- f) Improper handling during delivery, unloading, or installation.

Rejected pipe shall be plainly marked by the Inspector and immediately removed from the site of the work by the Contractor, without cost to the City.

M. Water Main Bedding and Backfill Materials:

Bedding and backfill material for Trench Detail I (under roadbed), Modified, shall be Granular Material, Class II, meeting the requirements of Section 902. Bedding and backfill for Trench Detail V (outside of the 1:1 influence line of roadbed or curb and gutter), Modified, shall be Granular Material, Class II and Engineer approved native material, placed in accordance with the trench details.

c. Water Main Installation, Bacteriologic and Hydrostatic Testing, and Acceptance Requirements.- Installation of proposed water mains will require work in close proximity to existing utilities. This must be taken into consideration when the contractor determines the required trench safety requirements. All excavation shall conform to all relevant MIOSHA Standards; the Contractor is solely responsible for determining all excavation and trench safety requirements.

A. Dry Tap:

When a connection to an existing water main is to be made in the dry, the existing main to which a connection is to be made shall be isolated by the closing of the necessary existing valves, and the water from the existing main shall then be pumped out or removed by other means so that the connection may be made in the dry. All pipe materials and appurtenances which will come into contact with potable City water after the restoration of water service following the connections shall be disinfected with a strong chlorine solution prior to installation.

The Contractor may not operate City water main valves. For valve operation, contact City of Ann Arbor Public Services Area personnel; the City of Ann Arbor personnel will direct the operation of all valves by Contractor personnel. It is recommended that the Contractor request that the existing valves, which will need to be operated in order to perform the water main work, are checked in advance of the work to ensure that they operate properly. If the Contractor elects not to request the operation of the valves in advance of any required water main operation, then a request for extension of contract time will not be allowed.

It is possible that the valves which need to be operated to facilitate a shutdown will not close entirely, thereby allowing water to leak past the valve into the area of the shut down. The Contractor shall provide the necessary labor, material, and equipment to enable work to be completed with a poor shut down. Under no circumstances shall the Contractor be compensated for "downtime" associated with water main valve or appurtenance failure or its inability to properly operate or close fully. An extension of contract time may be allowed, if the Contractor has requested that the water main valves have been exercised in advance of the intended water main shutdown.

Due to the size and length of pipe being shut down, and the quality of shut-down attained, large amounts of water may need to be removed from the excavation. Where possible, the water shall be run directly into nearby storm sewer inlets via pumps and hose.

The Contractor shall have all pipe, fittings and appurtenances required to complete the water main connection prior to the excavation for the connection, or the work will not be allowed to commence.

The Contractor shall complete the water main work in a manner which minimizes the disruption of water service to the greatest extent possible.

The City must notify all businesses 48 hours in advance of a water main shut-down; residences must be notified 24 hours in advance. To give the City an opportunity to provide such notification, the Contractor shall schedule the water main shut-downs at least 72 hours in advance, and preferably a full four or five days in advance, of the water main shut-down.

No water main shutdown shall take place after 12:00 p.m. (noon), unless written permission has been granted by the Engineer and that the Contractor has sufficient lighting equipment to provide a safe and efficient work area for working after dark. No water main will be shut down until the main has been exposed and cleaned, and is ready to be cut.

There shall be no gap larger than 1/4 inch left in the existing water main as a result of the tie-in. If needed, a closure piece ("thrust ring") of such size so as to meet this requirement shall be installed.

B. Wet Tap:

Prior to the installation of a tapping sleeve, the section of pipe to be tapped shall be cleaned of all foreign material and wire brushed to a smooth surface. The two halves of the sleeve shall be placed around the pipe with the gaskets installed per the manufacturer's instructions. The bolts shall be tightened evenly from the center toward the ends. The bolts shall be tightened to the manufacturer's specified torque.

When performing a wet tap in a prestressed concrete steel cylinder water main, grout is to be placed under the tapping saddle whether or not the saddle is epoxy coated.

All pipe materials and appurtenances which may come into contact with potable City water shall be disinfected with a strong chlorine solution prior to installation. This includes the pipe section to be tapped, the two halves of the sleeve, gaskets and the gate valve.

Prior to installation of the end gaskets, the sleeve shall be blocked with cement bricks such that the outlet is in proper position. The end gaskets shall be installed with an overlap as specified by the manufacturer.

The glands shall be assembled on the pipe. The bolts around the gland shall be tightened evenly, causing the gaskets to uniformly compress.

The valve shall be installed on the sleeve following the manufacturer's instructions.

Prior to tapping, the assembly shall be tested using the test plug tap in the sleeve with the valve closed, or by placing a tapped plug on the outlet of the valve with the valve open. The assembly shall be pressurized to 150 psi and hold the pressure fifteen minutes. After the pressure test is complete, the pipe shall be tapped.

C. Oversized Water Mains:

Portions of the proposed water mains or fittings may connect with existing water mains or fittings. The possibility exists that some of the existing water mains may have been constructed using oversized, cast iron, pipe. Where tie-ins or interconnections are specified and the existing main is found to be oversized, the Contractor shall furnish and install Clow 3501B Sleeves, Tyler Dual Sleeve 5-146L, or Rockwell 441 Sleeves. These sleeves are to be present on the jobsite prior to the excavation for the water main connection, or the work will not be allowed to commence.

D. Permissible Deflection at Joints:

Wherever it is necessary to deflect ductile iron pipe from a straight line, either in the vertical or horizontal plane, to avoid obstructions, to plumb valve stems, or where long-radius curves are permitted, the amount of deflection allowed shall not exceed that required for satisfactory making of the joint, and shall be approved by the Engineer. The deflection shall not exceed the following amounts:

Size of Pipe (Inches)	Joint Angle (Degrees)	Deflection in 18 ft. (Inches)	Approx. Radius of Curve Produced by Succession of 18 ft. Lengths (Feet)
4	5	19	205
6	5	19	205
8	5	19	205
10	5	19	205
12	5	19	205
16	3	11	340
20	3	11	340
24	3	11	340
30	3	11	340

The above joint deflection angles apply to fittings as well as pipe joints.

E. Trench Opening:

The Contractor shall fully comply with all laws and regulations governing construction methods and the furnishing and use of all safeguards, safety devices, protective equipment, and pollution controls. Where required to support the surfaces of adjacent roadways, structures, or excavations, or to protect the

construction work, adjacent work, or workmen, the Contractor shall design and install sheeting, bracing, and shoring. The Engineer will not review the Contractor's design(s) or be responsible for the adequacy of the elements supporting the trench. The placing of such supports shall not release the Contractor of the responsibility for the sufficiency and integrity of the trench, trench opening, and the safety of all persons involved in the work.

Sheeting, bracing, and shoring shall not be left in place after completion of the work except as required by the Engineer. In the removing of sheeting and bracing after the construction has been completed, special care shall be taken to prevent any caving of the sides of the excavation and injury to the completed work or to adjacent property. Where the Engineer requires the sheeting, bracing, or shoring to be left in place it shall be cut off below the established surface grade as required by the Engineer.

All excavation shall be performed in such a manner as to provide adequate room for the construction and installation of the work to the lines, grades and dimensions shown on the Plans. The width of the trench shall be ample to permit the pipe to be laid and jointed properly, and the backfill to be placed and compacted as specified. For each size of pipe, the minimum trench width shall provide clearance of four inches on each side of the bell of the pipe or fitting or six inches on each side of the pipe barrel, whichever is greater. Trenches shall be of such extra width, when required, to permit the convenient placing of timber supports, sheeting and bracing, and handling of special fittings. The Work shall be performed such that the existing utilities, asphalt curb and gutter, and existing pavement shall be protected at all times.

In excavating for water mains, the excavation shall at all times be finished to the required grade in advance of the pipe line, but unless otherwise permitted in writing by the Engineer, not more than 50 feet of trench shall be open at one time in advance of the pipe. At no time shall more than 200 feet of trench be opened and incompletely backfilled. At the end of each day, no more than 10 feet of trench may be left open, and access to all drives shall be restored. This opening shall be surrounded by fencing and barricades, or plated. The remainder of the trenching operation shall be available for safe vehicular and pedestrian traffic at all times.

It is essential that the discharge of the trench de-watering pumps be conducted to natural drainage channels, drains, or storm sewers. Engineer-approved soil erosion and sedimentation controls shall be installed and maintained at the point of discharge.

The length of street which may be occupied by the construction work at any one time shall be subject to the approval of the Engineer and will be based on the requirements of use of the street by the public.

F. Boring Pits

The means and methods of boring pit excavation and support, in whatever conditions encountered or created, shall be determined by the Contractor, subject to approval by the Engineer. All costs shall be included in the Contract Price per lineal foot of bored water main. Perform all excavations required for construction of pits, shafts, and other structures. Excavations shall include any and all materials encountered in the Work, such as topsoil, clay, sand, gravel, cinders, rocks, boulders, fill, old timber, buried trees and roots, abandoned utilities, abandoned foundations and structures, buried debris, or any combination of these, in whatever condition found.

Provide and maintain all sheeting, shoring, and bracing required in shafts and pits, and open cut excavations to insure protection and safety of personnel and to protect adjacent structures, property and work in place. The Contractor shall be responsible for the complete design of all sheeting, shoring, and bracing work. The design shall be appropriate for the soil conditions, shall be of such strength, quality, dimension and spacing as to prevent caving or loss of ground or squeezing within the neat lines of the excavation, and shall effectively restrain movement of the adjacent soil. Prior to installing the sheeting, shoring or bracing, the Contractor shall submit plans for this work to the Engineer for informational purposes only. Sheeting, shoring, and bracing shall conform to the current federal or state regulations for safety.

Excavate as required to perform all boring work to the grades, lines and levels indicated on the Plans and as specified herein. Construct approach trenches, pits and shafts of sufficient length and width to accommodate the equipment being used, the pipe units to be placed and the manpower working. Locate the approach tunnel or working shaft or pit so that it will not unduly interfere with traffic or with the use of adjacent property.

Where required, control the infiltration of groundwater into the excavation. Use dewatering systems to lower the groundwater to below the bottom of the shaft or use other approved methods at no additional cost to the Owner.

Any relocations or removal and replacement of utilities, including gas mains, water mains, services, sewers, irrigation systems, signs, and other miscellaneous items required to construct shafts shall be incidental to the project unless otherwise specified.

Excavation under railroads shall conform to the requirements of the American Railroad Engineering Association (AREA) and the railroad corporation having jurisdiction.

G. Laying Pipe:

Each pipe shall be inspected for defects prior to being lowered into the trench.

Inside of pipe and outside of spigot shall be cleaned of any earth or foreign matter.

Proper implements, tools, and facilities satisfactory to the Engineer shall be provided and used by the Contractor for the safe and convenient prosecution of the work. All pipe, fittings, valves, and hydrants shall be carefully lowered into the trench piece by piece by means of an excavator using chains, slings, or other suitable tools or equipment as recommended by the manufacturer, in such a manner as to prevent damage to them and their protective coatings and linings. Under no circumstances shall materials be dropped or dumped into the trench.

New water main construction shall not be connected into the existing system until it has been tested and accepted by the Engineer. The Contractor shall excavate for all bell holes and shall place the bell of the pipe in the excavated bell hole. Pipe shall be laid on the prepared trench bottom with the bell ends facing the direction of laying, unless otherwise directed by the Engineer.

The Contractor shall take every precaution to prevent foreign material from entering the pipe while it is being placed in the line. During laying operations, no debris, tools, clothing or other materials shall be placed in the pipe. At times when pipe laying is not in progress, the open ends of pipe shall be closed by a watertight plug. This provision shall apply during the noon hours as well as overnight. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Pipe shall be jointed as specified elsewhere herein. The pipe shall be secured in place with approved backfill material tamped under it except at the bells. Pipe and fittings which do not allow a sufficient and uniform space for joints shall be removed and replaced with pipe and fittings of proper dimensions to insure such uniform space. Precautions shall be taken to prevent dirt from entering the joint space.

All pipe shall be laid at the correct line and grade as indicated by the grade stakes and offset line. Each pipe, as laid, shall be checked by the Contractor to ensure that this result is obtained. The staking shall be provided by the Engineer. No pipe shall be laid until a cut sheet for that pipe has been approved by the Engineer. The grade as shown on the Plans is that of the top-of-pipe for water main; and, the work must conform to this profile. For water main construction, a variation from the profile grade of two inches with ductile iron pipe, and three inches with reinforced concrete pipe, will be deemed sufficient reason to cause the work to be rejected and re-laid. Water main pipe alignment shall be maintained so as not to vary more than three inches from the correct line. Any pipe found out of line shall be re-laid properly by the Contractor.

Due to conditions in the field, changes to the proposed vertical and horizontal alignment of the proposed water main may become necessary. The Contractor shall, where directed by the Engineer, excavate up to 60 feet in advance of the pipe

laying operation to expose existing underground facilities thereby enabling the Engineer to make alignment decisions. The Contractor is required to realign (re-lay) the water main up to 2 feet vertically and/or horizontally as directed by the Engineer at no extra cost to the project. The excavation in advance of the pipe laying is intended to help eliminate the need for re-laying pipe.

H. Crossing Existing Structures and Facilities:

During the construction it may be necessary to cross under or over certain sewers, drains, culverts, water lines, gas lines, electric lines, fiber optic communication, telecommunication, and other types of underground structures or facilities, known or unknown. The Contractor shall make every effort to prevent damage to such underground structures and facilities. The Contractor shall not intentionally damage or break existing structures or facilities and repair them in order to expedite the water main installation process. Wherever such structures or facilities may inadvertently be disturbed or broken, they shall be restored to a condition that is equal to, or better than, that was encountered prior to the damage. All damaged structures and/or facilities shall be made fully acceptable to the owner and the City, at the Contractor's expense. All crossings shall be made with a minimum of twelve inches of vertical clearance between or alongside existing structures or facilities.

I. Cutting Pipe:

Cutting cast iron or ductile iron pipe for inserting valves, fittings, or closure pieces shall be performed in a neat and workmanlike manner without damage to the pipe or cement lining and so as to leave a smooth end at right angles to the longitudinal axis. Where the type of pipe joint in use is such that it employs push-on assembly to affect the joint seal, the outside of the cut end shall be tapered back 1/8 inch with a coarse file or a portable grinder at an angle of about 30 degrees. The tapering must remove all sharp and/or rough edges which might injure the gasket.

The flame cutting of pipe will not be allowed. Reinforced concrete water main pipe shall not be cut.

J. Setting Water Main Fittings and Accessories:

Valves, fittings, plugs, hydrants, etc. shall be set and joined to pipe in the manner specified in the Section entitled "Making Joints."

Hydrants shall be located as shown on the Plans or as directed by the Engineer in such a manner as to provide complete accessibility and minimize the possibility of damage from vehicles or injury to pedestrians.

Hydrants shall be set to stand plumb with their nozzles parallel to the street and the pumper nozzle facing the street. Hydrants shall be set with pumper nozzles between 18 and 24 inches above finished grade, or as directed in writing by the Engineer.

K. Making Joints:

Mechanical means shall be used for pulling home all rubber-gasket pipes regardless of trench condition where manual means will not result in pushing and holding the pipe home. When a trench box or liner is used, a cable shall be used to pull the joints home and hold them in position.

Where work is performed in wet trenches or trenches with running sand, the Contractor shall provide and use mechanical means for pulling the pipe home in making up the joint and for holding the pipe joints tight until completion of the line. Mechanical means shall consist of a cable placed inside or outside of the pipe with a suitable winch, jack, or come-along for pulling the pipe home and holding the pipe in position.

Where not required by these Specifications, manual means will be acceptable only if the joints can be pushed home and held.

L. Anchorage for Water Main Fittings and Accessories:

All plugs, caps, tees, hydrants, and bends shall be provided with MDOT Grade S2 concrete meeting the requirements of Section 701 of the 2020 MDOT Standard Specifications for Construction reaction backing (thrust block) as shown on the Plans or specified herein. Valves shall be restrained from movement at adjacent sleeves by the use of a closure piece, or thrust ring (full size pipe section cut to fill the gap inside the sleeve to within 1/4") as specified herein.

Reaction backing shall be placed between unexcavated solid ground and the fitting to be anchored. The area of bearing on the pipe and on the ground in each instance shall be that shown on the details or directed by the Engineer. The reaction backing shall, unless otherwise shown or directed, be so placed that the pipe and fitting joints will be accessible for repairs. This shall include adequate protection of any bolts from direct contact with the concrete.

Metal harnesses of tie rods or clamps may not be used instead of concrete reaction backing. Mega-Lug joint restraint systems and restrained, push-on joint, pipe shall be used where connections to existing lines require immediate pressurization, as specified herein.

In the event that the Engineer determines a change in the anchorage or design is required due to unsuitable earth conditions, changes may be ordered by the Engineer.

The use of friction clamps or set-screw type retainer glands for thrust restraint will not be allowed.

M. Casing Pipe Installation

Casing pipe I.D. shall be a minimum of 6-inches larger than the largest O.D. of the water main pipe. Larger diameter casing pipes shall be required where so noted on the plans. Place pipe to the lines and grades indicated on the Plans. Use care to not damage pipe, joints or joint material.

Perform boring or auguring excavation by excavating an opening larger than the outside diameter of the pipe to be installed. The diameter of the excavation shall not exceed the outside diameter of the casing pipe by more than 1-inch. Employ grouting or other methods approved by the Engineer to fill voids within 48 hours of completing the bore.

N. Abandonment or Removal of Water Main:

The Contractor shall abandon or remove water main(s) where shown on the Plans. All work shall be performed in accordance with the Detailed Specification entitled "Water Main and Appurtenances, Remove or Abandon."

O. Water Main Testing:

The water main shall be disinfected and tested by the Contractor in the presence of the Engineer in accordance with the requirements below. The Contractor shall furnish all piping, pumps, hoses, gauges, and other materials and equipment required to carry out the tests using water from the City's water mains. All chlorinated water shall be discharged directly to the sanitary sewer and will not be allowed to be discharged to the ground or any surrounding water course. Any hoses which are needed to direct water from blow-offs and/or hydrants during water main testing and flushing shall be supplied by the Contractor. The City shall furnish and install one inch corporation stops at all necessary locations, at the expense of the Contractor. The tapping of water mains, the installation of all corporation stops, and the operation of valves and hydrants is reserved for City personnel. The Contractor is required to assist in valve and hydrant operation, however. The Contractor shall give the City forty-eight hours prior written notice of intent and desire to test water mains.

P. Bacteriological Testing Sequences:

In the case of all water mains connected to existing facilities, flushing, chlorination and bacteriological testing must precede pressure testing. Where mains can be totally isolated from existing facilities with air gaps or double valves, pressure testing may precede chlorination and bacteriological testing. The normal sequence and time requirements for testing are:

Isolated (Gapped) Water Main	Connected Water Main
1. Fill Main	1. Flush and Swab*
2. Pressure Test	2. Chlorinate
3. Connect One End of Main	3. Wait; 24 hours
4. Flush and Swab*	4. Flush**
5. Chlorinate	5. Wait; 24 hours
6. Wait; 24 hours	6. Bacteriological Samples
7. Flush**	7. Wait; 24 hours
8. Wait; 24 hours	8. Bacteriological Samples
9. Bacteriological Samples	9. Wait; 48 hours
10. Wait; 24 hours	10. Pressure Test (If both sets of Bacteriological samples pass)
11. Bacteriological Samples	11. Flush
12. Wait; 48 hours	12. Wait; 24 hours
13. Make Final Connection(s) – Place in Service (If both sets of bacteriological samples pass)	13. Bacteriological Samples
	14. Wait; 24 hours
	15. Bacteriological Samples
	16. Wait; 48 hours
	17. Place in Service (If both sets of bacteriological samples pass)

*Collect flush water in operable storm water retention/detention facility.

**Discharge flush water into approved sanitary sewer.

The Contractor shall not connect any end of a newly constructed water main to an existing, in-service, water main, until the newly constructed water main passes the hydrostatic test, unless approved in writing by the Engineer.

Q. Hydrostatic (Pressure Test):

Insofar as is practical, mains shall be pressure tested between valves. The maximum length of water main to be tested in any one test shall be 1500 feet. The section of main to be tested shall be slowly filled with potable water and the entrained air within the pipe removed or absorbed and pumped up to a pressure of 150 psi (or other pressure if specified) and the test period shall start immediately thereafter. The lines shall then be maintained under a test pressure of 145-155 psi for a continuous period of three hours by pumping chlorinated (25 ppm) water into the line at frequent intervals. The volume of water so added shall be measured and

considered to represent the leakage from the line under test during the interval. Visible leaks shall be repaired regardless of test results. The leakage under the conditions of the test shall not exceed the values shown in the table below. If one side of a double disc gate valve is under test pressure, that seat shall count as four joints.

Maximum Allowable Leakage per 100 Joints at 150 psi Avg. Test Pressure

Pipe Diameter (Inches)	4	6	8	10	12	16	20	24	30	36
Leakage (gallons/hr)	0.66	0.99	1.32	1.66	1.99	2.65	3.30	3.97	4.97	5.96

In the event that the leakage exceeds the maximum allowable leakage as specified above, the joints in the line shall be carefully inspected for leaks and repaired where necessary. Any pipes or fittings found to be leaking shall be removed and replaced with new pieces by the Contractor. After this work has been performed, all tests shall be repeated.

R. Flushing and Swabbing:

The Contractor shall flush the water main after making a connection to the existing City water main where a valve separates the new water main from the existing main. As a result, flushing will be accomplished using flow through the full size of the new water main. If a storm water retention/detention facility is to be constructed as part of the project, this facility is to be completed, stabilized, operable, and utilized for the collection of the flushing water. All pipe, materials, and appurtenances which will come into contact with potable City water after the restoration of water service following the connection shall be disinfected with a strong chlorine solution prior to installation.

