

ADDENDUM No. 3

ITB No. 4563

Hoover, Greene, & Hill Improvement Project

Bids Due: March 8, 2019 at 10:00 A.M. (Local Time)

The following changes, additions, and/or deletions shall be made to the Invitation to Bid for Hoover, Greene, & Hill Improvement Project, ITB No. 4563, on which proposals will be received on/or before March 8, 2019, at 10:00 A.M. (local time).

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes 62 pages total.**

Bidder is to acknowledge receipt of this Addendum No. 3, including all attachments (if any) in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgment of receipt of this addendum will be considered nonconforming.

The following forms provided within the ITB document must be included in submitted bids:

- City of Ann Arbor Prevailing Wage Declaration of Compliance
- City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- Vendor Conflict of Interest Disclosure Form
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these completed forms listed above upon bid opening will be rejected as non-responsive and will not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid document which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

<u>Section/Page(s)</u>	<u>Change</u>
IB-4	Inserted Current Wage Rate Decision for Heavy and Highway that will be used for this project. The decisions in their entirety can be found on pages ADD-3-23 through ADD-3-58 of this addendum.
BF-1 thru BF-5	Delete pages BF-1 through BF-5 of the bid form pages of the contract documents. Replace these pages with BF-1-R-2 through BF-9-R-2 that are pages ADD-3-6 through ADD-3-14 of this addendum. In addition, the following pay item was modified and/or added.

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Est. Quantity</u>
205	Barricade, Type III, High Intensity, Lighted, Furn & Oper	Ea	25
206	Channelizing Device, 42 inch, High Intensity, Furn & Oper	Ea	230
207	Plastic Drum, High Intensity, Furn & Oper	Ea	60
236	Pavement, Remove	Syd	16,500
244	Aggregate Base Course, 21AA, Modified	Ton	6,400
266	HMA, 3E1	Ton	2,805
267	HMA, 4E1	Ton	1,750
268	HMA, 5E1	Ton	1,875
276	Topsoil Surface, 4 inch	Syd	1,300
277	Seeding and Mulching	Syd	1,300
279	Line Stop, Ductile Iron Pipe, 8 inch (item renumber)		
279	Line Stop, Ductile Iron Pipe, 6 inch (item renumbered)		
280	Line Stop, Additional Rental Day	Each	10

Comment: The intent of this change is to replace pages of Section 1 Bid Form pages with the revised pages provided herein that are pages ADD-3-6 through ADD-3-14.

DS-156 thru DS161 Delete the existing Detailed Specification entitled “Temporary Water Main Line Stop.” Replace with the Detailed Specification entitled “Temporary Water Main Line Stop” dated March 1, 2019. This detailed specification is pages ADD-3-17 through ADD-3-22 of this addendum.

Comment: The Detailed Specification has been revised for include a line stop rental pay item and clarifies pavement removal, aggregate base course, bituminous pavement, and traffic control items as necessary to construct the line stop (as determined by the Engineer), shall be paid for separately as specified elsewhere; all other items shall be included in the pay item for the line stop.

DS-122 thru DS-123 Delete the existing Detailed Specification entitled “Project Clean-up and Restoration, Special.” Replace with the Detailed Specification entitled “Project Clean-up and Restoration, Special” dated March 1, 2019. This detailed specification is pages ADD-3-15 through ADD-3-16 of this addendum.

Comment: The Detailed Specification has been revised to clarify “Topsoil Surface, 4 inch” and “Seeding and Mulching” to be paid for separately.

Section/Page(s) Change

Plan Sheet 3 of 83 Added “Line Stop, Additional Rental Day” pay item to Note Sheet. The Contractor shall note that the quantities on this sheet have been revised from those as presented on the revised bid forms and shall update them as appropriate.

Plan Sheet 21 of 83 Updated detail added for “Fire Hydrant Assy, w/Extensions, Complete” pay item showing push on joints versus mechanical joints.

Plan Sheet 23 of 83 The contractor is required to follow Note No. 1 and provide signed and

sealed shop drawings for each storm control structure. Note No. 3 referring to ACI 350-1 shall be omitted from the plans.

Plan Sheet 25 of 83 Detail added for "Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall" pay item.

Plan Sheet 83 of 83 The Contractor shall note that the quantities on this sheet have been revised from those as presented on the revised bid forms and shall update them as appropriate.

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB. Offerors are directed to take note in their review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: Did you have an engineers estimate for this project (for bonding purposes)? What is the Engineers estimate for the project? What is the anticipated construction cost of the project?

Answer 1: \$4,257,500.00

Question 2: Is the Contractor responsible for any fees or costs directly associated with work near or in the railroad ROW (including railroad flaggers or inspectors)? If so, please provide the necessary information to determine the appropriate costs to the Contractor.

Answer 2: *Yes. The Railroad has not issued permits yet and amounts are subject to change. At this time, there will be four permits issued for the crossings at Hill and Hoover. There will be a \$1,750 fee for each permit for work within the railroad ROW as well as an \$850 processing fee for each permit. Once the permits have been issued, the Railroad will dictate flagging operations for traffic control which is anticipated to cost a maximum of \$150 per hour for the duration of construction within the railroad ROW. For bidding purposes, assume flagging operations will be required for 100 hours. This work shall be paid for as a part of "General Conditions, Max".*

Question 3: Please provide a detail for the pay item "Pedestrian Barrier with Fence, Temp" as described in the Special Provision of the same name.