Water main shall be cleaned using a high density poly-pig, Girard Aqua Swab (2 lbs/ft³ density) swab, or Engineer approved equal and flushed. The diameter of the blow-off pipes shall be at least 50% of the diameter of the pipe being flushed. Hydrants, with internal components removed, may serve as blow-offs for mains 12 inches and less. The Contractor shall provide details, for the review and approval of the Engineer, for the various required blow-offs. Blow-off pipes, discharge hoses, where needed, and associated costs shall be included in the cost of the permanent water main being installed and will not be paid for separately. If there are no branch connections to be swabbed, the poly-pig shall be inserted in the new water main at the time of connection described above. The poly-pig shall be located on the "downstream" or new side of the separation valve. The poly-pig shall then be forced through the new water main during the first flush and discharged through a construction blow-off of sufficient size to allow passage of the poly-pig. For water mains with branch connections, a launching tee or wye shall be installed as shown

in the details, for launching multiple poly-pigs. The main line and each branch main shall be flushed and swabbed individually. Following the successful final bacteriological testing of the water main, the launching tee/wye shall be permanently capped at its branch.

During the flushing and swabbing of a water main, the discharge point for the main shall be left open, with all other discharge points closed, to direct the poly-pig completely through the main being swabbed to its point of termination. Following the initial swabbing of water main, the separation valve shall be closed, and then the discharge point closed. If a branch water main is to be swabbed, the poly-pig is then to be placed in the launcher; the discharge point for the branch water main is to be opened; the poly-pig is to be inserted into the water main; the separation valve partially opened and the branch water main flushed and swabbed.

Following the swabbing of the water main(s), the water main(s) are to be flushed as required. If approved or directed by the Engineer, the water main(s) may be flushed overnight, provided that proper controls (i.e. hoses directed into storm structures, etc.) are installed to direct and control the flushing water.

S. Chlorination:

After the water mains to be tested have been acceptably flushed, they shall be disinfected in accordance with AWWA C651 "Disinfecting Water Mains" and these Specifications. All new mains and fittings, and any existing mains contaminated by the Contractor, shall be chlorinated to a minimum residual of fifty (50) parts per million (ppm) with commercial liquid chlorine solution (sodium hypochlorite - pool type). Other forms of chlorination and disinfection methods of water mains may be presented by the Contractor and shall receive prior approval in writing by the Engineer before being used. The minimum recommended dosage of sodium hypochlorite is as follows (based on 10% available chlorine):

Recommended Minimum Chlorine Dosage to Disinfect 100 L.F. of Pipe

Pipe Diameter (inches)	10% Chlorine Solution (gallon)
6	0.153
8	0.272
10	0.426
12	0.613
16	1.090
20	1.703
24	2.452

The chlorinated water shall remain in the mains for a minimum of 24 hours, at the end of which period the chlorinated water at all parts of the main must show free available chlorine residual of at least twenty-five (25) ppm. If less than 25 ppm residual is shown at the end of the first 24 hour period, additional chlorine shall be added until a residual of not less than 25 ppm at all parts of the system is shown after a subsequent 24 hour period. The chlorinated water shall then be removed from the mains and disposed of into an existing, approved City sanitary sewer main, or other location approved in writing by the Engineer. All chlorinated water shall be discharged directly to the sanitary sewer and will not be allowed to be discharged to the ground or any surrounding water course. The mains shall then be left full of water ready for bacteriological testing.

T. Bacteriological Testing:

The City will obtain bacteriological samples of the water in the mains for analysis from testing blow-offs, corporations, or other sampling points as determined acceptable by the City. Samples will be taken after the mains have been satisfactorily chlorinated in accordance with these Specifications, the chlorinated water flushed out and removed, and the mains filled with potable water. The water samples will only be bacteriologically tested at the City's Water Treatment Plant Laboratory; the use of other laboratories or testing locations shall not be allowed or deemed to provide satisfactory test results by the City of Ann Arbor under any circumstance. No samples will be deemed acceptable until they meet all city requirements. If the newly constructed water main is connected at one end to an in-service section of the City water main, and the chlorination precedes pressure testing, the City will also take samples after satisfactory pressure testing. In each case, two sets of samples shall be taken; a period of 24 hours must elapse between flushing of the main and drawing of the first samples, with the second samples being drawn 24 hours after the first samples were drawn. For each sample, a minimum of 48 hours is required to obtain test results. All samples must pass the bacteriological test.

The Contractor shall plan for these testing sequences and durations in his construction schedule. Contract time will continue during all water main testing phases, regardless of duration.

d. Construction, General Requirements.- coordination with the City of Ann Arbor Field Operations Unit for the installation of 1-inch corporations in the gate wells to be used for water main testing and/or filling of new main.

The Contractor must have all materials, fittings, pumps and other miscellaneous equipment, and personnel on-site before the City of Ann Arbor Public Services personnel will prepare and shutdown and existing main.

The bedding and backfill for Trench Detail I (under roadbed), Modified, shall be MDOT Granular Material, Class II compacted to 95% of its maximum dry density in maximum lifts

of 12 inches. The bedding and backfill for Trench Detail V (within 1:1 influence of the roadbed or curb and gutter), Modified, to a point 12 inches above the top of pipe, shall be MDOT Class II sand compacted to 95% of its maximum dry density. The material above this point shall be Engineer-approved native material compacted to 90% of its maximum dry density.

The Contractor shall dig-up and expose all utility crossings prior to laying any water main pipe. This will allow the Engineer to adjust the grade of the water main, if possible, to avoid the existing utilities. The costs of the 'dig-ups', and all related costs, shall be included in the respective items of work in this Detailed Specification. Some "dig-ups" may need to occur out of Phase.

Should the water main, or other pay items in this Detailed Specification, conflict with abandoned sewers or water mains, the conflicting section of the abandoned sewer or water main shall be removed and the remaining sections shall be (re)abandoned in accordance the Detailed Specification for "Water Main and Appurtenances, Abandon" and the Detailed Specification for "Sewer, Any Size or Depth, Abandon," except that flow filling the sewer will not be required. All the work shall be included in the cost of the water main, or other pay items in this Detailed Specification.

e. Lighting Requirements for Nighttime Water Main Work.- Night work shall be lighted to an average intensity of 10 foot-candles minimum. Sufficient light sources shall be provided to achieve this illumination requirement. The lighting scheme shall be submitted to the Engineer for review and approval a minimum of 72 hours prior to the anticipated commencement of the nighttime work. Nighttime work will not be allowed to begin until such time as the lighting scheme has been approved by the Engineer.

The lighting shall allow the inspector to clearly see and inspect all work operations. Light sources shall be adjusted as directed by the Engineer, as many times as needed, in order to meet the requirement.

Lighting systems may be fixed, portable, or equipment mounted. A power source shall be supplied with sufficient capacity to operate the lighting system. The power source shall not violate any local noise ordinance requirements. The lighting system(s) shall be arranged such that they do not interfere with the vision of motorists, glare or shine in the eyes of oncoming drivers, or unnecessarily illuminate surrounding properties or residences. After initial set-up, drive through and observe the lighted area from each direction on the roadway. Adjust lighting units as many times as needed in order to comply with these requirements.

f. Sequence of Construction.- All water main construction shall be completed in accordance with the Detailed Specification entitled "Maintaining Traffic and Construction Sequencing" and as detailed herein. The Contractor shall schedule and coordinate all water main shutdowns with the Engineer. The Contractor shall submit for the Engineer's review and approval the sequence of all water main "shut downs" and tie-ins such that disruption in service to existing properties is minimized to the greatest extent possible. Should the

Engineer not accept the Contractor's proposed construction sequence, it shall not be a basis of claim for extension of contract time or additional compensation.

All water main and appurtenances shall be pressure tested, cleaned, disinfected and bacteriological tested in accordance with the specifications outlined within this Detailed Specification.

After acceptance of each section of new main the Contractor shall begin coordination with the City of Ann Arbor Public Services Area for the installation of water services, curb stops and boxes in accordance with the Detailed Specification entitled "Excavate and Backfill for Water Service Tap and Lead."

g. Measurement and Payment.- The completed work will be paid for at the contract unit prices for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
D.I., CI-56, Water Main, w/ Poly Wrap, ___ inch, Tr Det I, Mod	Foot
Reducer, ___ inch x ___ inch.....	Each
Tee, ___ inch x ___ inch x ___ inch.....	Each
Fire Hydrant Assy, w/Extensions, Complete	Each

All work shall be paid in full at the contract unit prices which shall include all labor, materials and equipment required including all required costs associated with night time work, supplemental lighting, and all other required elements of the work.

Water main pipe per lineal foot includes restrained joints where called for on the plans.

Fittings other than those specifically listed as separate contract items, blow-off assemblies, hoses, and restrained joint pipe and gaskets, special gaskets, and the like, shall not be paid for separately, but shall be considered included in the payment for "PC350, D.I. Water Main, w/Poly Wrap, ___ inch, Tr Det ___." Tees, Bends, and Reducers and other fittings specifically listed as separate contract items (pay items), shall be paid for at the contract unit price for each unit installed.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
WATER MAIN AND APPURTENANCES, REMOVE OR ABANDON

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall include abandoning or removing existing water mains, valves, valve wells, valve boxes, and fire hydrant assemblies of various sizes as required by the Plans. All work shall be performed in accordance with the project plans, as detailed in this Detailed Specification, and as directed by the Engineer.

b. Materials.- All materials shall meet the requirements specified in Division 7 and 9 of the MDOT 20202 Standard Specifications for Construction as follows:

Mortar Type II	Section 702
Granular Material, Class II	Section 902
Masonry Units	Section 913

Push-on joint plugs and thrust blocks shall conform to the requirements as detailed in the Detailed Specification entitled "Water Main and Appurtenances."

c. Methods of Construction.- The Contractor shall abandon water mains where shown on the Plans. This includes, but is not limited to, cutting the main at each end, plugging the live main at the end(s) with push-on joint plug(s) and thrust block(s), plugging the abandoned main at its end(s) with brick and mortar, concrete, or mechanical joint plug, breaking down any manholes (remove manhole ring and cover and the top 4' of manhole structure, breaking out the manhole base, and backfilling as specified herein) in the abandoned line, removing and salvaging any valves and fittings, plugging the pipe in manholes with brick and mortar, concrete, or mechanical joint plugs.

In locations as shown on the Plans or where abandoned water main, valves or valve wells are within 30 inches of the proposed subgrade, the pipe, valves or valve wells shall be removed completely. The resulting hole or trench shall be backfilled with Granular Material, Class II, in maximum lifts of 12 inches, and be compacted to 95% of its maximum dry density, if located within the public rights-of-way, railroad rights-of-way, or within the influence of paved surfaces or structures. Otherwise, backfill shall be Engineer approved native material, compacted to 90% of its maximum dry density, in lifts of 12 inches or less, unless otherwise noted on the plans.

Abandoned (salvaged) or removed valves and fire hydrant assemblies shall be neatly stacked on-site in a single location so that City of Ann Arbor forces can retrieve them at a later date. The Contractor shall assist City forces by loading them into City trucks. All costs associated with storing, stockpiling, and loading valves and hydrants into City vehicles will not be paid for separately.

This project includes abandoning asbestos concrete water main, which is located as

shown on the plans along Stadium Blvd. Asbestos concrete pipes shall be kept wet at all times while cutting or crushing operations are occurring. High speed friction saws shall not be used to cut the pipe.

As shown on the plans and/or as directed by the Engineer, portions of the asbestos concrete pipe shall be abandoned by capping it on both ends and burying it in the trench. As shown on the plans, other portions of the asbestos concrete pipe shall be abandoned by crushing and burying it in the trench. At no time shall any asbestos concrete pipe be removed from the site unless specifically directed to do so in writing by the Engineer.

d. Measurement and Payment.- The completed work as measured shall be paid at the contract unit prices for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
___ inch Water Main, Abandon.....	Foot
Fire Hydrant, Rem.....	Each

“___ inch Water Main, Abandon” shall be measured and paid for by length in lineal feet and shall include all labor, materials, and equipment necessary to abandon the pipe including, but not limited to; excavation; cutting of pipe; furnishing and installing push-on joint plugs and thrust blocks; constructing brick and mortar bulkheads; the furnishing, placement, and compaction of approved granular backfill material, as required; and, the removal and proper disposal off-site of excess materials.

“Fire Hydrant, Rem” shall be paid for at the contract unit price for each unit removed. Payment for Fire Hydrant, Rem includes payment for removing the companion valve.

All work associated with abandoning the asbestos concrete pipe shall be included in the above pay items.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
RCP, SEWER, C76, CL-IV, TR DET __

WT:CT:RJM

1 of 7

05/16/22

a. Description.- This work shall consist of installing storm sewer in accordance with Section 402 of the Michigan Department of Transportation 2020 Standard Specifications for Construction (MDOT) and as specified herein. All newly constructed storm sewer shall be tested and video inspected in accordance with the requirements of this Detailed Specification.

b. Materials.- The materials used for this work shall be in accordance with Section 402.02 except as modified herein.

Bedding and backfill for Trench Detail I, shall be Granular Material, Class II, meeting the requirements of MDOT Section 902.

All pipe shall be concrete, contain steel reinforcement, and shall be of the type, class, and size as shown on the plans.

Reinforced concrete pipe shall conform to the requirements for reinforced concrete pipe of ASTM Designation C 76, Class IV, unless otherwise designated on the Plans. For diameters larger than listed in ASTM Specifications, wall thickness and reinforcing steel shall be as shown in Section 909 Table 909-3 or 909-4 as applicable.

Joints for reinforced concrete pipe shall meet ASTM C 443 and shall be rubber gasket for tongue and groove, full bell and spigot rubber O-ring gasket, or modified grooved tongue with rubber gasket. Joints for sewers over 36 inches in diameter shall have inside joints cement mortar pointed to their full depth and shall have the outside joints provided with a cement mortar collar.

Lubricants used in making up joints shall be supplied by the pipe manufacturer and the joints shall be coupled in accordance with the manufacturer's requirements.

Class X concrete as described in this Detailed Specification shall consist of Portland Cement, coarse and fine aggregates, and water, proportioned with 282 lbs. cement (3 sacks) per cubic yard to produce a minimum 28 day compressive strength of 1000 psi.

c. Pipe Inspection and Delivery.- The following information shall be clearly marked on each length of pipe:

- a) The pipe designation and class (e.g., C 76, Class IV).
- b) The name or trademark of the manufacturer.
- c) Identification of the manufacturing plant.
- d) The date of manufacture.

- e) Testing lot number or testing lab stamp.
- f) Reinforced concrete pipe with elliptical reinforcement shall be clearly marked on the inside and the outside opposite walls along the minor axes of the elliptical reinforcing.
- g) Beveled pipe shall be marked with the amount of bevel and the point of maximum length shall be marked on the beveled end.

All pipe furnished shall be subject to inspection on arrival at the job site by the Engineer. The purpose of the inspection shall be to cull and reject pipe or fittings that, independent of physical tests specified under the standard specifications designated herein, fail to conform to the requirements of these Specifications.

The Contractor shall notify the Engineer sufficiently in advance so that an Inspector may be on the job during the unloading of materials. A minimum notice of 24 hours is required for such unloading and inspection.

Concrete pipe of any type shall be subject to rejection on account of any of the following:

- a) Variation in any dimension exceeding the permissible variations given in the material specifications.
- b) Fractures or cracks passing through the wall.
- c) Defects that indicate imperfect proportioning, mixing, or molding.
- d) Surface defects indicating honeycombed or open texture.
- e) Variation of more than 1/16 inch per lineal foot in alignment of pipe intended to be straight.
- f) Insecure attachment of branches or spurs.
- g) Damaged ends, where in the judgment of the Engineer such damage would prevent making a satisfactory joint.

Rejected pipe shall be plainly marked by the Inspector and immediately removed from the site of the work by the Contractor without cost to the project.

All pipe furnished shall be accompanied by the manufacturer's certificate of test showing conformity with the Specifications. Each certificate shall identify a specific lot number, quantity of pipe, and show actual test results for the lot furnished. These certificates shall be submitted to the Inspector at the time of unloading.

d. Methods of Construction.- All construction shall be performed in accordance with Section 402.03 except as modified herein.

The bedding and backfill for Trench Detail I, shall be MDOT Class II sand compacted to 95% of its maximum dry density. Compaction shall be performed as specified elsewhere in this Detailed Specification.

The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground structures, both known and unknown, may be determined, and the Contractor shall be held responsible for the repair of such structures when broken or otherwise damaged. The Contractor shall not intentionally remove existing storm sewer, storm sewer leads, or sanitary sewer leads in lieu of protecting and preserving them in order to expedite the proposed construction.

Excavation normally shall be by open cut from the surface, except as otherwise specified, or in special cases where crossing under trees, pavements, or structures. The Contractor may use tunnel methods if permitted in writing by the Engineer, provided his method of backfill is such, in the judgment of the Engineer, as to avoid any present or future injury to the tree, pavement, or structure. All excavation shall be in such manner as will provide adequate room for the construction and installation of the work to the lines, grades and dimensions shown on the Plans.

The trench shall be excavated to a minimum of four inches below the final location of the pipe. For reinforced concrete pipe 66" in diameter or larger, the trench will be excavated to a minimum of six inches below the pipe. This cut shall be filled to the level of the bottom quadrant of the pipe with Class II granular material as specified herein, shaped and compacted to the pipe barrel.

Bell holes shall be provided in the trench bottom at each joint to permit the joints to be made properly.

The Contractor shall dig-up and expose all utility crossings prior to laying any storm sewer pipe. This will allow the Engineer to adjust the grade of the storm sewer, if possible, to avoid the existing utilities. The costs of the exploratory excavation, and all related costs, shall be included in the unit price of the storm sewer. The Engineer may require that some dig-ups be performed out of the current construction stage or phase where the sewer work is taking place in order to aid in alignment decisions. Any required traffic control measures required to comply with this requirement shall be included in the costs of "Minor Traffic Devices" and "Traffic Regulator Control."

During the construction it may be necessary to cross under or over certain sewers, drains, culverts, water lines, gas lines, electric lines, and other underground structures or facilities, known or unknown. The Contractor shall make every effort to prevent damage to such underground structures and facilities. Wherever such structures or facilities are disturbed or broken, they shall be restored to a condition that is as good, or better than, that which existed prior to the disturbance and shall be acceptable to the owner and the City, at the Contractor's expense. These crossings shall be made with a minimum of twelve inches of vertical clearance between facilities.

Should the storm sewer conflict with abandoned sewers or water mains, the conflicting section of abandoned sewer or water main shall be removed and the remaining sections shall be (re)abandoned in accordance the Detailed Specification for "Water Main and Appurtenances, Abandon" and the Detailed Specification for "Sewer,

Any Size or Depth, Abandon,” except that flow filling the sewer will not be required. All the abandonment work shall be included in the cost of the storm sewer and will not be paid for separately.

Not more than 50 feet of trench shall be open at one time in advance of the pipe laying operation. At no time shall more than 200 feet of trench be opened and incompletely backfilled. At the end of each day, no more than 25 feet of trench may be left open, and access to all drives shall be restored. This opening shall be surrounded by fencing and barricades, or plated. The remainder of the trenching operation shall be available for safe vehicular and pedestrian traffic at all times.

All excavated material approved by the Engineer as backfill material and imported backfill material shall be piled in a manner that will not endanger the work and that will avoid obstructing sidewalks and driveways. All excavated material which is unsuitable for backfill shall be immediately removed from the site by the Contractor unless otherwise provided in the contract documents. Hydrants under pressure, manholes of any kind, valve boxes, curb stop boxes, fire and police call boxes, and other utility controls shall be left unobstructed and accessible until the work is completed. Gutters shall be kept clear, or other satisfactory provisions made, for street drainage, and natural water courses shall not be obstructed.

Each pipe shall be inspected for defects prior to being lowered into the trench. Inside of pipe and outside of spigot shall be cleaned of any earth or foreign matter.

Proper implements, tools, and facilities satisfactory to the Engineer shall be provided and used by the Contractor for the safe and convenient prosecution of the work. All pipe, manhole bases, manhole sections, and other similar items shall be carefully lowered into the trench piece by piece by means of suitable tools or equipment as recommended by the manufacturer, in such a manner as to prevent damage to them and their protective coatings and linings. Under no circumstances shall materials be dropped or dumped into the trench.

Construction of sewers shall begin at the outlet end and proceed upgrade. Pipe shall be laid on the prepared subgrade with the bell ends facing the direction of laying, unless otherwise directed by the Engineer.

The Contractor shall take every precaution to prevent foreign material from entering the pipe while it is being placed in the line. During laying operations, no debris, tools, clothing or other materials shall be placed in the pipe. At times when pipe laying is not in progress, the open ends of pipe shall be closed by a watertight plug. This provision shall apply during the noon hours as well as overnight. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Pipe shall be jointed as specified elsewhere herein.

No pipe shall be laid until a cut sheet for that pipe has been approved by the Engineer. All pipe shall be laid at the correct line and grade as indicated by the grade stakes and offset line. The correct line and grade shall be maintained by the use of a laser alignment system. Each pipe, as laid, shall be checked by the Contractor to insure that this result is obtained. The grade as shown on the Plans is that of the pipe invert for sewers and the work must conform to this profile. A variation of 1/4 inch from this profile grade will be deemed sufficient reason to cause the work to be rejected and relaid. Sewer pipe alignment shall be maintained so as to not vary more than one-half inch from the correct line on pipes up to 36 inches in diameter nor more than one inch on pipes 42 inches in diameter and larger. Any pipe found out of line shall be relaid properly by the Contractor.

Mechanical means shall be used for pulling home all rubber-gasketed pipe regardless of trench condition where manual means will not result in pushing and holding the pipe home. When a trench box or liner is used, a cable shall be used to pull the joints home and hold them in position.

Where work is performed in wet trenches or trenches with running sand, the Contractor shall provide and use mechanical means for pulling the pipe home in making up the joint and for holding the pipe joints tight until completion of the line. Mechanical means shall consist of a cable placed inside or outside of the pipe with a suitable winch, jack, or come-along for pulling the pipe home and holding the pipe in position.

Where not required by these Specifications, manual means will be acceptable only if the joints can be pushed home and hold themselves securely in place.

All pipes shall be bed on a four inch or thicker layer of compacted Class II granular material (unless noted otherwise on the applicable trench details) unless pipe undercutting is required. Perform any required pipe undercutting as directed by the Engineer and in accordance with the Section 402.03.A.

Where Class II granular material used as pipe bedding is required by the plans, from the bedding to the pipe centerline backfill shall be carefully placed Class II granular material, placed in maximum lift thicknesses of six inches, loose measure. Each lift shall be thoroughly compacted by hand tamps, pneumatic "pogo-sticks", or other approved methods, to at least 95% of the material's maximum dry density at optimum moisture content. Each lift shall extend the full width of the space between the pipe and trench wall, and the fill shall be brought up evenly on both sides of the pipe. The backfill under the haunches of the pipe shall be consolidated by the use of a tee-bar.

When the pipe is greater than 48 inch diameter, or when permitted in writing by the Engineer, the Class II granular fill from the bedding to the centerline may be replaced by 6A, 17A, or 34R aggregate meeting the requirements of Section 902. A suitable geotextile separator, approved by the Engineer, shall be provided around and above the coarse aggregate to prevent intrusion of succeeding backfill materials.

Where Class II granular material used as pipe bedding is required by the plans, from the pipe centerline to the top of the pipe, backfill shall be Class II granular material placed in maximum lift thicknesses of six inches, loose measure. Each lift shall be thoroughly compacted by hand tamps, pneumatic "pogo-sticks", or other approved methods, to at least 95% of the material's maximum dry density.

From the top of the pipe to two feet above the top of the pipe backfill shall be Class II granular material uniformly spread and machine tamped. Machine tamping shall include manually operated vibrating plate compactors. The backfill material shall be compacted in lifts of twelve inches, loose measure.

From two feet above the top of the pipe to the grade shown on the Plans or to the subgrade of surface materials, or to the subgrade of surface structures, backfill shall be Class II granular material (Trench Detail I installations) uniformly spread and machine tamped. If machine tamping includes manually operated vibrating plate compactors or self propelled vibrating rollers the backfill material shall be compacted in lifts not exceeding twelve inches, loose measure. If a backhoe mounted compactor is employed, the backfill material shall be compacted in lifts of thirty-six inches, loose measure. Approval to use a particular machine tamping method will be withdrawn by the Engineer if the method causes injury to the pipe or adjacent structures or movement of the pipe. Each lift shall be thoroughly compacted to at least 95% of material's maximum dry density. The Engineer may give consideration to giving written permission to increase the thickness of the lifts specified in this paragraph if satisfactory compaction is achieved and no undesirable side effects occur.

All storm sewer shall be television inspected by the Contractor. The Contractor shall furnish all labor, equipment and materials necessary for the television inspection. The Engineer shall be given 24 hours notice so that an Inspector may witness the television inspection. All storm sewer lines are to be thoroughly cleaned prior to television inspection, by jetting of the lines or other approved methods. Television inspection shall consist of wetting the invert of the section by pouring clean water in the upstream manhole until it appears in the downstream manhole, and then, after the water has stopped flowing, passing a television camera through the section. The television camera shall be passed through the section of pipe from the downstream to upstream end. Any runs of sewer not televised in this manner shall be re-televised at the Contractor's expense. The camera shall be connected to a monitor and a digital video recorder capable of generating DVD format disks. The video inspection record shall indicate the date, the section tested, and the actual distance from the beginning manhole to the ending manhole and shall note each visible defect. The DVD shall be furnished to the Engineer for review.

The television inspection will be deemed satisfactory if no visible defects, including, but not limited to, dips or low spots, high spots, errors in horizontal or vertical alignment, joint offsets, leaks, cracks, standing water greater than ¼", or debris, are present. Only after all tests have been successfully completed, and acknowledged by the Engineer in writing, may the storm sewer be placed into service.

If a sewer repair is required as a result of damage during construction operations or television inspection failure, the Contractor shall expose the sewer pipe and perform the required correction(s), as specified herein and as directed by the Engineer.

If the repair is required due to the pipe being out of alignment or off grade, the pipe shall be adjusted so as to be placed in proper alignment and grade. Coarse-graded aggregate material shall be carefully placed under the haunches of the realigned pipe and compacted by the use of a tee-bar. From the haunches of the pipe, backfilling shall be performed in accordance with the requirements for backfilling as outlined elsewhere in this Detailed Specification.

If the pipe cannot be satisfactorily realigned or an open joint reset; or if the pipe is cracked, broken, or permanently deflected, the affected pipe shall be removed and replaced with the same pipe material. The pipe to be removed is to be sawed on each side of the damaged section in a neat and workmanlike manner without damage to the adjacent pipe. The replacement pipe section shall fit flush to the remaining pipe at each end. These sawed joints shall be coupled using a flexible pipe coupling and stainless steel shear ring. These joints shall be encased to the pipe centerline with Class X concrete one foot on either side of the flexible coupling. The remaining pipe backfill shall be performed in accordance with the applicable requirements for backfilling as outlined elsewhere in this Detailed Specification.

e. Measurement and Payment.- The completed work as measured will be paid for at the contract unit prices for the following contract items (pay items):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
RCP, Sewer, CI C 76 IV, _ inch, Tr Det I.....	Foot

The items of work listed above shall be paid for by the length of pipe actually installed. The unit price for this item of work shall include all labor, material, and equipment costs, including video inspection, and all needed items to properly complete the work as shown on the plans, as detailed in the Specifications, and as directed by the Engineer.

The herein specified dig-ups shall be included in the cost of the pipe and not paid for separately.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
DRAINAGE STRUCTURES

WT:CT:RJM

1 of 4

05/16/22

a. Description.- This work shall consist of constructing drainage structures in accordance with Section 403 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, as shown on the plans, and as specified herein.

b. Materials.- The materials used for this work shall conform to Subsection 403.02 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, except as specified herein.

Storm sewer drainage structures shall be constructed of precast or cast-in-place reinforced concrete sections, or concrete masonry units. All sanitary sewer manholes and gate wells (water main valve manholes) shall be constructed of precast reinforced concrete sections.

Precast reinforced concrete bases, bottom sections, manhole risers, grade adjustment rings, concentric cones, eccentric cones, and flat slab tops shall conform to the requirements of ASTM C-478. Joints on precast manholes used on all sanitary sewers shall meet ASTM C-443, rubber O-ring gasket.

Precast manhole tees and radius pipe sections shall conform to requirements for reinforced concrete pipe, ASTM C-76, Class IV. Joints shall conform to adjacent pipe. Tees and radius pipe shall conform to details indicated on drawings offered by the Concrete Pipe Association of Michigan, Inc., or Engineer approved equal.

If precast drainage structures are used, they shall be designed to accommodate HL-93 Modified Live Load requirements as determined by a Professional Engineer licensed by the State of Michigan, regardless of where they are to be installed. For the purposes of design, a HL-93 Modified Live Load shall consist of 1.2 times the design truck or 1.2 times a single 60 kip load, whichever produces the greater stresses.

If precast structures are used, the Contractor shall field verify inverts prior to fabricating precast units. No additional payment will be made to the Contractor for precast units that cannot be used due to existing inverts being different than shown on the plans, changes in vertical or horizontal alignment due to conditions found in the field, or similar unforeseen circumstances.

If the Contractor elects to use pre-cast drainage structures, or if portions of the drainage structures are constructed with pre-cast concrete elements, the Contractor shall submit to the Engineer for review and approval shop drawings in accordance with Section 104.02 of the Michigan Department of Transportation 2020 Standard Specifications for Construction.

For each submittal or resubmittal, the Contractor shall allow at least 14 calendar days from the date of the submittal to receive the Engineer's acceptance or request for revisions. The Engineer's comments shall be incorporated into the submitted plans, calculations and descriptions. The Engineer's acceptance is required before beginning the work. Resubmittals shall be reviewed and returned to the General Contractor within 14 calendar days. Required revisions will not be a basis of payment for additional compensation, extra work, or an extension of contract time. The Contractor shall include time for this entire review process in his/her CPM network schedule.

Concrete masonry units shall conform to the requirements for concrete masonry units for catch basins and manholes, ASTM C-139.

Concrete brick shall conform to the requirements for concrete building brick, ASTM C-55, Grade N-1.

Plastic coated manhole steps shall be injection molded of copolymer, polypropylene, encapsulating a 1/2 inch grade 60 steel reinforcing bar. Plastic-coated manhole steps shall meet the performance test described in ASTM C-478, Paragraph II, and shall have an impact resistance of 300 ft.-lbs. with only minor deflection and no cracking or breaking. The steps shall resist pull out forces of 1500 lbs.

c. Methods of Construction.- The construction methods used shall conform to Section 403.03 of the Michigan Department of Transportation 2020 Standard Specifications for Construction except as specified herein.

Where a structure currently exists and a new structure is required to be constructed in the same location, the Contractor shall excavate, remove, and dispose of the existing drainage structure included in the unit price for the structure to be constructed.

Excavation shall be carried to the depth and width required to permit the construction of the required base. The excavation width shall be greater than the base. The bottom of the excavation shall be trimmed to a uniform horizontal bed and be completely dewatered before any concrete is placed therein. Precast manhole bases and precast bottom sections are allowed.

Concrete block construction shall only be allowed for storm sewer manholes and inlets and shall be built of the size and dimensions shown on the Plans. The block shall be clean, laid in a full bed of mortar, and thoroughly bonded by completely filling the vertical end grooves with mortar so as to interlock with the adjacent block. The mortar beds and joints shall not exceed 3/4 inch thickness. The vertical joints are to be completely filled with the joints on the inside face rubbed full of mortar and struck smooth as the manhole, inlet or structure is built up. The entire outside face of the structure shall receive a 1/2" thick mortar coat and struck smooth. All masonry materials, sand, and water shall be heated to over 50° F during freezing weather, and the completed work shall be covered and protected from damage by freezing.

Circular precast manhole sections shall be constructed in accordance with the details as shown on the plans. Manhole stack units shall be constructed on level poured-in-place bases, precast concrete bases, or precast concrete bottom sections.

Precast cone sections shall be constructed in accordance with the details as shown on the plans. These units shall be eccentric for all manholes, precast or block. All structures shall be topped with a minimum of one, and a maximum of three, 2" tall, brick or precast adjustment courses.

Manholes, inlets, gate wells and structures shall be constructed within 2-1/2 inches of plumb.

Frames and cover castings shall be set in full mortar beds and pointed on the structure interior to a smooth, brushed finish. The covers shall be set flush with sidewalk, roadway pavement, or ground surfaces. The Engineer shall be notified prior to the final paving so as to allow inspection of the final casting adjustments for all utility structures. In gravel streets, covers shall be set six to eight inches below finished gravel surface.

Sewer pipes shall extend into structures a minimum of 1/2 inch and a maximum of 3 inches.

Flow channels for sewer structures shall be finished in accordance with the details as shown on the plans. All flow channels shall be screeded and floated to a smooth, uniform surface and troweled to a hard surface finish.

Stubs for future sewer connections shall be furnished and placed by the Contractor as shown on the Plans and as directed by the Engineer. Connections shall be properly supported and braced when not resting on original ground so that any settlement will not disturb the connection. Stubs shall consist of one length of sewer pipe, of the size indicated on the Plans, with a watertight plug.

The excavation shall be kept in a dry condition. All necessary dewatering shall be included in the price bid for the storm sewer work.

All necessary adjustments for new structures shall be included in the cost of the structure.

Temporary drainage structures shall be constructed as specified in the plans and consist of a typical manhole riser with no manhole base. The excavation for temporary drainage structures shall be performed such that the bottom portion of the manhole penetrates into the existing granular soil layer and water is permitted to infiltrate through the granular base. If the sand layer is not reached at the depth indicated in the plans, the Contractor shall excavate to a depth a minimum of 6 inches into said sand layer. The bottom of the excavation shall be trimmed to a uniform horizontal bed and be completely

dewatered. The manhole riser section shall be placed on existing granular material and supplemented with coarse aggregate (MDOT 6A or other Engineer approved material) such that the manhole is stable and will remain plumb during the entire construction process.

Removal and/or abandonment of the temporary drainage structures shall be performed as shown on the plans and as directed by the Engineer.

d. Measurement and Payment.- The completed work as measured shall be paid at the contract unit price for the following contract items (pay items):

<u>(Contract Item) Pay Item</u>	<u>Pay Unit</u>
Type II Manhole, ___ inch dia (0 – 10 feet Deep).....	Each
Type II Manhole, ___ inch dia, Add Depth	Foot
Double Inlet	Each
Storm Control Structure.....	Each

Payment for drainage structures includes furnishing the labor, equipment and materials for all necessary excavation, disposing of surplus excavated material, backfilling, and constructing the structure complete, including pipe connections and structure cleaning. A standard depth manhole shall be considered to be 10 feet or less in depth (including sump).

Payment for additional depth for drainage structures includes furnishing the labor, equipment, and materials for all necessary excavation, disposing of surplus excavated material, backfilling, and constructing the structure complete, including pipe connections and structure cleaning, for the portion of the structure which is deeper than 10 feet (including sump).

Payment for Storm Control Structure includes the entire structure, regardless of depth; including weir, Fluidic-Cone Hydrobrake, and structure complete.

Payment for adjusting of drainage structure covers shall be included in payment for the structure. Drainage structure covers will be paid for separately.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
EXCAVATE AND BACKFILL FOR WATER SERVICE TAP AND LEAD

WT:CT:RJM

1 of 2

05/16/22

a. Description.- This work shall consist of exposing new or existing water mains and excavating and backfilling a trench from the water main to the property line, at the locations shown on the drawings, or as directed by the Engineer, for the purpose of installing new water services or transferring existing water services to new water mains or replacing existing water services on existing water mains.

b. Materials.- The backfill material shall meet the requirements for Granular Material, Class II specified in Section 902 of the Michigan Department of Transportation 2020 Standard Specifications for Construction (MDOT).

c. Methods of Construction.- The trench is to be excavated to the applicable MIOSHA standards for the purposes of transferring water services, installing water service taps, leads, and curb stops and boxes. The City will furnish all labor and materials for taps, leads, and curb stops and boxes. The Contractor will not be entitled to extra compensation due to delays caused by City of Ann Arbor personnel in performing work on the project. The Contractor shall be responsible for all coordination with the City of Ann Arbor – Field Operations personnel for the scheduling and execution of the work.

Granular Material, Class II bedding (3 inch) and backfill material shall be placed in lifts not to exceed 12 inches and compacted to a minimum of 95% of its maximum dry density as measured by the AASHTO T-180 test.

d. Measurement and Payment.- The completed work shall be paid for at the contract unit price for the following contract item (pay item):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Excavate & Backfill for Water Service Tap and Lead.....	Foot

“Excavate and Backfill for Water Service Tap and Lead” shall be measured by length in feet from the new or existing water main to the curb stop and box or the location where the new and existing water services are to be re-connected. The Contractor shall be aware that the plan quantities are estimates only. The actual amount of excavation and backfill may be significantly more or less based on actual field conditions. Price adjustments based upon MDOT Section 103.02.B shall not apply to this item of work.

Payment for “Excavate and Backfill for Water Service Tap and Lead” shall include, but not be limited to; all labor, material, and equipment costs necessary to schedule and coordinate with City of Ann Arbor personnel for the work of transferring and/or installing new water services; expose and backfill the new water main; excavate, backfill, and

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
EXCAVATE AND BACKFILL FOR WATER SERVICE TAP AND LEAD

WT:CT:RJM

2 of 2

05/16/22

compact the water service trenches; and, properly dispose of all excess excavated materials.

CITY OF ANN ARBOR
DETAILED SPECIFICATION
FOR
ADJUST STRUCTURE COVER

WT:CT:RJM

1 of 3

05/16/22

a. Description.- This work shall include the final adjustment of structure covers in accordance with Section 403 of the Michigan Department of Transportation 2020 Standard Specifications for Construction, as shown on the plans, and as specified herein. The adjustment of existing valve wells, existing valve boxes, and monument boxes will also be included in this item of work.

The Contractor shall also be required to coordinate the adjustment of private utility structure covers and ensure that the adjustment has been properly performed with the respective utility prior to placing any final paving materials.

b. Materials.- In bituminous pavement areas, adjustments shall be made using MDOT Grade 4500HP (658 lbs/cyd) as specified in Section 1004 of the MDOT 2020 Standard Specifications for Construction. In areas of concrete pavement, adjustments shall be made at the time of paving and encased with the grade of concrete used in the roadway.

c. Methods of Construction.- Structure Covers, monument boxes, water valve boxes and all other public utility underground access or control point covers shall be adjusted to conform to the finished surface section and elevation. The adjusting of castings in lawn areas shall be performed in a one-step process. The adjusting of castings in a bituminous pavement area shall be performed in two steps: step one is the lowering of the structure cover to below the subgrade elevation and plating of the structure; step two is the final adjustment to finish grade made prior to placing the bituminous wearing surface. In areas of concrete pavement, the final adjustment of the structure to finish grade shall be made at the time of concrete pavement forming. All structures in areas of concrete pavement shall be approved by the Engineer prior to the placement of any concrete pavement.

There shall be a minimum of one, and maximum of three, 2" tall, concrete brick or pre-cast adjustment rings on manholes and vaults. If necessary, remove the cone, add or remove manhole sections and replace the cone to comply with these adjustment ring limits. If this work is necessary, it shall be paid for as "Additional Depth Structure, Adjust/Repair."

All structures final adjustment is to be to the elevation which results in their top surface being flush with the finished grade. The work is to be accomplished and checked by using a 10 foot straight edge that is placed parallel, and then perpendicular to, the pavement centerline. Failure to meet these conditions will result in the readjustment of the structure and finish patching of the area, as directed by the Engineer, at the Contractor's expense.

All private utility manholes and valve covers (Edison, Gas, Ameritech, etc.) will be adjusted during this project by the Utility. It is the responsibility of the Contractor to coordinate with these private utilities by giving adequate notice and arranging for any adjustment of structures or valves by these utilities. It shall be the sole responsibility of the Contractor to ensure that this work is completed in a timely manner.

The Contractor shall replace all existing structures covers, top portions of valve boxes and monument boxes.

As directed by the Engineer and within two days of their removal, the Contractor shall stockpile on-site, in a location that is mutually agreeable to the Engineer and Contractor, the existing structure covers. The City of Ann Arbor’s forces will pick-up the structure covers at a time that is convenient to them and mutually agreeable to the Contractor. The Contractor shall provide the equipment and manpower to load the castings on the City’s vehicle(s) so that they can be removed from the site by the City.

All adjustments in areas of proposed bituminous pavement shall be backfilled with Grade 4500HP concrete, from the depth of excavation necessary for adjustment, to an elevation 2 inches below the top flange or adjusted casting. This material shall be included in this item of work and will not be paid for separately.

Structure covers shall be adjusted to between flush and ¼ inch below final pavement surfaces.

There is a possibility that the Contractor may find hidden utility structures during the work. It is the Contractor's responsibility to inform the respective utility owner(s) of the findings. In such instances, the City may direct the Contractor to adjust the structure(s) to grade. This work will be paid as "Adjust Structure Cover."

d. Measurement and Payment.- The completed work as measured for "Adjust Structure Cover" will be paid for at the contract unit price for the following contract item (pay item):

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
Adjust Structure Cover	Each
Adjust Monument Box or Gate Valve Box.....	Each

"Adjust Structure Cover" and "Adjust Monument Box or Gate Valve Box " will be measured and paid for at the contract unit price for each structure that is adjusted, which price shall be payment in full for all labor, equipment and material needed to accomplish this work.

Payment for adjusting for new drainage structures, new manholes, new valves-in-wells and new valves-in-boxes shall be included in the respective items and will not be paid for

under this item. The work for adjusting these items, however, shall be performed in accordance with this Detailed Specification.

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 D
PREVAILING WAGE DECLARATION OF COMPLIANCE

The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides 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. Where the contract and the Ann Arbor City Code 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. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

- (a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,
- (b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.
- (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.

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 in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall has been deemed a material breach of the terms of the contract and grounds for termination of same by the City.

Company Name

Signature of Authorized Representative Date

Print Name and Title

Address, City, State, Zip

Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

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 \$14.82/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 \$16.52/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, 2022 - ENDING APRIL 29, 2023

\$14.82 per hour

If the employer provides health care benefits*

\$16.52 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.

ENFORCEMENT

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/> <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 H

DECLARATION OF COMPLIANCE

Non-Discrimination Ordinance

The “non discrimination by city contractors” provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis 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. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor’s Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor’s Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

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 in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor 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.

Company Name

Signature of Authorized Representative Date

Print Name and Title

Address, City, State, Zip

Phone/Email Address

Questions about the Notice or the City Administrative Policy, Please contact:
Procurement Office of the City of Ann Arbor
(734) 794-6500

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) EMPLOYEE INFORMATION		(b) WORK CLASSIFICATION		(c) Hour Type		(d) DAY AND DATE							(e) TOTAL HOURS ON PROJECT	(f) PROJECT RATE OF PAY	(g) PROJECT RATE OF FRINGE PAY	(h) GROSS PROJECT EARNED	(i) TOTAL WEEKLY HOURS WORKED ALL JOBS	(j) DEDUCTIONS				(k) TOTAL WEEKLY WAGES PAID FOR ALL JOBS																																					
		NAME:											0			\$0.00							\$0.00																																				
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Date _____

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

do hereby state:

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

_____ (Contractor or Subcontractor) _____ on the _____ (Building or Work) _____; that during the payroll period commencing on the _____ 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

_____ (Contractor or Subcontractor) _____ from the full 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.	

Required Bid and Contract Documents
Washtenaw County Community Development Block Grant (CDBG) Program
Public Infrastructure and Facilities Improvement Projects

This is a Federally funded project. The contractor and subcontractors must comply with HUD procurement provisions in CFR 24 Part 85.36, Equal Employment Opportunity requirements, the Copeland “Anti-Kickback” Act, the Davis-Bacon Act, Contract Work Hours and Safety Standards Act, Section 3 of the Housing and Urban Development Act and other requirements as set forth in the bid documents. Minority and Women Owned Business Enterprises and Section 3 Business Concerns seeking bid opportunities under this project are encouraged to respond.

Enclosed is a set of documents related to compliance with Federal and local requirements concerning public infrastructure and facilities improvement projects under Washtenaw County’s Community Development Block Grant (CDBG) program:

1. Federal Contract Provisions
2. Federal Labor Standards Provisions
3. Equal Opportunity
 - a. Equal Opportunity Clause
 - b. Standard Federal Equal Employment Opportunity Construction Contract Specifications
 - c. Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity
4. Section 3
 - a. Section 3 Contracting Policy, Procedure, & Contract Language
 - b. Washtenaw County Previously Approved Section 3 Contractor List
 - c. Section 3 Definitions
5. Required Contractor Documents
 - a. Section 3 Plan Template
 - b. Sub-Contractor Information Sheet
 - c. Wage Requirement Data Sheet
 - d. Equal Employment Opportunity Poster
 - e. Employee Rights Under the Davis-Bacon Act Poster
 - f. Certified Payroll
 - g. Payroll Deduction Authorization for “Other Deductions” on Certified Payroll
 - h. Waiver of Lien
 - i. Full Unconditional Waiver
 - j. Sworn Statement
 - k. Section 3 Summary Report
6. Project Wage Decision

Federal Contract Provisions

Federal Contract Provisions

1. Contracts other than small purchases shall contain administrative, contractual or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.
2. All contracts in excess of \$10,000 shall contain suitable provision for termination for cause and for convenience by the grantee, including the manner by which it will be effected and the basis for settlement.
3. All contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees shall contain a provision requiring compliance with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Part 60).
4. All contracts and subgrants for construction or repair shall include a provision for compliance with the Copeland "Anti-Kickback" Act (18 USC 874) as supplemented in Department of Labor regulations (29 CFR, Part 3).
5. All construction contracts in excess of \$2,000 must include a provision for compliance with the Davis-Bacon Act (40 USC 276a to a-7) as supplemented by Department of Labor regulations (29 CFR, Part 5).
6. Where applicable, all contracts awarded by grantees and subgrantees in excess of \$2,000 for construction contracts and in excess of \$2,500 for other contracts which involve the employment of mechanics or laborers shall include a provision for compliance with Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 USC 327-330) as supplemented by the Department of Labor regulations (29 CFR, Part 5).
7. The contract shall include notice of requirements and regulations pertaining to reporting and patent rights respect to any discovery or invention which arises or is developed in the course of or under such contract, and of grantor agency requirements and regulations pertaining to copyrights and rights in data.
8. All negotiated contracts awarded by grantees shall include a provision to the effect the grantee, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract, for the purpose of making audit, examination, excerpts, and transcriptions.

9. Grantees shall require contractors to maintain all required records for three years after grantees make final payments and all other pending matters are closed.

10. Contracts, subcontracts, and subgrants of amounts in excess of \$100,000 shall contain a provision which requires compliance with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 USC 1857(h)), Section 508 of the Clean Water Act (33 USC 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR, Part 15), which prohibit the use of non-exempt Federal contracts, grants, or loans of facilities included on the EPA List of Violating Facilities. The provision shall require reporting of violations to the grant agency and to the USEPA Assistance Administrator for Enforcement (EN-329).

11. Contracts shall recognize mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

Federal Labor Standards Provisions

A. APPLICABILITY

The Project or Program to which the construction work covered by this Contract pertains is being assisted by the United States of America, and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

(1) MINIMUM WAGES

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment, computed at rates not less than those contained in the wage determination of the Secretary of Labor (which is attached hereto and made a part hereof), regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH1321)) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place, where it can be easily seen by the workers.

(ii) Additional Classifications.

- (A) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
 - (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor, the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division ("Administrator"), Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget ("OMB") under OMB control number 1235-0023.)
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, or HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1235-0023.)

(D) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (1)(ii)(B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1235-0023.)

(2) **Withholding.** HUD or its designee shall, upon its own action or upon written request of an authorized representative of the U.S. Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Department of Labor shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(3) **Payrolls and basic records.**

(i) **Maintaining Payroll Records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification(s), hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid.

Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1235-0023 and 1215-0018)

(ii) **Certified Payroll Reports.**

(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/agencies/whd/forms> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the U.S. Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1235-0008.)

- (B)** Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1)** That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;
 - (2)** That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
 - (3)** That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract; and
- (C)** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by subparagraph (a)(3)(ii)(b).
- (D)** The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph (a)(3)(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the U.S. Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency (where appropriate), to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman’s hourly rate) specified in the contractor’s or subcontractor’s registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice’s level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination.

Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program.

If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed, unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) **Equal employment opportunity.** The utilization of apprentices, trainees, and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

- (5) **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this Contract.
- (6) **Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs (1) through (11) in this paragraph (a) and such other clauses as HUD or its designee may, by appropriate instructions, require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.
- (7) **Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this Contract.
- (9) **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.
- (10) **Certification of Eligibility.**
- (i) By entering into this Contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) Anyone who knowingly makes, presents, or submits a false, fictitious, or fraudulent statement, representation or certification is subject to criminal, civil and/or administrative sanctions, including fines, penalties, and imprisonment (e.g., 18 U.S.C. §§ 287, 1001, 1010, 1012; 31 U.S.C. §§ 3729, 3802).

(11) Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic, to whom the wage, salary, or other labor standards provisions of this Contract are applicable, shall be discharged or in any other manner discriminated against by the contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The provisions of this paragraph (b) are applicable where the amount of the prime contract exceeds **\$100,000**. As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work, which may require or involve the employment of laborers or mechanics, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek, unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph B(1) of this paragraph, the contractor, and any subcontractor responsible therefor, shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph B(1) of this paragraph, in the sum of **\$27** for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph B(1) of this paragraph. In accordance with the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. § 2461 Note), the Department of Labor adjusts this civil monetary penalty for inflation no later than January 15 each year.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the U.S. Department of Labor, withhold or cause to be withheld from any moneys payable on account of work performed by the contractor or subcontractor under any such contract, or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages, as provided in the clause set forth in subparagraph B(2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph B(1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs B(1) through (4) of this paragraph.

C. HEALTH AND SAFETY

The provisions of this paragraph (c) are applicable where the amount of the prime contract exceeds **\$100,000**.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his or her health and safety, as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The contractor shall comply with all regulations issued by the Secretary of Labor pursuant to 29 CFR Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96), 40 U.S.C. § 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract, so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Equal Opportunity

EQUAL OPPORTUNITY CLAUSE
Executive Order 11246, as amended: 41 CFR Part 60-1.4(b)

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however,* That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS
(Executive Order 11246: 41 CFR Part 60.4.3)

1. As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has

employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the FEDERAL REGISTER in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(b) The notice set forth in 41 CFR 60-4.2 and the specifications set forth in 41 CFR 60-4.3 replace the New Form for Federal Equal Employment Opportunity Bid Conditions for Federal and Federally Assisted Construction published at 41 FR 32482 and commonly known as the Model Federal EEO Bid Conditions, and the New Form shall not be used after the regulations in 41 CFR part 60-4 become effective.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
Executive Order 11246: 41CFR Part 60-2

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Time- tables	Goals for minority participation for each trade	Goals for female participation in each trade
	8.5%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

Section 3

Section 3 Contracting Policy, Procedure, & Contract Language

Section 3 Contracting Policy & Procedure

Subrecipient and the general contractor will incorporate Section 3 in its existing Procurement Policy and adopt a Section 3 Contracting Policy and Procedure to be included in all procurements generated for use with HUD funding. This policy and procedure contain requirements for making efforts to award contracts to Section 3 Business Concerns.

All contractors/businesses seeking Section 3 preference must, before submitting bids/proposals to the general contractor be required to complete certifications, as appropriate. Such certifications shall be adequately supported with appropriate documentation as referenced in the Section 3 Business Concern Certification Form.

Section 3 Provisions/Contract Language

Subrecipients and general contractor will include standard Section 3 language in all of its contracts to ensure compliance with regulations in 24 CFR Part 75. Washtenaw County OCED will take appropriate actions upon finding that a contractor is in violation of 24 CFR Part 75 and does not knowingly contract with any contractor that has been found in violation of the Section 3 regulations. On a periodic basis the Washtenaw County OCED will audit the subrecipient's contractors for compliance with the minimum Section 3 requirements outlined in the Section 3 Plan.

In addition, contractors and subrecipients are required to include language in all Section 3 covered contracts or agreements for subcontractors to meet the requirements of 24 CFR Part 75.19 (for housing and community development financial assistance).

For businesses, noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

Contractors that were previously approved Section 3 Contractors by Washtenaw County OCED but currently are not approved but can reapply for new approval as Section 3 contractors under the new Section 3 Final Rule (24 CFR 75)

Name	Address	City	Zip Code	Contact	Phone	Type
Section 3						
A.H. Construction, LLC	5417 Daytona	Ypsilanti	48197	Ali Huwio	734-481-1983	Housing Rehab, Roofing, Siding
All-Temp Heating & Cooling, Inc.	1262 Clarita	Ypsilanti	48198	Dan Sword	734-483-8598	HVAC
Huddleston Group & Associates, LLC	3961 Hillside Drive	Ypsilanti	48197	Guy Huddleston	313-586-3994	HVAC, Housing Rehab
LaSant Building. Inc.	7754 Hidden Ridge Lane	Northville	48168	Danielle Bass	248-486-6868	Housing Rehab, Excavation
Saladino Construction Company Inc.	3303 W. North Territorial Rd.	Ann Arbor	48105	Zina Saladino	734-665-5913	Paving Concrete
Stephen B. St. Clair, Inc	10150 Burmeister Rd	Manchester	48158	Stephen B. St.Clair	734-320-2050	Housing Rehab

Date: as of 4/11/2022

Contractor Email List

Instructions:

1. Click on the combined list of emails under Complete List.
2. Hold the Ctrl key and hit the C key to copy the list to the clipboard.
3. Open up a new email message or run a report and Export using the Microsoft Mail option
4. Click on the To: box
5. Hold the Ctrl key and hit the V key to paste the list into the To: box.
6. Type your message and send it.

Former Section 3 Contractors

Complete List

alihuwio@sbcglobal.net; UgMug@aol.com; saladino@aol.com; office@lasantbuilding.com; hudconstruction@att.net; dsword7373@sbcglobal.net

Itemized List

Company Name	Email Address
A.H. Construction, LLC	alihuwio@sbcglobal.net
All-Temp Heating & Cooling, Inc.	dsword7373@sbcglobal.net
Huddleston Group & Associates, LLC	hudconstruction@att.net
LaSant Building. Inc.	office@lasantbuilding.com
Saladino Construction Company Inc.	saladinoconstruction@gmail.com
Stephen B. St. Clair, Inc	UgMug@aol.com

SECTION 3 DEFINITIONS

"SECTION 3 WORKER" MEANS:

1. The worker's income for the previous or annualized calendar year is below the income limit established by HUD (see Low Income Definition below for Washtenaw County, MI. For workers that reside in other U.S. counties they will use a different income schedule – Please contact Washtenaw County OCED for income forms for other counties); OR
2. The worker is employed by a Section 3 business concern; OR
3. The worker is a YouthBuild participant.

"TARGETED SECTION 3 WORKER" MEANS:

1. A worker employed by a Section 3 business concern and living/residing within the service area or the neighborhood of the project, as defined in 24 CFR Part 75.5; OR
2. A worker who currently fits or when hired fit at least one of the following categories, as documented within the past five years:
 - a. Living within the service area or the neighborhood of the project, and for most projects this means that the worker is living within 1 mile of the project; OR
 - b. A YouthBuild participant.

2022 LOW-INCOME LIMIT FOR WASHTENAW COUNTY RESIDENTS

Individual Income (less than)

Income Limits Category	FY 2022 Income Limits
Extremely Low Income Limits (30%)	\$24,750
Very Low Income Limits (50%)	\$41,250
Low Income Limits (80%)	\$62,600

"SECTION 3 BUSINESS" DEFINED

A business concern meeting at least one of the following criteria, documented within the last six-month period:

1. It is at least **51% or more owned** and controlled by low- or very low-income persons; OR
2. **Over 75 % of the labor hours performed** for the business over the prior three-month period are performed by Section 3 workers; OR
3. It is a business **at least 51 % owned and controlled** by current public housing residents or residents who currently live in Section 8-assisted housing.

Required Contractor Documents

Section 3

Plan

(Template)

Version Number	Date Updated	Summary of Changes
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1.0	[date]	Initial Draft
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Table of Contents

Table of Contents	iii
1. Overview of Section 3 Requirements	4
A. WHAT IS SECTION 3?	4
B. PURPOSE OF THIS DOCUMENT.....	4
C. APPLICABILITY	4
2. Section 3 Coordinator	5
3. Employment, Training, and Contracting Goals.....	5
A. SAFE HARBOR COMPLIANCE	5
B. SAFE HARBOR BENCHMARKS.....	5
C. CERTIFICATION OF PRIORITIZATION OF EFFORT FOR EMPLOYMENT, TRAINING, AND	6
4. Section 3 Eligibility and Certifications	7
A. SECTION 3 WORKER AND TARGETED SECTION 3 WORKER CERTIFICATION	7
B. SECTION 3 BUSINESS CONCERN CERTIFICATION.....	9
5. Assisting Contractors with Achieving Section 3 Goals.....	10
6. Section 3 Outreach	11
A. OUTREACH EFFORTS FOR EMPLOYMENT AND TRAINING	11
B. OUTREACH EFFORTS FOR CONTRACTING	11
7. Section 3 Contracting Policy and Procedure.....	12
8. Section 3 Provisions/Contract Language	13
9. Reporting Requirements.....	13
A. MONTHLY REPORTING	13
B. ANNUAL REPORTING	13
C. REPORTING ON PROJECTS WITH MULTIPLE FUNDING SOURCES.....	13
10. Internal Section 3 Complaint Procedure	14
11. Appendices.....	16
APPENDIX A: DEFINITIONS.....	16
APPENDIX B: MULTIPLE FUNDING SOURCES - CHART.....	19
APPENDIX C: SERVICE AREA/NEIGHBORHOOD FOR THE PROJECT.....	20

1. Overview of Section 3 Requirements

A. WHAT IS SECTION 3?

Section 3 is a provision of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) that is regulated by the provisions of 24 CFR 75. Section 3 regulations ensure that employment and other economic opportunities generated by certain HUD financial assistance shall, to the greatest extent feasible, and consistent with existing Federal, State and local laws and regulations, be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons.

B. PURPOSE OF THIS DOCUMENT

This plan outlines how the [subrecipient] and [general contractor] and its subcontractors will comply with HUD's Section 3 requirements in implementing [subrecipient]'s [HUD funded program]. [Subrecipient] and [general contractor] will, to the greatest extent feasible, ensure that employment and other economic opportunities are directed to low- and very low-income persons (Section 3 workers and Targeted Section 3 workers) and to eligible businesses (Section 3 Businesses) and requires the same of its contractors.

[Recipient/grantee] and [general contractor] may amend its Section 3 Policies and Procedures document as necessary to ensure continued compliance with HUD's requirements and/or to reflect updated Section 3 guidance and outreach strategies.

C. APPLICABILITY

For public housing financial assistance, all funding is covered, regardless of the amount of expenditure or size of a contract. This plan applies to development assistance, operating funds, capital funds, and all mixed-finance development.

For housing and community development financial assistance, this plan applies to housing rehabilitation, housing construction, and other public construction projects that exceed \$200,000 or more of housing and community development financial assistance from one or more HUD programs. Applicability is determined at the project level.

For projects funded with Lead and Hazard Control and Healthy Homes Programs, this plan applies to projects that exceed \$100,000.

This plan also applies to projects that include multiple funding sources. Multiple funding source projects include projects that include public housing financial assistance, housing and community development financial assistance for single or multiple recipients, and the Lead Hazard Control and Healthy Homes Program.

Section 3 requirements **do not** apply to: 1) Material Supply Contracts - § 75.3(b), 2) Indian and Tribal Preferences - § 75.3(c), and 3) Other HUD assistance and other Federal assistance not subject to Section 3 §75.3 (d). However, for financial assistance that is not subject to Section 3, recipients are encouraged to consider ways to support the purpose of Section 3.

2. Section 3 Coordinator

[Subrecipient]'s Section 3 Coordinator serves as the central point of contact for Section 3 compliance for [Subrecipient]. The General contractor's Section 3 Coordinator serves as the central point of contact for the subcontractors supporting the program. Subcontractors and others are encouraged to reach out to Washtenaw County OCED's Section 3 Coordinator for the project with questions regarding Section 3 compliance:

Subrecipient's Section 3 Coordinator

[coordinator name]

[coordinator title]

[coordinator email]

General contractor's Section 3 Coordinator

[coordinator name]

[coordinator title]

[coordinator email]

3. Employment, Training, and Contracting Goals

A. SAFE HARBOR COMPLIANCE

[subrecipient] and [general contractor] will be considered to have complied with the Section 3 requirements and met safe harbor, if they certify that they followed the required prioritization of effort and met or exceeded the Section 3 benchmarks, absent evidence of the contrary.

Prior to the beginning of work, contractors and subcontractors will be required to certify that they will follow the required prioritization of effort for Section 3 workers, Targeted Section 3 workers, and Section 3 business concerns as outlined below in [section C](#). After completion of the project, on the Section 3 Cumulative Report, contractors and subcontractors will be required to certify that they followed the prioritization of effort requirements.

If the general contractor and subcontractor does not meet the safe harbor requirements, they must provide evidence that they have made qualitative efforts to assist low and very low-income persons with employment and training opportunities.

B. SAFE HARBOR BENCHMARKS

Washtenaw County OCED has established employment and training goals that subrecipients, contractors, and subcontractors should meet in order to comply with Section 3 requirements outlined in 24 CFR Part 75.19. The safe harbor benchmark goals are as follows:

(for housing and community development financial assistance)

- 1) Twenty-five (25) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Section 3 workers;

Section 3 Labor Hours/Total Labor Hours = 25%



And

- 2) Five (5) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Targeted Section 3 workers, as defined at 24 CFR Part 75.21.

Targeted Section 3 Labor Hours/Total Labor Hours = 5%

HUD establishes and updates Section 3 benchmarks for Section 3 workers and/or Targeted Section 3 workers through a document published in the Federal Register, not less frequently than once every 3 years. Given that the Section 3 benchmarks are subject to change every three years or sooner, Washtenaw County OCED will review and update the Section 3 Plan every 3 months or as needed.

It is the responsibility of contractors to implement efforts to achieve Section 3 compliance. Any contractor that does not meet the Section 3 benchmarks must demonstrate why meeting the benchmarks were not feasible. All contractors and subcontractors submitting bids or proposals to the [general contractor or subrecipient or Washtenaw County OCED] are required to certify that they will comply with the requirements of Section 3.

C. CERTIFICATION OF PRIORITIZATION OF EFFORT FOR EMPLOYMENT, TRAINING, AND CONTRACTING

EMPLOYMENT AND TRAINING

Under the Washtenaw County's Section 3 Program, contractors and subcontractors should make best efforts to provide employment and training opportunities to Section 3 workers in the priority order listed below:

(for housing and community development financial assistance)

Provide employment and training opportunities to Section 3 workers within the metropolitan area (or nonmetropolitan county) in which the project is located in the priority order listed below:

- 1) Section 3 workers residing within the service area or the neighborhood of the project, and
- 2) Participants in YouthBuild programs.

Contractors and subcontractors will be required to certify that they will and have made best efforts to follow the prioritization of effort requirements prior to the beginning work and after work is completed.

CONTRACTING

Under the Washtenaw County OCED's Section 3 Program, contractors and subcontractors must make their best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order or priority:

(for housing and community development financial assistance)



- 1) Business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (or nonmetropolitan county) in which assistance is located in the following order of priority (*where feasible*):
 - a) Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the service area or the neighborhood of the project; and
 - b) YouthBuild programs.

Contractors and subcontractors will be required to certify that they will and have made best efforts to follow the prioritization of effort requirements prior to the beginning work and after work is completed.

4. Section 3 Eligibility and Certifications

Individuals and businesses that meet Section 3 criteria may seek Section 3 preference from the **general contractor** and its subcontractors for training, employment, or contracting opportunities generated by **[public housing financial assistance or housing and community development financial assistance]**. To qualify as a Section 3 worker, Targeted Section 3 worker or a Section 3 business concern, each must self-certify that they meet the applicable criteria.

Businesses who misrepresent themselves as Section 3 business concerns and report false information to Washtenaw County may have their contracts terminated as default and be barred from ongoing and future considerations for contracting opportunities.

A. SECTION 3 WORKER AND TARGETED SECTION 3 WORKER CERTIFICATION

A Section 3 worker seeking certification shall submit self-certification documentation to the recipient general contractor or subcontractor, that the person is a Section 3 worker or Targeted Section 3 worker as defined in 24 CFR Part 75. For the purposes of Section 3 worker eligibility, Washtenaw County OCED will use individual income rather than family/household income to determine eligibility. The income limits will be determined annually using the guidelines published at <https://www.huduser.org/portal/datasets/il.html>.

Persons seeking the Section 3 worker preference shall demonstrate that it meets one or more of the following criteria currently or when hired within the past five years, as documented:

- 1) A low or very low-income resident (the worker's income for the previous or annualized calendar year is below the income limit established by HUD); or
- 2) Employed by a Section 3 business concern; or
- 3) A YouthBuild participant.

Persons seeking the Targeted Section 3 worker preference shall demonstrate that it meets one or more of the following criteria:

(for housing and community development assistance)



- 1) Employed by a Section 3 business concern (see attached map to see if the worker's location of residence is within the Service Area/Neighborhood for this project. The location of worker's residence must be within the Service Area/Neighborhood for the project as defined in 24 CFR 75.5) or
- 2) Currently meets or when hired met at least one of the following categories as documented within the past five years:
 - a) Living within the service area or the neighborhood of the project, as defined in 24 CFR Part 75.5 - for this project, see attached map for Service Area/Neighborhood for the project in Appendix C attached; or
 - b) A YouthBuild participant.

Section 3 workers and Targeted Section 3 workers who are seeking preference in training and employment must submit the Section 3 Worker and Targeted Section 3 Worker Certification Form. The certification procedure will consist of the following:

PROJECTS INVOLVING MULTIPLE SOURCES OF FUNDING

In cases where Section 3 covered projects include multiple sources of funds, including public housing financial assistance and housing and community development assistance, the [PHA] must follow the definition of Targeted Section 3 worker and priorities as outlined in subpart B of Part 75. For housing and community development financial assistance, Washtenaw County OCED may follow either subpart B or subpart C of Part 75.

In cases where Section 3 covered projects include multiple housing and development funding sources (financial assistance) from single or multiple recipients, Washtenaw County OCED will follow subpart C of Part 75. Refer to chart in [Appendix B](#).

B. SECTION 3 BUSINESS CONCERN CERTIFICATION

The Washtenaw County OCED, **subrecipient and general contractor** should encourage contractors and subcontractors to make best efforts to award contracts and subcontracts to Section 3 business concerns.

Businesses that believe they meet the Section 3 Business requirements can may self-register in the HUD Business registry, here: <http://www.hud.gov/Sec3Biz>. Businesses may seek Section 3 Business Concern preference by demonstrating that it meets one or more of the following criteria:

- 1) At least 51 percent of the business is owned and controlled by low- or very low-income persons; or
- 2) At least 51 percent of the business is owned and controlled by current public housing residents or residents who currently live in Section 8-assisted housing; or
- 3) Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers.

Businesses that seek Section 3 preference shall certify, or demonstrate to Washtenaw County, **subrecipient, general contractor** or subcontractors, that they meet the definitions provided in the above. Businesses may demonstrate eligibility by submitting the Section 3 Business Concern Certification Form, located at Washtenaw County OCED Section 3 website at www.washtenaw.org/section3.

Section 3 Business Concern Certification Forms must be submitted at the time of bid/proposal. If the Washtenaw County previously approved the business concern to be Section 3 certified, then the certification can be submitted along with the bid, as long as the form is submitted within the prescribed expiration date. The Section 3 Business Concern Certification Form will expire after 6 months. Establishing a 6 month certification of eligibility period allows Washtenaw County OCED the ability to assess contractor performance to ensure the business is striving to meet the required goals.

5. Assisting Contractors with Achieving Section 3 Goals

In an effort to assist contractors with meeting or exceeding the Section 3 goals, the subrecipient and the contractor will do the following:

- 1) Share Section 3 Plan with contractors and subcontractors and explain policies and procedures
- 2) Require contractors wishing to submit a bid/offer/proposal to attend pre-bid meeting
- 3) Require the sub-recipient and the contractor to sign the Section 3 Plan at pre-construction conference
- 4) Review Section 3 benchmarks and prioritization of effort with contractors and subcontractors to ensure that the goals are understood. It is not intended for contractors and subcontractors to terminate existing employees, but to make every effort feasible to meet Section 3 benchmark goals by utilizing existing qualified workforce and by considering qualified eligible Section 3 workers and Targeted Section 3 workers (per the prioritization of effort outlined in Section #3) before any other person, when hiring additional employees is needed to complete proposed work to be performed with [HUD program].
- 5) At the time of bid, require the contractor to present a list, of the number of total labor hours, Section 3 worker labor hours, and Targeted Section 3 worker labor hours expected to be generated from the initial contract and a list of projected number of available positions, to include job descriptions and wage rates.
- 6) Maintain a local Section 3 worker/Targeted Section 3 worker database and provide the contractor with a list of interested and qualified Section 3 workers and Targeted Section 3 workers and contact information.
- 7) Inform contractors about the HUD Section 3 Opportunity Portal <https://hudapps.hud.gov/OpportunityPortal/>
- 8) Require contractors sub-contractors to notify Section 3 Coordinator of their interests regarding employment of Section 3 workers prior to hiring.
- 9) Encourage local business to register on the HUD Business Registry and direct contractors to the HUD Section 3 Business Registry <https://www.hud.gov/section3businessregistry>
- 10) Leverage Washtenaw County's, the Subrecipient's and Contractor's communication outlets (social media, website, etc.) to effectively communicate employment and contracting opportunities that arise.
- 11) Require contractors to submit a list of core employees (including administrative, clerical, planning and other positions pertinent to the construction trades) at the time of contact award.

6. Section 3 Outreach

A. OUTREACH EFFORTS FOR EMPLOYMENT AND TRAINING

In order to educate and inform workers and contractors, the Contractor's Section 3 Coordinator will be prepared to provide training and technical assistance on a regular basis per program guidelines. When training opportunities are available, contractors and subcontractors should, to the greatest extent feasible:

- 1) Notify the Section 3 Coordinator when training opportunities are available
- 2) Provide information/handouts about Section 3 training opportunities to potential Section 3 workers and Targeted Section 3 workers
- 3) Conduct an annual training for Section 3 workers and Section 3 businesses

Contractors and subcontractors should employ several active strategies to notify Section 3 workers and Targeted Section 3 workers of Section 3 job opportunities, including:

- 1) Clearly indicating Section 3 eligibility on all job postings with the following statement: "This job is a Section 3 eligible job opportunity. We encourage applications from individuals that are low income and/or live in Public Housing and/or receive a Section 8 voucher";
- 2) Including the Section 3 Worker and Targeted Section 3 Worker Self-Certification Form in all job postings
- 3) Working with the Section 3 Coordinator to connect Section 3 worker and Targeted Section 3 workers in the contractor's database with opportunities and/or utilize the Section 3 Opportunity Portal to find qualified candidates
- 4) Establishing a current list of Section 3 eligible applicants
- 5) Contacting local community organizations and provide them with job postings for Section 3 eligible applicants; and
- 6) Coordinating a programmatic ad campaign, which results in widespread job posting across diverse ad networks including:
 - a) Advertising job opportunities via social media, including LinkedIn and Facebook;
 - b) Advertising job opportunities via flyer distributions and mass mailings and posting ad in common areas of housing developments and all public housing management offices
 - c) Contacting resident councils, resident management corporations, and neighborhood community organizations to request their assistance in notifying residents of available training and employment opportunities

B. OUTREACH EFFORTS FOR CONTRACTING

When contracting opportunities arise in connection with the [HUD program], the subrecipient and the general contractor will employ the following strategies to notify Section 3 Business Concerns of Section 3 contracting opportunities, including but not limited to:

- 1) Adding Section 3 language to all RFPs, procurement documents, bid offerings and contracts.

- 2) Coordinating mandatory pre-bid meetings to inform Section 3 Business Concerns of upcoming contracting opportunities. The Section 3 Coordinator will participate in these meetings to explain and answer questions related to Section 3 policy.
- 3) Advertising contracting opportunities in local community papers and notices that provide general information about the work to be contracted and where to obtain additional information.
- 4) Providing written notice of contracting opportunities to all known Section 3 Business Concerns. The written notice will be provided in sufficient time to enable business concerns the opportunity to respond to bid invitations.
- 5) Coordinating with the prime general contractor to publicize contracting opportunities for small businesses.
- 6) Coordinating with Ann Arbor Spark and all other business assistance agencies and contractor associations to inform them of contracting opportunities and request their assistance in identifying Section 3 business concerns. Could include local community development organizations, business development agencies (Chamber of Commerce), and minority contracting associations.
- 7) Connecting Section 3 business concerns with resources to support business development to assist in obtaining contracting opportunities (e.g., bonding and insurance assistance, etc.). Contractors will also be encouraged to collaborate with the Washtenaw County OCED as subcontract opportunities arise in an effort to notify eligible Section 3 business concerns about the contracting opportunities.
- 8) Publication of opportunities in the Washtenaw County Press or other local newspapers.
- 9) Publication of opportunities with Michigan Works.
- 10) Inviting Section 3 business concerns to relevant bidding opportunities.
- 11) Use of signage at the project site and flyers posted in the neighborhood and surrounding areas.
- 12) Notification to the Ann Arbor Housing Commission, Barrier Busters, Washtenaw Housing Alliance, and Washtenaw County Continuum of Care, and other appropriate organizations.
- 13) Notification of potential bidding opportunities, training or employment opportunities to Neighborhood and Non-profits groups servicing low-income persons in the Service Area or Neighborhood as identified in the attached map.
- 14) Communicate opportunities to contractor and trade organizations, employment agencies and career centers.

7. Section 3 Contracting Policy and Procedure

Subrecipient and the general contractor will incorporate Section 3 in its existing Procurement Policy and adopt a Section 3 Contracting Policy and Procedure to be included in all procurements generated for use with HUD funding. This policy and procedure contain requirements for making efforts to award contracts to Section 3 Business Concerns.



All contractors/businesses seeking Section 3 preference must, before submitting bids/proposals to the general contractor be required to complete certifications, as appropriate. Such certifications shall be adequately supported with appropriate documentation as referenced in the Section 3 Business Concern Certification Form.

8. Section 3 Provisions/Contract Language

Subrecipients and general contractor will include standard Section 3 language in all of its contracts to ensure compliance with regulations in 24 CFR Part 75. Washtenaw County OCED will take appropriate actions upon finding that a contractor is in violation of 24 CFR Part 75 and does not knowingly contract with any contractor that has been found in violation of the Section 3 regulations. On a periodic basis the Washtenaw County OCED will audit the subrecipient's contractors for compliance with the minimum Section 3 requirements outlined in the Section 3 Plan.

In addition, contractors and subrecipients are required to include language in all Section 3 covered contracts or agreements for subcontractors to meet the requirements of 24 CFR Part 75.19 (for housing and community development financial assistance).

For businesses, noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

9. Reporting Requirements

For Section 3 covered contracts, general contractors must submit the Section 3 Performance and Summary Report to Washtenaw County OCED on a monthly basis, and the annual reporting requirement set forth in that form's instructions.

A. MONTHLY REPORTING

- 1) Contractors are required to submit monthly activity reports to Washtenaw County OCED by the [number] day of each month.

B. ANNUAL REPORTING

- 1) Once a project is completed, contractors must submit a final Section 3 cumulative report for the program year.
- 2) Upon the completion of a project, Washtenaw County OCED will conduct a final review of the project's overall performance and compliance.
- 3) Washtenaw County OCED will submit the Section 3 data into IDIS to HUD at [reporting period] and/or at the project's completion.

C. REPORTING ON PROJECTS WITH MULTIPLE FUNDING SOURCES

- 1) For Section 3 projects that include public housing financial assistance and housing and community development financial assistance, [recipient/grantee] and [recipient/grantee] will report on the project as a whole and will identify the multiple associated recipients.
- 2) For projects assisted with funding from multiple sources of housing and community development assistance that exceed the thresholds of \$200,000 and \$100,000 for Lead Hazard Control and Healthy Homes Programs (LHCHH), the subrecipient and the general contractor will follow subpart C of Part 75 and will report to Washtenaw County OCED, as prescribed by HUD. Note: LHCHH assistance is not included in calculating whether the assistance exceeds the \$200,000 threshold. HUD public housing financial assistance and HUD housing and community development financial assistance is not included in calculating whether the assistance exceeds the LHCHH \$100,000 threshold. Refer to chart in [Appendix B](#).

10. Internal Section 3 Complaint Procedure

In an effort to resolve complaints generated due to non-compliance through an internal process, Washtenaw County OCED requires submittal of such complaints to Washtenaw County OCED as follows:

- 1) Complaints of non-compliance should be filed in writing and must contain the name of the complainant and brief description of the alleged violation of 24 CFR Part 75.
- 2) Complaints must be filed within [redacted] () calendar days after the complainant becomes aware of the alleged violation.
- 3) An investigation will be conducted if complaint is found to be valid. Washtenaw County OCED will conduct an informal, but thorough investigation affording all interested parties, if any, an opportunity to submit testimony and/or evidence pertinent to the complaint.
- 4) Washtenaw County OCED will provide written documentation detailing the findings of the investigation. The Washtenaw County OCED will review the findings for accuracy and completeness before it is released to complainants. The findings will be made available no later than [redacted] () days after the filing of complaint. If complainants wish to have their concerns considered outside of the Washtenaw County a complaint may be filed with HUD:

The HUD program office responsible for the public housing financial assistance or the Section 3 project, or to the local HUD field office. These offices can be found through the HUD website, www.hud.gov/.

Complainants may be eligible to bring complaints under other federal laws. The U.S. Equal Employment Opportunity Commission (EEOC) is responsible for enforcing federal laws that make it illegal to discriminate against a job applicant or an employee because of the person's race, color, religion, sex (including pregnancy), national origin, age (40 or older), disability or genetic information (medical history or predisposition to disease). For more information about complainant rights, please contact EEOC at: www.EEOC.gov.

The Department of Labor Office of Federal Contract Compliance Programs (OFCCP) enforces, for the benefit of job seekers and wage earners, the contractual promise of affirmative action and equal employment opportunity required of those who do business with the Federal government. More information about the services they provide can be obtained at: <http://www.dol.gov/ofccp/>.



Submitted to Washtenaw County Office of Community and Economic Development

Date: _____

Public Agency (subrecipient):

(Print/type name of organization)

By: _____

(Print/type name and title)

Date:

General Contractor:

(Print/type name of organization)

By: _____

(Print/type name and title)



11. Appendices

APPENDIX A: DEFINITIONS

The terms *HUD*, *Public housing*, and *Public Housing Agency (PHA)* are defined in 24 CFR part 5.

The following definitions also apply to 24 CFR Part 75 HUD's Economic Opportunities for Low-and Very Low-Income Persons:

1937 Act means the United States Housing Act of 1937, 42 U.S.C. 1437 *et seq. activities related to Public Housing*

General contractor or prime contractor or prime general contractor or contractor means any entity entering into a contract with:

- (1) A recipient to perform work in connection with the expenditure of public housing financial assistance or for work in connection with a Section 3 project; or
- (2) A subrecipient for work in connection with a Section 3 project.

Labor hours means the number of paid hours worked by persons on a Section 3 project or by persons employed with funds that include public housing financial assistance.

Low-income person means a person as defined in Section 3(b)(2) of the 1937 Act, at or below 80% AMI. Note that Section 3 worker eligibility uses individual income rather than family/household income.

Material supply contracts means contracts for the purchase of products and materials, including, but not limited to, lumber, drywall, wiring, concrete, pipes, toilets, sinks, carpets, and office supplies.

Professional services means non-construction services that require an advanced degree or professional licensing, including, but not limited to, contracts for legal services, financial consulting, accounting services, environmental assessment, architectural services, and civil engineering services.

Public housing financial assistance means assistance as defined in 24 CFR Part 75.3(a)(1).

Public housing project is defined in 24 CFR 905.108.

Recipient means any entity that receives directly from HUD public housing financial assistance or housing and community development assistance that funds Section 3 projects, including, but not limited to, any State, local government, instrumentality, PHA, or other public agency, public or private nonprofit organization.

Section 3 means Section 3 of the Housing and Urban Development Act of 1968, as amended (12 U.S.C. 1701u).

Section 3 business concern means:

- (1) A business concern meeting at least one of the following criteria, documented within the last six-month period:
 - (i) It is at least 51 percent owned and controlled by low- or very low-income persons;
 - (ii) Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers; or

(iii) It is a business at least 51 percent owned and controlled by current public housing residents or residents who currently live in Section 8-assisted housing.

(2) The status of a Section 3 business concern shall not be negatively affected by a prior arrest or conviction of its owner(s) or employees.

(3) Nothing in this part shall be construed to require the contracting or subcontracting of a Section 3 business concern. Section 3 business concerns are not exempt from meeting the specifications of the contract.

Section 3 Coordinator is person tasked with overseeing all Section 3 responsibilities for the PHA/CD office.

Section 3 project means a project defined in 24 CFR Part 75.3(a)(2).

Section 3 worker means:

(1) Any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:

(i) The worker's income for the previous or annualized calendar year is below the income limit established by HUD.

(ii) The worker is employed by a Section 3 business concern.

(iii) The worker is a YouthBuild participant.

(2) The status of a Section 3 worker shall not be negatively affected by a prior arrest or conviction.

(3) Nothing in this part shall be construed to require the employment of someone who meets this definition of a Section 3 worker. Section 3 workers are not exempt from meeting the qualifications of the position to be filled.

Section 8-assisted housing refers to housing receiving project-based rental assistance or tenant-based assistance under Section 8 of the 1937 Act.

Service area or the neighborhood of the project means an area within one mile of the Section 3 project or, if fewer than 5,000 people live within one mile of a Section 3 project, within a circle centered on the Section 3 project that is sufficient to encompass a population of 5,000 people according to the most recent U.S. Census.

Small PHA means a public housing authority that manages or operates fewer than 250 public housing units.

Subcontractor means any entity that has a contract with a general contractor to undertake a portion of the general contractor's obligation to perform work in connection with the expenditure of public housing financial assistance or for a Section 3 project.

Subrecipient has the meaning provided in the applicable program regulations or in 2 CFR 200.93.

Targeted Section 3 worker has the meanings provided in 24 CFR Part 75.11, 75.21, or 75.29, and does not exclude an individual that has a prior arrest or conviction.

Very low-income person means the definition for this term set forth in section 3(b)(2) of the 1937 Act (at or below 50% AMI).

YouthBuild programs refers to YouthBuild programs receiving assistance under the Workforce Innovation and Opportunity Act (29 U.S.C. 3226).



APPENDIX B: MULTIPLE FUNDING SOURCES - CHART

TYPE OF FINANCIAL ASSISTANCE	DEFINITIONS *TARGETED SECTION 3 WORKER	THRESHOLDS	PRIORITIZATION	REPORTING
Public Housing and Housing and Community Development	<p>PHA – must follow subpart B of Part 75</p> <p>HCD – may follow subpart B or C of Part 75</p>	<p>None</p> <p>*Any amount of PH assistance triggers Section 3</p>	<p>PHA – must follow subpart B of Part 75</p> <p>HCD – may follow subpart B or C of Part 75</p>	<p>PHA – must follow subpart B of Part 75</p> <p>HCD – may follow subpart B or C of Part 75</p> <p>Both - Must report on project as a whole and identify the multiple associated recipients</p>
<p>Multiple Sources of Housing and Community Development <i>(single or multiple recipients)</i></p>	<p>Must follow subpart C of Part 75</p>	<p>Exceeds \$200,000 for Section 3 projects</p> <p>*LHCHHP exceeds \$100,000</p>	<p>Must follow subpart C of Part 75</p>	<p>Must follow subpart C of Part 75</p> <p>Must report on project as a whole and identify the multiple associated recipients</p> <p>Must report to the applicable HUD program office, as prescribed by HUD</p>

APPENDIX C: SERVICE AREA/NEIGHBORHOOD OF THE PROJECT



ATTACH MAP

Russell Street Paving Project Service Area/ Neighborhood For Targeted Section 3 Workers Map

Block Groups located Within 1 mile of Project Site

City of Ann Arbor, Washtenaw County, MI

Legend

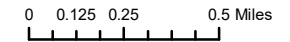
-  Russell Street Project Site
-  Russell Street Project Site 1 mile Buffer
-  Block Groups
-  Russell Street Project Service Area*
-  Census Tracts
-  Streets and Roads

4035 Census Tract Number Label
Block Group 1 Block Group Number Label

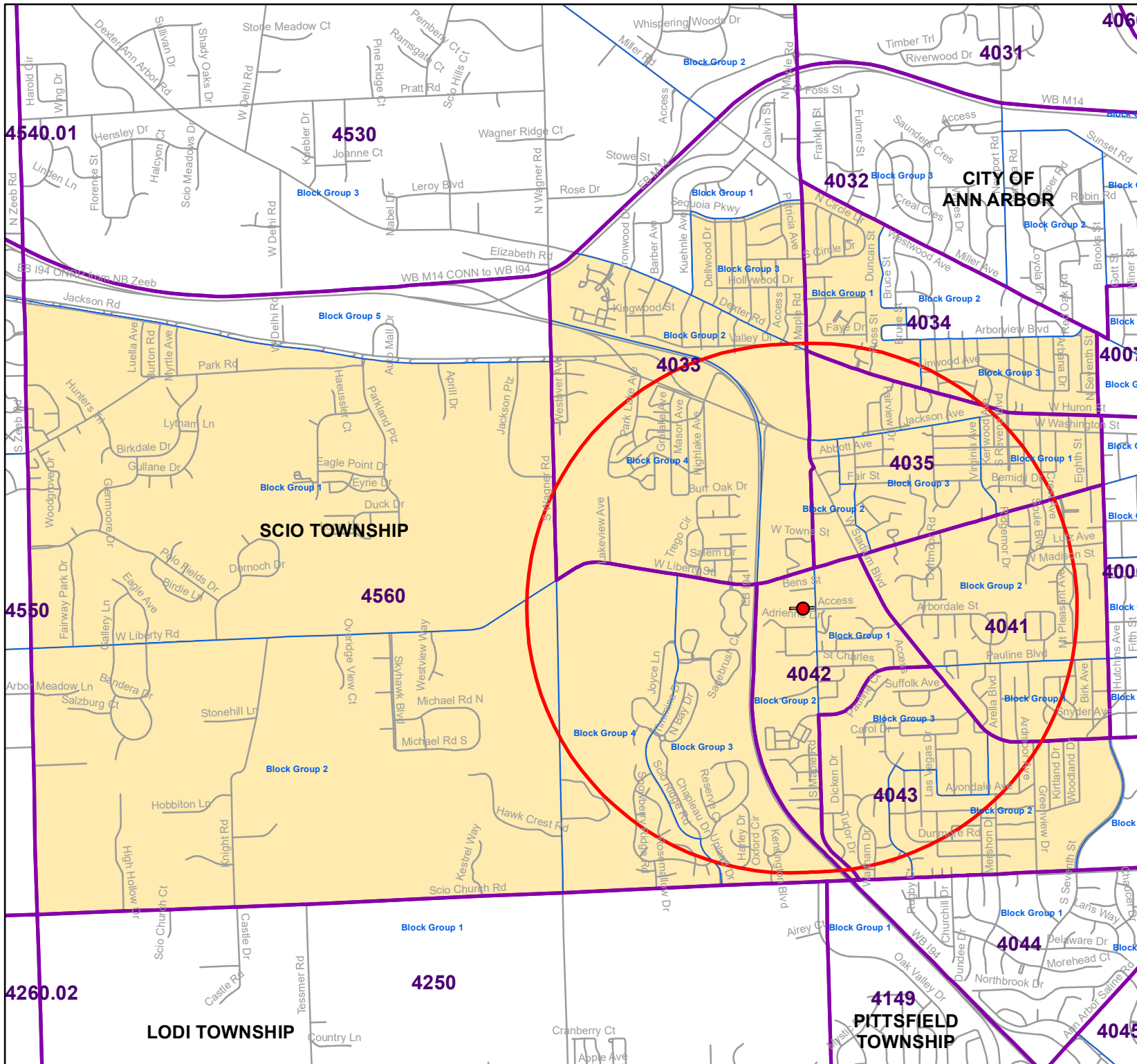
* = Service Area (Neighborhood) for Targeted Section 3 Workers includes all Block Groups that are either fully or partially located within 1 mile of the project site. The entirety of all Block Groups that meet this requirement are located within the Service Area (Neighborhood) for the Targeted Section 3 Workers.

Total Population of Service Area (2020 Census) = 10,496 persons

Sources: U.S. Census Bureau, TIGER Line Files, 2020, 2020 Decennial Census Redistricting Data (P.L. 94-171)



The map shown here is for illustrative purposes only, and is not suitable for site-specific decision-making. The data depicted is compiled from a variety of sources, thus this information is provided with the understanding that the conclusions drawn from the data are solely the responsibility of the user. Any assumptions of the legal status of this data are hereby disclaimed. Last Update: 4/12/2022 Washtenaw County Office of Community & Economic Development.



SUB-CONTRACTOR INFORMATION SHEET

Project:	Phone:
General Contractor (Name of Company) & Federal Identification Number & Race of Owner and WBE Status of Owner(s):	Address:

Sub-Company Name/Federal Identification Number/Street Address/City/State/Zip	Contact Person	Phone	Work Done	Sub- Contract Amount	Paid (Y) (N)
				MBE/WBE?	Race
				MBE/WBE?	Race
				MBE/WBE?	Race
				MBE/WBE?	Race

Attach additional sheet(s) if necessary

WAGE REQUIREMENT DATA SHEET

(Please submit before starting work on job)

PROJECT NAME: _____ PROJECT NO: _____ PROJECT LOCATION: _____ _____ COUNTY/STATE: _____	SUBCONTRACTOR'S NAME AND ADDRESS: _____ _____ _____ PHONE NO: _____ IRS NO: _____
--	--

WAGE DECISION USED FOR THIS PROJECT: MI _____ MODIFICATION _____ DATE _____

CONTRACT DATA WORK TO BE PERFORMED: _____ (Be Specific) CONTRACT AMOUNT: \$ _____ AWARD DATE: _____ START DATE: _____

PRECONSTRUCTION STATEMENT <input type="checkbox"/> <input type="checkbox"/> I/We have received a copy of the applicable wage rates for the above named project Yes No <input type="checkbox"/> <input type="checkbox"/> I/We have read and understand the information contained in the "Labor Standards: Instructions for Subcontractors" packet Yes No
--

SUBCONTRACTOR'S CERTIFICATION STATEMENT The name, title and address of the owner, partners or officers of the undersigned are: <table style="width: 100%; border: none;"><tr><td style="text-align: center; width: 33%;"><u>Name</u></td><td style="text-align: center; width: 33%;"><u>Title</u></td><td style="text-align: center; width: 33%;"><u>Address</u></td></tr><tr><td>_____</td><td>_____</td><td>_____</td></tr><tr><td>_____</td><td>_____</td><td>_____</td></tr><tr><td>_____</td><td>_____</td><td>_____</td></tr></table>	<u>Name</u>	<u>Title</u>	<u>Address</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Name</u>	<u>Title</u>	<u>Address</u>										
_____	_____	_____										
_____	_____	_____										
_____	_____	_____										

PAYROLL AUTHORIZATION STATEMENT The following person(s) is/are hereby authorized to complete and sign all payroll forms (WH-347) submitted for the above named project <table style="width: 100%; border: none;"><tr><td style="width: 50%; text-align: center;">_____ (Print name and title)</td><td style="width: 10%; text-align: center; vertical-align: middle;">X</td><td style="width: 40%; text-align: center;">_____ (prove sample of signature)</td></tr><tr><td style="width: 50%; text-align: center;">_____ (Print name and title)</td><td style="width: 10%; text-align: center; vertical-align: middle;">X</td><td style="width: 40%; text-align: center;">_____ (prove sample of signature)</td></tr></table>	_____ (Print name and title)	X	_____ (prove sample of signature)	_____ (Print name and title)	X	_____ (prove sample of signature)
_____ (Print name and title)	X	_____ (prove sample of signature)				
_____ (Print name and title)	X	_____ (prove sample of signature)				

THE WILLFUL FALSIFICATION OF THE ABOVE STATEMENTS MAY SUBJECT THE SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1010 OF TITLE 18 AND SECTION 231 OF THE UNITED STATES CODE.

(Print name of subcontractor)

Date: _____ By: X _____
 Check box if additional sheet is attached Its: _____

FRINGE BENEFITS STATEMENT

The following are the basic hourly rate and fringe benefits paid to our employees, and where the fringe benefits payments are made:

TRADE _____	Union Name/Local _____
Basic Hourly rate: _____	Fringe Benefits _____ \$ _____
	(list) _____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____

TRADE _____	Union Name/Local _____
Basic Hourly rate: _____	Fringe Benefits _____ \$ _____
	(list) _____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____

TRADE _____	Union Name/Local _____
Basic Hourly rate: _____	Fringe Benefits _____ \$ _____
	(list) _____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____

TRADE _____	Union Name/Local _____
Basic Hourly rate: _____	Fringe Benefits _____ \$ _____
	(list) _____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____
	_____ \$ _____

CERTIFICATION

The undersigned certifies compliance with all Labor Standards and Prevailing Wage requirements

Name: _____ Title: _____

Date: _____

Equal Employment Opportunity is **THE LAW**

Private Employers, State and Local Governments, Educational Institutions, Employment Agencies and Labor Organizations

Applicants to and employees of most private employers, state and local governments, educational institutions, employment agencies and labor organizations are protected under Federal law from discrimination on the following bases:

RACE, COLOR, RELIGION, SEX, NATIONAL ORIGIN

Title VII of the Civil Rights Act of 1964, as amended, protects applicants and employees from discrimination in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment, on the basis of race, color, religion, sex (including pregnancy), or national origin. Religious discrimination includes failing to reasonably accommodate an employee's religious practices where the accommodation does not impose undue hardship.

DISABILITY

Title I and Title V of the Americans with Disabilities Act of 1990, as amended, protect qualified individuals from discrimination on the basis of disability in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment. Disability discrimination includes not making reasonable accommodation to the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or employee, barring undue hardship.

AGE

The Age Discrimination in Employment Act of 1967, as amended, protects applicants and employees 40 years of age or older from discrimination based on age in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment.

SEX (WAGES)

In addition to sex discrimination prohibited by Title VII of the Civil Rights Act, as amended, the Equal Pay Act of 1963, as amended, prohibits sex discrimination in the payment of wages to women and men performing substantially equal work, in jobs that require equal skill, effort, and responsibility, under similar working conditions, in the same establishment.

GENETICS

Title II of the Genetic Information Nondiscrimination Act of 2008 protects applicants and employees from discrimination based on genetic information in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment. GINA also restricts employers' acquisition of genetic information and strictly limits disclosure of genetic information. Genetic information includes information about genetic tests of applicants, employees, or their family members; the manifestation of diseases or disorders in family members (family medical history); and requests for or receipt of genetic services by applicants, employees, or their family members.

RETALIATION

All of these Federal laws prohibit covered entities from retaliating against a person who files a charge of discrimination, participates in a discrimination proceeding, or otherwise opposes an unlawful employment practice.

WHAT TO DO IF YOU BELIEVE DISCRIMINATION HAS OCCURRED

There are strict time limits for filing charges of employment discrimination. To preserve the ability of EEOC to act on your behalf and to protect your right to file a private lawsuit, should you ultimately need to, you should contact EEOC promptly when discrimination is suspected:

The U.S. Equal Employment Opportunity Commission (EEOC), 1-800-669-4000 (toll-free) or 1-800-669-6820 (toll-free TTY number for individuals with hearing impairments). EEOC field office information is available at www.eeoc.gov or in most telephone directories in the U.S. Government or Federal Government section. Additional information about EEOC, including information about charge filing, is available at www.eeoc.gov.

Employers Holding Federal Contracts or Subcontracts

Applicants to and employees of companies with a Federal government contract or subcontract are protected under Federal law from discrimination on the following bases:

RACE, COLOR, RELIGION, SEX, NATIONAL ORIGIN

Executive Order 11246, as amended, prohibits job discrimination on the basis of race, color, religion, sex or national origin, and requires affirmative action to ensure equality of opportunity in all aspects of employment.

INDIVIDUALS WITH DISABILITIES

Section 503 of the Rehabilitation Act of 1973, as amended, protects qualified individuals from discrimination on the basis of disability in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment. Disability discrimination includes not making reasonable accommodation to the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or employee, barring undue hardship. Section 503 also requires that Federal contractors take affirmative action to employ and advance in employment qualified individuals with disabilities at all levels of employment, including the executive level.

DISABLED, RECENTLY SEPARATED, OTHER PROTECTED, AND ARMED FORCES SERVICE MEDAL VETERANS

The Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, 38 U.S.C. 4212, prohibits job discrimination and requires affirmative action to employ and advance in employment disabled veterans, recently separated veterans (within

three years of discharge or release from active duty), other protected veterans (veterans who served during a war or in a campaign or expedition for which a campaign badge has been authorized), and Armed Forces service medal veterans (veterans who, while on active duty, participated in a U.S. military operation for which an Armed Forces service medal was awarded).

RETALIATION

Retaliation is prohibited against a person who files a complaint of discrimination, participates in an OFCCP proceeding, or otherwise opposes discrimination under these Federal laws.

Any person who believes a contractor has violated its nondiscrimination or affirmative action obligations under the authorities above should contact immediately:

The Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, 200 Constitution Avenue, N.W., Washington, D.C. 20210, 1-800-397-6251 (toll-free) or (202) 693-1337 (TTY). OFCCP may also be contacted by e-mail at OFCCP-Public@dol.gov, or by calling an OFCCP regional or district office, listed in most telephone directories under U.S. Government, Department of Labor.

Programs or Activities Receiving Federal Financial Assistance

RACE, COLOR, NATIONAL ORIGIN, SEX

In addition to the protections of Title VII of the Civil Rights Act of 1964, as amended, Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination on the basis of race, color or national origin in programs or activities receiving Federal financial assistance. Employment discrimination is covered by Title VI if the primary objective of the financial assistance is provision of employment, or where employment discrimination causes or may cause discrimination in providing services under such programs. Title IX of the Education Amendments of 1972 prohibits employment discrimination on the basis of sex in educational programs or activities which receive Federal financial assistance.

INDIVIDUALS WITH DISABILITIES

Section 504 of the Rehabilitation Act of 1973, as amended, prohibits employment discrimination on the basis of disability in any program or activity which receives Federal financial assistance. Discrimination is prohibited in all aspects of employment against persons with disabilities who, with or without reasonable accommodation, can perform the essential functions of the job.

If you believe you have been discriminated against in a program of any institution which receives Federal financial assistance, you should immediately contact the Federal agency providing such assistance.

EMPLOYEE RIGHTS UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.



For additional information:

1-866-4-USWAGE
(1-866-487-9243) TTY: 1-877-889-5627



WWW.WAGEHOUR.DOL.GOV

DERECHOS DEL EMPLEADO BAJO LA LEY DAVIS-BACON

PARA OBREROS Y MECÁNICOS EMPLEADOS EN PROYECTOS DE CONSTRUCCIÓN FEDERAL O CON ASISTENCIA FEDERAL

LA SECCIÓN DE HORAS Y SUELDOS DEL DEPARTAMENTO DE TRABAJO DE EEUU

SALARIOS PREVALECIENTES

No se le puede pagar menos de la tasa de pago indicada en la Decisión de Salarios Davis-Bacon fijada con este Aviso para el trabajo que Ud. desempeña.

SOBRETIEMPO

Se le ha de pagar no menos de tiempo y medio de su tasa básica de pago por todas las horas trabajadas en exceso de 40 en una semana laboral. Existen pocas excepciones.

CUMPLIMIENTO

Se pueden retener pagos por contratos para asegurarse que los obreros reciban los salarios y el pago de sobretiempo debidos, y se podría aplicar daños y perjuicios si no se cumple con las exigencias del pago de sobretiempo. Las cláusulas contractuales de Davis-Bacon permiten la terminación y exclusión de contratistas para efectuar futuros contratos federales hasta tres años. El contratista que falsifique los registros certificados de las nóminas de pago o induzca devoluciones de salarios puede ser sujeto a procesamiento civil o criminal, multas y/o encarcelamiento.

APRENDICES

Las tasas de aprendices sólo se aplican a aprendices correctamente inscritos bajo programas federales o estatales aprobados.

PAGO APROPIADO

Si Ud. no recibe el pago apropiado, o precisa de información adicional sobre los salarios aplicables, póngase en contacto con el Contratista Oficial que aparece abajo:

o póngase en contacto con la Sección de Horas y Sueldos del Departamento de Trabajo de EEUU.



Para obtener información adicional:

1-866-4-USWAGE

(1-866-487-9243) TTY: 1-877-889-5627



WWW.WAGEHOUR.DOL.GOV

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)



Rev. Dec. 2008

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

OMB No.:1235-0008
Expires: 04/30/2021

NAME OF CONTRACTOR OR SUBCONTRACTOR			ADDRESS													OMB No.:1235-0008 Expires: 04/30/2021			
PAYROLL NO.		FOR WEEK ENDING					PROJECT AND LOCATION						PROJECT OR CONTRACT NO.						
(1) <small>NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER</small>	(2) <small>NO. OF WITHHOLDING EXEMPTIONS</small>	(3) <small>WORK CLASSIFICATION</small>	OT OR ST.	(4) DAY AND DATE							(5) <small>TOTAL HOURS</small>	(6) <small>RATE OF PAY</small>	(7) <small>GROSS AMOUNT EARNED</small>	(8) DEDUCTIONS					(9) <small>NET WAGES PAID FOR WEEK</small>
				M	T	W	T	F	S	S				FICA	WITH- HOLDING TAX	OTHER	TOTAL DEDUCTIONS		
			O									/							
			S									/							
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

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)

_____;
(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
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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.

**WAGE DEDUCTION AUTHORIZATION FOR
FEDERAL ASSISTED PROJECTS
DEDUCTION APPROVAL/"OTHER" DEDUCTION FORM**

This form must accompany the first certified payroll on which deduction appears. Submit form only once unless revisions are necessary.

Project Name: _____ **Project Number:** _____

Subcontractor Name: _____

Title 29, Part 3 of the Code of Federal Regulations provides for “anti-kickback” regulations as governed by the Copeland Act. The contractor shall comply with the requirements incorporated by reference in the project contract.

Payments for the benefit of employees, their families and dependents are permitted on federally assisted projects as long as the deduction is a) Not otherwise prohibited by law; b) Voluntarily consented to by the employee, in writing, and in advance of the period in which the work is to be done; and c) Such consent is not a condition either for the obtaining of, or the continuation of employment.

EMPLOYEE CONSENT TO WAGE DEDUCTION

I, _____, authorize the deduction(s) listed below from my wages:

(print name)

Purpose of Deduction	Amount	Frequency (Hr/Wk/Mo)	Time Frame (From-To)
<u>Insurance Payments</u>	\$ _____	_____	_____
<u>401K/Retirement Payments</u>	\$ _____	_____	_____
<u>Friend of the Court/Child Sup</u>	\$ _____	_____	_____
<u>Union Dues</u>	\$ _____	_____	_____
<u>Cell Phone Payments</u>	\$ _____	_____	_____
<u>Vehicle/Mileage</u>	\$ _____	_____	_____
<u>Pay Advances</u>	\$ _____	_____	_____
<u>Tools/Equipment</u>	\$ _____	_____	_____
<u>Loans</u>	\$ _____	_____	_____
<u>Other:</u>	\$ _____	_____	_____
<u>Other:</u>	\$ _____	_____	_____
<u>Other:</u>	\$ _____	_____	_____

_____ Employee Signature Last 4 digits of Social Security # _____ Date _____

_____ Subcontractor Signature Print Name/Title _____ Date _____

Waiver of Lien

My/our contract with: _____ to

provide _____ for the improvement

to: _____

(Check One)

Partial Conditional

I hereby waive my/our construction lien to the amount \$ _____ for labor/materials provided. This waiver, together with all previous waivers, if any, does not cover amounts due to me/us for the contract improvement provided.

This waiver is conditioned on actual payment of \$ _____.

Partial Unconditional

Having been fully paid and satisfied, hereby waive my/our construction lien to the amount of \$ _____ for the labor/materials provided through _____. This waiver, together with all previous waivers, if any, does/does not cover all amounts due to me/us for contract improvement provided through the date shown above.

Full Conditional

Having been fully paid and satisfied, all my/our construction lien rights against such property are hereby waived and released.

This waiver is conditioned on the actual payment of \$ _____.

Full Unconditional

Having been fully paid and satisfied, all my/our construction lien rights against such property are hereby waived and released.

Date: _____

Signature: _____

Company: _____

Address: _____

Phone: _____

DO NOT SIGN BLANK FORM

FULL UNCONDITIONAL WAIVER

My/our contract with _____ to provide
_____ for the improvement of the property described as

_____ having been
fully paid and satisfied, all my/our construction lien rights against such property
are hereby waived and released.

(Printed Name of Lien Claimant)

(Signature of lien claimant)

Signed on: _____

Address: _____

Telephone: _____

DO NOT SIGN BLANK OR INCOMPLETE FORMS. RETAIN A COPY.

SWORN STATEMENT

State of Michigan

} §

County of Washtenaw

_____, being duly sworn, states the following:

is the (contractor)(subcontractor) for an improvement to the following real property in Washtenaw

County, Michigan, described as follows: _____

The following is a statement of each subcontractor, supplier and laborer, for whom payment of wages or fringe benefits and withholdings is due but unpaid, with whom the **(contractor)(subcontractor)** has (contracted)(subcontracted) for performance under the contract with the owner or lessee, and the amounts due to the persons as of the date of this statement are correctly and fully set forth opposite their names:

Name, Address & Phone Number of Subcontractor, Supplier, or Laborer	Type of Improvement Furnished	Total Contract Price	Amount Already Paid	Amount Currently Owing	Balance to Complete (optional)	Amount of Laborer Wages Due but Unpaid	Amount of Fringe Benefits and Withholdings Due But Unpaid
Totals							

(Some columns may not be applicable to all persons listed)

The contractor has not procured material from, or subcontracted with, any person other than those set forth and owes no money for the improvement other than the sums set forth.*

I make this statement as the (contractor)(subcontractor) or as of the (contractor)(sub-contractor) to represent to the owner or lessee of the property and his or her agents that the property is free from claims of construction liens, or the possibility of construction liens, except as specifically set forth in this statement and except for claims of construction liens by laborers that may be provided under Section 109 of the Construction Lien Act, 1980 PA 497, MCL 570.1 109.

WARNING TO OWNER OR LESSEE: AN OWNER OR LESSEE OF THE PROPERTY MAY NOT RELY ON THIS SWORN STATEMENT TO AVOID THE CLAIM OF A SUBCONTRACTOR, SUPPLIER OR LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING OR A LABORER WHO MAY PROVIDE A NOTICE OF FURNISHING UNDER SECTION 109 OF THE CONSTRUCTION LIEN ACT, 1980 PA 497, MCL 570.1109 TO THE DESIGNEE OR TO THE OWNER OR LESSEE IF THE DESIGNEE IS NOT NAMED OR HAS DIED.

IF THIS SWORN STATEMENT IS IN REGARD TO A RESIDENTIAL STRUCTURE, ON RECEIPT OF THIS SWORN STATEMENT, THE OWNER OR LESSEE, OR THE OWNER'S OR LESSEE'S DESIGNEE MUST GIVE NOTICE OF ITS RECEIPT, EITHER IN WRITING, OR BY TELEPHONE, OR PERSONALLY. TO EACH SUBCONTRACTOR, SUPPLIER, AND LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING UNDER SECTION 109 OR, IF A NOTICE OF FURNISHING IS EXCUSED UNDER SECTION 108 OR 108A, TO EACH SUBCONTRACTOR, SUPPLIER, AND LABORER NAMED IN THE SWORN STATEMENT. IF A SUBCONTRACTOR, SUPPLIER WHO HAS PROVIDED LESSEE, OR DESIGNEE SHALL PROVIDE THE REQUESTER A COPY OF THE SWORN STATEMENT WITHIN 10 BUSINESS DAYS AFTER RECEIVING THE REQUEST.

Dependent Printed Name

Dependent Signature

WARNING TO DEPENDENT: A PERSON WHO GIVES A FALSE SWORN STATEMENT WITH INTENT TO DEFRAUD IS SUBJECT TO CRIMINAL PENALTIES AS PROVIDED IN SECTION 110 OF THE CONSTRUCTION LIEN ACT, 1980 PA 497, MCL 570.1110.

Subscribed and sworn to before me this

_____ day of _____, _____

Notary Public, _____ County, Michigan

My Commission Expires:

*Materials furnished by a contractor or a subcontractor out of his or her own inventory, and which has not been purchased specifically for the purpose of performing the contract, need not be listed.

Section 3 Performance and Summary Report

This form will be submitted to Washtenaw County OCED by the Prime or General Contractor and/or the Subrecipient on a monthly basis and at the end of the project.

Month and year of this report: _____

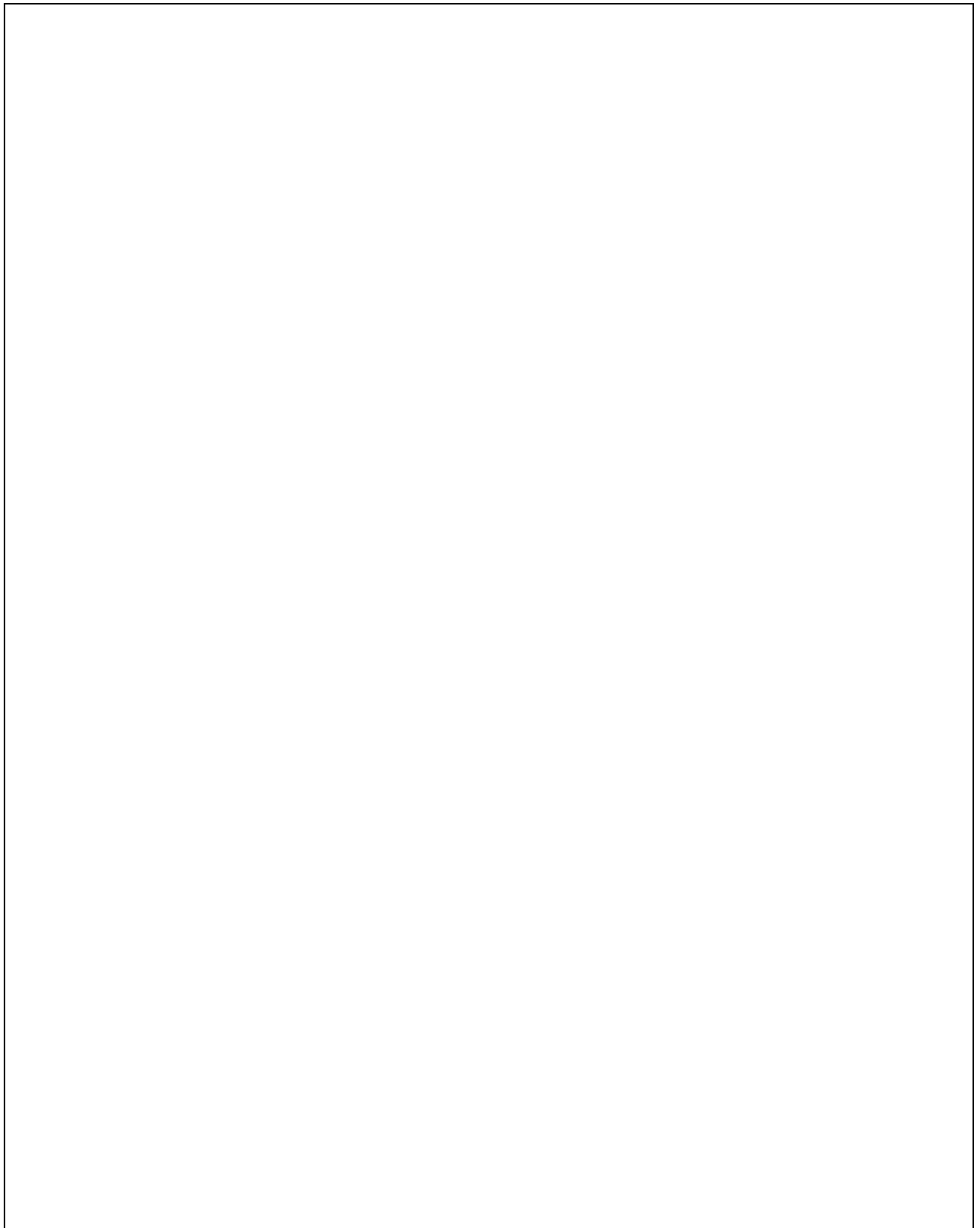
Is this the final project report: Yes ___ No ___

Total Labor Hours Worked by All Workers on the project	
Total Labor Hours Worked by Section 3 Workers	
Total Labor Hours Worked by Targeted Section 3 Workers	
Number of contracts/subcontracts to business concerns that provided economic opportunities to Section 3 workers per the prioritization requirements.	

Outreach to Solicit Bids from Section 3 Businesses and Outreach to Section 3 Workers on the Project during the Reporting Period/Qualitative Efforts

General Contractor	
Project Name	
Period Covered	
Date Submitted	

Indicate the efforts that will be made to notify Section 3 business concerns and Section 3 workers of contracting opportunities generated by HUD financial assistance for housing and community development programs, to the greatest extent feasible (using additional pages if necessary). All efforts must be documented. After the contracts are awarded, attach copies of all publications, notices, pictures of posted notices, and any other outreach material utilized, along with a list of all Section 3 business concerns that responded to your outreach efforts (bid tabulations, etc).



Project Wage Decision

"General Decision Number: MI20220001 05/06/2022

Superseded General Decision Number: MI20210001

State: Michigan

Construction Types: Highway (Highway, Airport & Bridge xxxxx and Sewer/Incid. to Hwy.)

Counties: Michigan Statewide.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for

performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	01/21/2022
2	02/11/2022
3	02/25/2022
4	03/25/2022
5	04/08/2022
6	04/15/2022
7	04/29/2022
8	05/06/2022

CARP0004-004 06/01/2019

REMAINDER OF STATE

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 27.62	20.59

 CARP0004-005 06/01/2018

LIVINGSTON (Townships of Brighton, Deerfield, Genoa, Hartland, Oceola & Tyrone), MACOMB, MONROE, OAKLAND, SANILAC, ST. CLAIR AND WAYNE COUNTIES

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 30.50	27.28

 ELEC0017-005 06/01/2021

STATEWIDE

	Rates	Fringes
Line Construction		
Groundman/Driver.....	\$ 29.11	7.20+32%
Journeyman Signal Tech, Communications Tech, Tower		
Tech & Fiber Optic Splicers..	\$ 42.55	7.20+32%
Journeyman Specialist.....	\$ 48.93	7.20+32%

Operator A.....	\$ 35.96	7.20+32%
Operator B.....	\$ 33.57	7.20+32%

Classifications

Journeyman Specialist: Refers to a crew of only one person working alone.

Operator A: Shall be proficient in operating all power equipment including: Backhoe, Excavator, Directional Bore and Boom/Digger truck.

Operator B: Shall be proficient in operating any 2 of the above mentioned pieces of equipment listed under Operator A.

 ENGI0324-003 06/01/2021

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LENAWEE, LIVINGSTON, MACOMB, MIDLAND, MONROE, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLAIR, SANILAC, SHIAWASSEE, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 49.02	24.85
GROUP 3.....	\$ 46.52	24.85
GROUP 4.....	\$ 47.52	24.85
GROUP 5.....	\$ 45.02	24.85
GROUP 6.....	\$ 46.02	24.85
GROUP 7.....	\$ 44.75	24.85
GROUP 8.....	\$ 45.75	24.85
GROUP 9.....	\$ 44.30	24.85
GROUP 10.....	\$ 45.30	24.85
GROUP 11.....	\$ 43.57	24.85
GROUP 12.....	\$ 44.57	24.85
GROUP 13.....	\$ 43.21	24.85
GROUP 14.....	\$ 44.21	24.85
GROUP 15.....	\$ 42.57	24.85
GROUP 16.....	\$ 39.37	24.85
GROUP 17.....	\$ 24.89	12.00
GROUP 18.....	\$ 28.38	12.00

FOOTNOTE:

Paid Holidays: New Year's Day, Memorial Day, Fourth of July,

Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Engineer when operating combination of boom and jib 400' or longer

GROUP 2: Engineer when operating combination of boom and jib 400' or longer on a crane that requires an oiler

GROUP 3: Engineer when operating combination of boom and jib 300' or longer

GROUP 4: Engineer when operating combination of boom and jib 300' or longer on a crane that requires an oiler

GROUP 5: Engineer when operating combination of boom and jib 220' or longer

GROUP 6: Engineer when operating combination of boom and jib 220' or longer on a crane that requires an oiler

GROUP 7: Engineer when operating combination of boom and jib 140' or longer

GROUP 8: Engineer when operating combination of boom and jib 140' or longer on a crane that requires an oiler

GROUP 9: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level)

GROUP 10: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level) on a crane that requires an oiler

GROUP 11: Engineer when operating combination of boom and jib 120' or longer

GROUP 12: Engineer when operating combination of boom and jib 120' or longer on a crane that requires an oiler

GROUP 13: Crane operator; job mechanic and 3 drum hoist and excavator

GROUP 14: Crane operator on a crane that requires an oiler

GROUP 15: Hoisting operator; 2 drum hoist and rubber tired backhoe

GROUP 16: Forklift and 1 drum hoist

GROUP 17: Compressor or welder operator

GROUP 18: Oiler

ENGI0324-004 06/01/2021

AREA 1: ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, EATON, HILLSDALE, IONIA, KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH, VAN BUREN

AREA 2: ANTRIM, BENZIE, CHARLEVOIX, EMMET, GRAND TRAVERSE, KALKASKA, LEELANAU, MISSAUKEE AND WEXFORD COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
AREA 1		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 44.75	24.85
GROUP 3.....	\$ 43.21	24.85
GROUP 4.....	\$ 39.37	24.85
GROUP 5.....	\$ 24.89	12.00
GROUP 6.....	\$ 28.38	12.00
AREA 2		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 44.75	24.85
GROUP 3.....	\$ 43.21	24.85
GROUP 4.....	\$ 39.37	24.85
GROUP 5.....	\$ 24.89	12.00
GROUP 6.....	\$ 28.38	12.00

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 additional to the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 additional to the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1: Crane Operator with main boom & jib 400', 300', or 220' or longer.

GROUP 2: Crane Operator with main boom & jib 140' or longer, Tower Crane; Gantry Crane; Whirley Derrick.

GROUP 3: Regular Equipment Operator, Crane, Dozer, Loader, Hoist, Straddle Wagon, Mechanic, Grader and Hydro Excavator.

GROUP 4: Air Tugger (single drum), Material Hoist Pump 6" or over, Elevators, Brokk Concrete Breaker.

GROUP 5: Air Compressor, Welder, Generators, Conveyors

GROUP 6: Oiler and fire tender

ENGI0324-005 09/01/2021

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALLEGAN, ALGER, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KWEENAW, LAKE, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

OPERATOR: Power Equipment
(Underground construction
(including sewer))

AREA 1:

GROUP 1.....	\$ 37.63	24.85
GROUP 2.....	\$ 32.90	24.85
GROUP 3.....	\$ 32.17	24.85
GROUP 4.....	\$ 31.60	24.85
GROUP 5.....	\$ 23.15	12.05

AREA 2:

GROUP 1.....	\$ 35.92	24.85
GROUP 2.....	\$ 31.03	24.85
GROUP 3.....	\$ 30.53	24.85
GROUP 4.....	\$ 30.25	24.85
GROUP 5.....	\$ 23.15	12.05

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator; Hydro Excavator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or diesel- powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4 or equivalent); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller); Vac Truck and End dump operator;

GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more-less than 600 cfm); Boom truck (non-swinging, non- powered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum-1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more-4-in. up to 6-in. discharge-gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more-300 amp. or larger - gas or diesel powered)

GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Hydraulic pipe pushing machine; Mulching equipment; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered - excluding submersible pumps); Roller (other than asphalt); Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); Sweeper (Wayne type); Water wagon and Extend-a boom forklift

Group 5: Fire Person, Oiler

* ENGI0324-006 06/01/2021

GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW, WAYNE, ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE,

HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
Power equipment operators: (AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION)		
GROUP 1.....	\$ 36.86	24.85
GROUP 2.....	\$ 30.13	24.85
GROUP 3.....	\$ 29.52	24.85
GROUP 4.....	\$ 29.40	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt plant operator; Crane operator (does not include work on bridge construction projects when the crane operator is erecting structural components); Dragline operator; Shovel operator; Locomotive operator; Paver operator (5 bags or more); Elevating grader operator; Pile driving operator; Roller operator (asphalt); Blade grader operator; Trenching machine operator (ladder or wheel type); Auto-grader; Slip form paver; Self-propelled or tractor-drawn scraper; Conveyor loader operator (Euclid type); Endloader operator (1 yd. capacity and over); Bulldozer; Hoisting engineer; Tractor operator; Finishing machine operator (asphalt); Mechanic; Pump operator (6-in. discharge or over, gas, diesel powered or generator of 300 amp. or larger); Shouldering or gravel distributing machine operator (self-propelled); Backhoe (with over 3/8 yd. bucket); Side boom tractor (type D-4 or equivalent or larger); Tube finisher (slip form paving); Gradall (and similar type machine); Asphalt paver (self-propelled); Asphalt planer (self-propelled); Batch plant (concrete-central mix); Slurry machine (asphalt); Concrete pump (3 in. and over); Roto-mill; Swinging boom truck (over 12 ton capacity); Hydro demolisher (water blaster); Farm-type tractor with attached pan; Vacuum truck operator; Batch Plant (concrete dry batch); Concrete Saw Operator (40h.p. or over; Tractor Operator (farm type); Finishing Machine Operator (concrete); Grader Operator (self-propelled fine grade or form (concrete)).

GROUP 2: Screening plant operator; Washing plant operator;

Crusher operator; Backhoe (with 3/8 yd. bucket or less);
 Side boom tractor (smaller than D-4 type or equivalent);
 Sweeper (Wayne type and similar equipment); Greese Truck;
 Air Compressor Operator (600 cu.ft. per min or more); Air
 Compressor Operator (two or more, less than 600 cfm);

GROUP 3: Boiler fire tender; Tractor operator (farm type with
 attachment); Concrete Breaker; Wagon Drill Operator;

GROUP 4: Oiler; Fire tender; Trencher (service); Flexplane
 operator; Cleftplane operator; Boom or winch hoist truck
 operator; Endloader operator *under 1 yd. capacity); Roller
 Operator (other than asphalt); Curing equipment operator
 (self-propelled); Power bin operator; Plant drier (6 ft.
 wide or over); Guard post driver operator (power driven);
 All mulching equipment; Stump remover; Concrete pump (under
 3-in.); Mesh installer (self-propelled); End dump; Skid
 Steer.

 ENGI0324-007 05/01/2021

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON,
 IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON
 AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment		
(Steel Erection)		
Compressor, welder and forklift.....	\$ 35.90	24.60
Crane operator, main boom & jib 120' or longer.....	\$ 42.37	24.60
Crane operator, main boom & jib 140' or longer.....	\$ 42.67	24.60
Crane operator, main boom & jib 220' or longer.....	\$ 43.26	24.60
Mechanic with truck and tools.....	\$ 41.50	24.60
Oiler and fireman.....	\$ 34.36	24.60
Regular operator.....	\$ 39.72	24.60

 ENGI0324-008 10/01/2020

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY,
 BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
 TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,

IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment (Sewer Relining)		
GROUP 1.....	\$ 35.37	14.31
GROUP 2.....	\$ 33.33	14.31

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system, including remote in-ground cutter and other equipment used in connection with the CCTV system

GROUP 2: Operation of hot water heaters and circulation systems, water jettors and vacuum and mechanical debris removal systems

* ENGI0325-012 05/01/2021

	Rates	Fringes
Power equipment operators - gas distribution and duct installation work:		
GROUP 1.....	\$ 33.48	24.85
GROUP 2.....	\$ 31.45	24.85

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as "distribution work," starting from the first metering station, connection, similar or related facility, of the main or cross country pipeline and including duct installation.

Group 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd.

capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater), boom truck (with powered boom), tractor (wheel type other than backhoe or front endloader). Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service). Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

IRON0008-007 06/01/2021

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector.....	\$ 23.70	6.95
IRONWORKER		
General contracts		
\$10,000,000 or greater.....	\$ 36.45	27.65
General contracts less than \$10,000,000.....	\$ 36.45	27.65

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0025-002 06/01/2021

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LIVINGSTON, MACOMB, MIDLAND, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector		
Alcona, Alpena, Arenac, Cheboygan, Clare, Clinton,		

Crawford, Gladwin, Gratiot, Huron, Ingham, Iosco, Isabella, Jackson, Lapeer, Livingston (west of Burkhardt Road), Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Sanilac, Shiawassee, Tuscola & Washtenaw (west of U.S. 23).	\$ 24.26	22.11
Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University of Michigan, Washtenaw (east of U.S. 23) & Wayne...	\$ 25.48	23.11
IRONWORKER Ornamental and Structural...	\$ 36.77	29.03
Reinforcing.....	\$ 32.99	30.76

IRON0055-005 07/01/2021

LENAWEE AND MONROE COUNTIES:

	Rates	Fringes
IRONWORKER Pre-engineered metal buildings.....	\$ 23.59	19.35
All other work.....	\$ 31.25	26.90

IRON0292-003 06/01/2020

BERRIEN AND CASS COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector).....	\$ 31.75	22.84

IRON0340-001 06/19/2017

ALLEGAN, ANTRIM, BARRY, BENZIE, BRANCH, CALHOUN, CHARLEVOIX,
EATON, EMMET, GRAND TRAVERSE, HILLSDALE, IONIA, KALAMAZOO,
KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA,
MISSAUKEE, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA,
OTTAWA, ST. JOSEPH, VAN BUREN AND WEXFORD COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector).....	\$ 24.43	24.67

LAB00005-006 10/01/2020

	Rates	Fringes
Laborers - hazardous waste abatement: (ALCONA, ALPENA, ANTRIM, BENZIE, CHARLEVOIX, CHEBOYGAN, CRAWFORD, EMMET, GRAND TRAVERSE, IOSCO, KALKASKA, LEELANAU, MISSAUKEE, MONTMORENCY, OSCODA, OTSEGO, PRESQUE ISLE AND WEXFORD COUNTIES - Zone 10)		
Levels A, B or C.....	\$ 17.45	12.75
class b.....	\$ 18.64	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 16.45	12.75
class a.....	\$ 17.64	12.90

Zone 10

Laborers - hazardous waste abatement: (ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES - Zone 11)		
Levels A, B or C.....	\$ 23.58	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 22.58	12.90

Laborers - hazardous waste abatement: (ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, IONIA COUNTY (except the city of Portland); KALAMAZOO, KENT, LAKE,		
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MANISTEE, MASON, MECOSTA,
MONTCALM, MUSKEGON, NEWAYGO,
OCEANA, OSCEOLA, OTTAWA, ST.
JOSEPH AND VAN BUREN COUNTIES

- Zone 9)

Levels A, B or C.....\$ 21.80 12.90
Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 20.80 12.90

Laborers - hazardous waste
abatement: (ARENAC, BAY,
CLARE, GLADWIN, GRATIOT,
HURON, ISABELLA, MIDLAND,
OGEMAW, ROSCOMMON, SAGINAW
AND TUSCOLA COUNTIES - Zone 8)

Levels A, B or C.....\$ 21.39 12.90
Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 20.80 12.90

Laborers - hazardous waste
abatement: (CLINTON, EATON
AND INGHAM COUNTIES; IONIA
COUNTY (City of Portland);
LIVINGSTON COUNTY (west of
Oak Grove Rd., including the
City of Howell) - Zone 6)

Levels A, B or C.....\$ 25.64 12.90
Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 24.64 12.90

Laborers - hazardous waste
abatement: (GENESEE, LAPEER
AND SHIAWASSEE COUNTIES -
Zone 7)

Levels A, B or C.....\$ 24.20 13.80
Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 23.20 13.80

Laborers - hazardous waste

abatement: (HILLSDALE, JACKSON AND LENAWEЕ COUNTIES - Zone 4)		
Levels A, B or C.....\$ 25.17		12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 24.17		12.90
Laborers - hazardous waste abatement: (LIVINGSTON COUNTY (east of Oak Grove Rd. and south of M-59, excluding the city of Howell); AND WASHTENAW COUNTY - Zone 3)		
Levels A, B or C.....\$ 29.93		14.20
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 28.93		14.20
Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1)		
Levels A, B or C.....\$ 29.93		16.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 28.93		16.90
Laborers - hazardous waste abatement: (MONROE COUNTY - Zone 4)		
Levels A, B or C.....\$ 31.75		14.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 31.75		14.90
Laborers - hazardous waste abatement: (OAKLAND COUNTY and the Northeast portion of LIVINGSTON COUNTY bordered by Oak Grove Road on the West and M-59 on the South - Zone 2)		
Level A, B, C.....\$ 29.93		16.90

Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 28.93	16.90
Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5) Levels A, B or C.....\$ 25.75	16.35
Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 24.75	16.35

LAB00259-001 09/01/2021

AREA 1: MACOMB, OAKLAND AND WAYNE COUNTIES
 AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,
 BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
 TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,
 IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,
 KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE,
 MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE,
 MIDLAND, MISSAUKEE, MONROE, MONTCALM, MONTMORENCY, MUSKEGON,
 NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO,
 OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST.
 JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN,
 WASHTENAW AND WEXFORD COUNTIES

	Rates	Fringes
Laborers - tunnel, shaft and caisson:		
AREA 1		
GROUP 1.....\$ 23.62		16.95
GROUP 2.....\$ 23.73		19.95
GROUP 3.....\$ 23.79		16.95
GROUP 4.....\$ 23.97		16.95
GROUP 5.....\$ 24.22		16.95
GROUP 6.....\$ 24.55		16.95
GROUP 7.....\$ 17.83		16.95
AREA 2		
GROUP 1.....\$ 25.15		12.95
GROUP 2.....\$ 25.24		12.95
GROUP 3.....\$ 25.34		12.95

GROUP 4.....	\$ 25.50	12.95
GROUP 5.....	\$ 25.76	12.95
GROUP 6.....	\$ 26.07	12.95
GROUP 7.....	\$ 18.34	12.95

SCOPE OF WORK: Tunnel, shaft and caisson work of every type and description and all operations incidental thereto, including, but not limited to, shafts and tunnels for sewers, water, subways, transportation, diversion, sewerage, caverns, shelters, aquifers, reservoirs, missile silos and steel sheeting for underground construction.

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Tunnel, shaft and caisson laborer, dump, shanty, hog house tender, testing (on gas) and watchman

GROUP 2: Manhole, headwall, catch basin builder, bricklayer tender, mortar machine and material mixer

GROUP 3: Air tool operator (jackhammer, bush hammer and grinder), first bottom, second bottom, cage tender, car pusher, carrier, concrete, concrete form, concrete repair, cement invert laborer, cement finisher, concrete shoveler, conveyor, floor, gasoline and electric tool operator, gunite, grout operator, welder, heading dinky person, inside lock tender, pea gravel operator, pump, outside lock tender, scaffold, top signal person, switch person, track, tigger, utility person, vibrator, winch operator, pipe jacking, wagon drill and air track operator and concrete saw operator (under 40 h.p.)

GROUP 4: Tunnel, shaft and caisson mucker, bracer, liner plate, long haul dinky driver and well point

GROUP 5: Tunnel, shaft and caisson miner, drill runner, key board operator, power knife operator, reinforced steel or mesh (e.g. wire mesh, steel mats, dowel bars, etc.)

GROUP 6: Dynamite and powder

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LAB00334-001 09/01/2021

Rates Fringes

Laborers - open cut:

ZONE 1 - MACOMB, OAKLAND
AND WAYNE COUNTIES:

GROUP 1.....	\$ 23.47	16.95
GROUP 2.....	\$ 23.58	16.95
GROUP 3.....	\$ 23.63	16.95
GROUP 4.....	\$ 23.71	16.95
GROUP 5.....	\$ 23.77	16.95
GROUP 6.....	\$ 21.22	16.95
GROUP 7.....	\$ 17.84	16.95

ZONE 2 - LIVINGSTON COUNTY
(east of M-151 (Oak Grove
Rd.)); MONROE AND

WASHTENAW COUNTIES:

GROUP 1.....	\$ 24.80	12.95
GROUP 2.....	\$ 24.91	12.95
GROUP 3.....	\$ 25.03	12.95
GROUP 4.....	\$ 25.10	12.95
GROUP 5.....	\$ 25.25	12.95
GROUP 6.....	\$ 22.55	12.95
GROUP 7.....	\$ 19.19	12.95

ZONE 3 - CLINTON, EATON,
GENESEE, HILLSDALE AND
INGHAM COUNTIES; IONIA
COUNTY (City of Portland);
JACKSON, LAPEER AND
LENAWEE COUNTIES;
LIVINGSTON COUNTY (west of
M-151 Oak Grove Rd.);
SANILAC, ST. CLAIR AND
SHIAWASSEE COUNTIES:

GROUP 1.....	\$ 22.99	12.95
GROUP 2.....	\$ 23.13	12.95
GROUP 3.....	\$ 23.25	12.95
GROUP 4.....	\$ 23.30	12.95
GROUP 5.....	\$ 23.44	12.95
GROUP 6.....	\$ 20.74	12.95
GROUP 7.....	\$ 17.89	12.95

ZONE 4 - ALCONA, ALLEGAN,
ALPENA, ANTRIM, ARENAC,
BARRY, BAY, BENZIE,
BERRIEN, BRANCH,
CALHOUN, CASS, CHARLEVOIX,
CHEBOYGAN, CLARE,
CRAWFORD, EMMET,
GLADWIN, GRAND TRAVERSE,
GRATIOT AND HURON
COUNTIES; IONIA COUNTY
(EXCEPT THE CITY OF
PORTLAND); IOSCO,
ISABELLA, KALAMAZOO,

KALKASKA, KENT,
 LAKE, LEELANAU, MANISTEE,
 MASON, MECOSTA, MIDLAND,
 MISSAUKEE, MONTCALM,
 MONTMORENCY, MUSKEGON,
 NEWAYGO, OCEANA, OGEMAW,
 OSCEOLA, OSCODA, OTSEGO,
 OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SAGINAW, ST.
 JOSEPH, TUSCOLA, VAN BUREN
 AND WEXFORD COUNTIES:

GROUP 1.....	\$ 22.02	12.95
GROUP 2.....	\$ 22.15	12.95
GROUP 3.....	\$ 22.26	12.95
GROUP 4.....	\$ 22.33	12.95
GROUP 5.....	\$ 22.45	12.95
GROUP 6.....	\$ 19.67	12.95
GROUP 7.....	\$ 18.01	12.95

ZONE 5 - ALGER, BARAGA,
 CHIPPEWA, DELTA,
 DICKINSON, GOGEBIC,
 HOUGHTON, IRON,
 KEWEENAW, LUCE, MACKINAC,
 MARQUETTE, MENOMINEE,
 ONTONAGON AND SCHOOLCRAFT
 COUNTIES:

GROUP 1.....	\$ 22.24	12.95
GROUP 2.....	\$ 22.38	12.95
GROUP 3.....	\$ 22.51	12.95
GROUP 4.....	\$ 22.56	12.95
GROUP 5.....	\$ 22.61	12.95
GROUP 6.....	\$ 19.99	12.95
GROUP 7.....	\$ 18.10	12.95

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth including industrial, commercial and residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation. For all areas except the Upper Peninsula, open cut construction work shall also be construed to mean waterfront work, piers, docks, seawalls, breakwalls, marinas and all incidental work. Open cut construction work shall not include any structural modifications, alterations, additions and

repairs to buildings, or highway work, including roads, streets, bridge construction and parking lots or steel erection work and excavation for the building itself and back filling inside of and within 5 ft. of the building and foundations, footings and piers for the building. Open cut construction work shall not include any work covered under Tunnel, Shaft and Caisson work.

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, headwall, seawall, breakwall and dock builder

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting man, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LAB00465-001 06/01/2021

LABORER: Highway, Bridge and Airport Construction

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALLEGAN, BARRY, BAY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, EATON, GRATIOT, HILLSDALE, HURON, INGHAM, JACKSON,

KALAMAZOO, LAPEER, LENAWEE, LIVINGSTON, MIDLAND, MUSKEGON,
 SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA
 AND VAN BUREN COUNTIES

AREA 3: ALCONA, ALPENA, ANTRIM, ARENAC, BENZIE, CHARLEVOIX,
 CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE,
 IONIA, IOSCO, ISABELLA, KALKASKA, KENT, LAKE, LEELANAU,
 MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MONTMORENCY,
 NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA,
 PRESQUE ISLE, ROSCOMMON AND WEXFORD COUNTIES

AREA 4: ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC,
 HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE,
 ONTONAGON AND SCHOOLCRAFT COUNTIES

	Rates	Fringes
LABORER (AREA 1)		
GROUP 1.....	\$ 30.52	13.45
GROUP 2.....	\$ 30.65	13.45
GROUP 3.....	\$ 30.83	13.45
GROUP 4.....	\$ 30.91	13.45
GROUP 5.....	\$ 31.12	13.45
GROUP 6.....	\$ 31.42	13.45
LABORER (AREA 2)		
GROUP 1.....	\$ 26.92	12.90
GROUP 2.....	\$ 27.12	12.90
GROUP 3.....	\$ 27.36	12.90
GROUP 4.....	\$ 27.71	12.90
GROUP 5.....	\$ 27.58	12.90
GROUP 6.....	\$ 27.92	12.90
LABORER (AREA 3)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90
LABORER (AREA 4)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90

LABORER CLASSIFICATIONS

GROUP 1: Asphalt shoveler or loader; asphalt plant misc.;
 burlap person; yard person; dumper (wagon, truck, etc.);

joint filling laborer; miscellaneous laborer; unskilled laborer; sprinkler laborer; form setting laborer; form stripper; pavement reinforcing; handling and placing (e.g., wire mesh, steel mats, dowel bars); mason's tender or bricklayer's tender on manholes; manhole builder; headwalls, etc.; waterproofing,(other than buildings) seal coating and slurry mix, shoring, underpinning; pressure grouting; bridge pin and hanger removal; material recycling laborer; horizontal paver laborer (brick, concrete, clay, stone and asphalt); ground stabilization and modification laborer; grouting; waterblasting; top person; railroad track and trestle laborer; carpenters' tender; guard rail builders' tender; earth retention barrier and wall and M.S.E. wall installer's tender; highway and median installer's tender(including sound, retaining, and crash barriers); fence erector's tender; asphalt raker tender; sign installer; remote control operated equipment.

GROUP 2: Mixer operator (less than 5 sacks); air or electric tool operator (jackhammer, etc.); spreader; boxperson (asphalt, stone, gravel); concrete paddler; power chain saw operator; paving batch truck dumper; tunnel mucker (highway work only); concrete saw (under 40 h.p.) and dry pack machine; roto-mill grounds person.

GROUP 3: Tunnel miner (highway work only); finishers tenders; guard rail builders; highway and median barrier installer; earth retention barrier and wall and M.S.E. wall installer's (including sound, retaining and crash barriers); fence erector; bottom person; powder person; wagon drill and air track operator; diamond and core drills; grade checker; certified welders; curb and side rail setter's tender.

GROUP 4: Asphalt raker

GROUP 5: Pipe layers, oxy-gun

GROUP 6: Line-form setter for curb or pavement; asphalt screed checker/screw man on asphalt paving machines.

 LAB01076-005 04/01/2022

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1.....	\$ 25.17	13.32
Zone 2.....	\$ 23.47	13.40

Zone 3.....	\$ 21.60	13.45
Zone 4.....	\$ 20.97	13.43
Zone 5.....	\$ 21.00	13.40

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

- Zone 1 - Macomb, Oakland and Wayne
- Zone 2 - Monroe and Washtenaw
- Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair
- Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft
- Zone 5 - Remaining Counties in Michigan

PAIN0022-002 07/01/2008

HILLSDALE, JACKSON AND LENAWEE COUNTIES; LIVINGSTON COUNTY (east of the eastern city limits of Howell, not including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 25.06	14.75

FOOTNOTES: For all spray work and journeyman rigging for spray work, also blowing off, \$0.80 per hour additional (applies only to workers doing rigging for spray work on off the floor work. Does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment. For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel, \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of

fifty (50) feet from the ground or higher, \$0.50 per hour additional. For all preparatorial work and painting performed on open steel under forty (40) feet when no scaffolding is involved, \$0.50 per hour additional. For all swing stage work-window jacks and window belts-exterior and interior, \$0.50 per hour additional. For all spray work and sandblaster work to a scaffold height of forty (40) feet above the floor level, \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height, \$0.50 per hour additional. For all steeplejack work performed where the elevation is forty (40) feet or more, \$1.25 per hour additional.

 PAIN0312-001 06/01/2018

EXCLUDES: ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); INCLUDES: Barry, Berrien, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, St. Joseph, Van Buren

	Rates	Fringes
PAINTER		
Brush and roller.....	\$ 23.74	13.35
Spray, Sandblast, Sign		
Painting.....	\$ 24.94	13.35

 PAIN0845-003 05/10/2018

CLINTON COUNTY; EATON COUNTY (does not include the townships of Bellevue and Olivet); INGHAM COUNTY; IONIA COUNTY (east of Hwy. M 66); LIVINGSTON COUNTY (west of the eastern city limits of Howell, including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); AND SHIAWASSEE COUNTY (Townships of Bennington, Laingsbury and Perry):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

 PAIN0845-015 05/10/2018

MUSKEGON COUNTY; NEWAYGO COUNTY (except the Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OCEANA COUNTY; OTTAWA

COUNTY (except the townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

PAIN0845-018 05/10/2018

ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); IONIA COUNTY (west of Hwy. M-66); KENT, MECOSTA AND MONTCALM COUNTIES; NEWAYGO COUNTY (Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OSCEOLA COUNTY (south of Hwy. #10); OTTAWA COUNTY (Townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.

PAIN1011-003 06/02/2021

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 26.71	14.38

FOOTNOTES: High pay (bridges, overpasses, watertower): 30 to 80 ft.: \$.65 per hour additional. 80 ft. and over: \$1.30 per hour additional.

PAIN1474-002 06/01/2010

HURON COUNTY; LAPEER COUNTY (east of Hwy. M-53); ST. CLAIR, SANILAC AND TUSCOLA COUNTIES:

Rates	Fringes
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PAINTER.....\$ 23.79 12.02

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.
 Work with any hazardous material: \$1.00 per hour additional.
 Sandblasting, steam cleaning and acid cleaning: \$1.00 per hour additional.
 Ladder work at or above 40 ft., scaffold work at or above 40 ft., swing stage, boatswain chair, window jacks and all work performed over a falling height of 40 ft.: \$1.00 per hour additional.
 Spray gun work, pick pullers and those handling needles, blowing off by air pressure, and any person rigging (setting up and moving off the ground): \$1.00 per hour additional.
 Steeplejack, tanks, gas holders, stacks, flag poles, radio towers and beacons, power line towers, bridges, etc.: \$1.00 per hour additional, paid from the ground up.

 PAIN1803-003 06/01/2019

ALCONA, ALPENA, ANTRIM, ARENAC, BAY, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT, IOSCO, ISABELLA, KALKASKA, LAKE, LEELANAU, MANISTEE, MASON, MIDLAND, MISSAUKEE, MONTMORENCY AND OGEMAW COUNTIES; OSCEOLA COUNTY (north of Hwy. #10); OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW AND WEXFORD COUNTIES:

	Rates	Fringes
PAINTER		
Work performed on water, bridges over water or moving traffic, radio and powerline towers, elevated tanks, steeples, smoke stacks over 40 ft. of falling heights, recovery of lead-based paints and any work associated with industrial plants, except maintenance of industrial plants.....	\$ 25.39	14.68
All other work, including maintenance of industrial plant.....	\$ 25.39	14.68

FOOTNOTES: Spray painting, sandblasting, blowdown associated with spraying and blasting, water blasting and work involving a swing stage, boatswain chair or spider: \$1.00 per hour additional. All work performed inside tanks,

vessels, tank trailers, railroad cars, sewers, smoke stacks, boilers or other spaces having limited egress not including buildings, opentop tanks, pits, etc.: \$1.25 per hour additional.

 PLAS0514-001 06/01/2018

ZONE 1: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, SAGINAW, WASHTENAW AND WAYNE COUNTIES

ZONE 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
ZONE 1.....	\$ 31.47	13.81
ZONE 2.....	\$ 29.97	13.81

 PLUM0190-003 05/01/2015

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

	Rates	Fringes
Plumber/Pipefitter - gas		

distribution pipeline:

Welding in conjunction with gas distribution pipeline work.....	\$ 33.03	20.19
All other work:.....	\$ 24.19	12.28

TEAM0007-004 06/01/2020

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
TRUCK DRIVER		
AREA 1		
Euclids, double bottoms and lowboys.....	\$ 28.05	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.80	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 27.90	.50 + a+b
AREA 2		
Euclids, double bottomms and lowboys.....	\$ 24.895	.50 + a+b
Euclids, double bottoms and lowboys.....	\$ 28.15	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.90	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 28.00	.50 + a+b

Footnote:

- a. \$470.70 per week
- b. \$68.70 daily

TEAM0247-004 04/01/2013

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,

CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE,
 GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO,
 IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW,
 LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE,
 MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE,
 MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW,
 ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, SAGINAW, ST.
 CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND,
 WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
Sign Installer		
AREA 1		
GROUP 1.....	\$ 21.78	11.83
GROUP 2.....	\$ 25.27	11.8375
AREA 2		
GROUP 1.....	\$ 22.03	11.83
GROUP 2.....	\$ 25.02	11.8375

FOOTNOTE:

a. \$132.70 per week, plus \$17.80 per day.

SIGN INSTALLER CLASSIFICATIONS:

GROUP 1: performs all necessary labor and uses all tools required to construct and set concrete forms required in the installation of highway and street signs

GROUP 2: performs all miscellaneous labor, uses all hand and power tools, and operates all other equipment, mobile or otherwise, required for the installation of highway and street signs

 TEAM0247-010 04/01/2018

AREA 1: LAPEER AND SHIAWASSEE COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

Rates Fringes

TRUCK DRIVER (Underground construction)

AREA 1		
GROUP 1.....	\$ 23.82	19.04
GROUP 2.....	\$ 23.91	19.04
GROUP 3.....	\$ 24.12	19.04
AREA 2		
GROUP 1.....	\$ 24.12	19.04
GROUP 2.....	\$ 24.26	19.04
GROUP 3.....	\$ 24.45	19.04

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

SCOPE OF WORK: Excavation, site preparation, land balancing, grading, sewers, utilities and improvements; also including but not limited to, tunnels, underground piping, retention, oxidation, flocculation facilities, conduits, general excavation and steel sheeting for underground construction. Underground construction work shall not include any structural modifications, alterations, additions and repairs to buildings or highway work, including roads, streets, bridge construction and parking lots or steel erection.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low boys, Euclid, double bottom and fuel trucks)

GROUP 2: Truck driver on dump trucks of 8 cubic yards capacity or over, pole trailers, semis and fuel trucks

GROUP 3: Truck driver on low boy, Euclid and double bottom

 * SUMI2002-001 05/01/2002

	Rates	Fringes
Flag Person.....	\$ 10.10 **	0.00
LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)....	\$ 22.89	13.45
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND,		

WASHTENAW AND WAYNE).....\$ 20.19 13.45

Pavement Marking Machine
(ZONE 1: GENESEE, MACOMB,
MONROE, OAKLAND, WASHTENAW
AND WAYNE COUNTIES)
Group 1.....\$ 30.52 13.45

Pavement Marking Machine
(ZONE 1: GENESEE, MACOMB,
MONROE, OAKLAND, WASHTENAW
AND WAYNE)
Group 2.....\$ 27.47 13.45

Pavement Marking Machine
(ZONE 2: STATEWIDE (EXCLUDING
GENESEE, MACOMB, MONROE,
OAKLAND, WASHTENAW AND WAYNE
COUNTIES)
Group 1.....\$ 26.92 13.45

Pavement Marking Machine
(ZONE 2: STATEWIDE (EXCLUDING
GENESEE, MACOMB, MONROE,
OAKLAND, WASHTENAW AND WAYNE)
Group 2.....\$ 24.23 13.45

WORK CLASSIFICATIONS:

PAVEMENT MARKER GROUP 1: Drives or operates a truck mounted
striper, grinder, blaster, groover, or thermoplastic melter
for the placement or removal of temporary or permanent
pavement markings or markers.

PAVEMENT MARKER GROUP 2: Performs all functions involved for
the placement or removal of temporary or permanent pavement
markings or markers not covered by the classification of
Pavement Marker Group 1 or Line Protector.

LINE PROTECTOR: Performs all operations for the protection or
removal of temporary or permanent pavement markings or
markers in a moving convoy operation not performed by the
classification of Pavement Marker Group 1. A moving convoy
operation is comprised of only Pavement Markers Group 1 and
Line Protectors.

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of

the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"