Answer 3: *Refer to detailed specification for information on device. For reference, this device is also used on MDOT projects and as shown in below MDOT image.*

Temporary Pedestrian Barrier With Fence



- Use to channelize pedestrians, and provide a high level of protection.
- May be used to separate pedestrian and vehicle traffic.
- Concrete or water-filled barrier sections are allowed.

Pay Item

Pay Unit

Pedestrian Barrier with Fence, Temp..... Foot

Question 4: Can the requirement to install post driven temporary traffic control signs (for installations greater than 14 days) be waived?

Answer 4: *The requirement will not be waived. Consideration for waiving driven posts will be performed on a sign by sign basis between the Contractor and Engineer given site specific circumstances such as, but not limited to, underground utilities, sidewalk, obstructions, and similar.*

Question 5: Please clarify the type of aggregate backfill material will be required for the pay item entitled "Subgrade Undercutting, Type IIB". The Special Provision states that the backfill material shall be Granular Material Class II or as directed by the engineer.

Answer 5: *The backfill material shall be Granular Class II. The Engineer has the discretion to consider use of other backfill material if a suitable alternative is proposed by the Contractor.*

Question 6: Please provide the required replacement detail showing the necessary cross section for the pay item entitled "Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall". No detail has been provided on the plans.

Answer 6: *The appropriate detail has been added to Plan Sheet 25.*

Question 7: Please clarify when and where restrained joint DIP will be required to be "TR-Flex" as detailed in the special provision for "Water Main and Appurtenances" (specifically, Section b.2.A; fourth paragraph on page DS-133). I believe that the intent is to provide restrained joint pipe and fittings using "Field-Lok" gaskets (as typical for City of Ann Arbor installations).

Answer 7: *Restrained joint pipe shall be used where called out on the plans and at all fire hydrant leads from the tee at the main line water main to the hydrant. The Detailed Specification makes the distinction between true restrained joint pipe and push-on joint pipe that has restrained joints via the use of "restraining gaskets". For the purposes of this project, the restrained joint pipe as detailed on the plans shall be accomplished with the use of "Fast-Grip" or "Field-Lok 350" gaskets as appropriate to the type of water main being installed.*

Question 8: Please clarify if the required Hydrant shoe assembly will be MJ or PJ.

Answer 8: *The hydrant shoe assembly shall be push joint. The detail on Plan Sheet 21 has*

been updated to reflect this.

Question 9: Please provide a pay item for additional “Temporary Water Main Line Stop” rental day(s), for situations when the proposed line stop needs to be in service for more than 24 hours.

Answer 9: *The pay item “Line Stop, Additional Rental Day” has been added.*

Question 10: Please consider removing the traffic control items, pavement removal, aggregate base installation and pavement replacement from the “Temporary Water Main Line Stop” pay item. As these are usually installed outside of the work zone it is impossible to determine what type of removal(s), replacement(s) and traffic control that may be necessary to provide the specified line stop installation. These items could be paid for separately via other contractual pay items.

Answer 10: *The traffic control items, pavement removal, aggregate base and pavement replacement items have been removed from the pay item “Temporary Water Main Line Stop” and will be paid for separately through the corresponding pay item. See updated Detailed Specification.*

Question 11: Please clarify the following statement found in the Special Provision for “Maintaining Traffic and Construction Sequencing” (Addendum #2, Page ADD-2-21, Second Paragraph): **“The Contractor shall suspend work within the CIA during peak traffic hours and / or when construction activities are unduly hampering or delaying traffic flow as determined by the Engineer.”** What is the intent of this statement and how will it be implemented on the project?

Answer 11: *The intent of the statement is to minimize disruption to traffic operations through the construction zones during the peak traffic hours by construction vehicles and related construction activities within travel lanes and routes being maintained for traffic. The Contractor and Engineer will coordinate on this item during construction with the goal to maintain and continue construction operations while minimizing travel lane and route disruptions during peak hours.*

Question 12: Please confirm that the phased construction on Greene and Keech (Phase 2A / 2B) can be performed at the same time as the phased construction on Hoover (Stage 1A / 1B). Can stage 1 and 2 run concurrently?

Answer 12: *Stage 1A/1B can overlap with Stage 2A/2B. Stage 1 must be completed by August 20, 2019.*

Question 13: Can you please describe when seeding and topsoil installation will be paid for as part of the various “Project Clean-Up and Restoration, Special” pay items in lieu of the pay items “Topsoil Surface, 4 Inch” and “Seeding and Mulching”? It seems that these pay items overlap in scope.

Answer 13: *All topsoil, seeding and mulching will be paid for per the Turf Establishment detailed specification. The detailed specification for “Project Clean-Up and Restoration, Special” has been updated to clear up the payment of these items.*

Respondents are responsible for any conclusions that they may draw from the information contained in the Addendum.

BID FORM

Section 1 – Schedule of Prices

Company: _____

Project: **Hoover, Greene, & Hill Improvement Project**

City of Ann Arbor File No.: 2018-031

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
130	Protective Fencing	Ft	2000	_____	_____
140	Exploratory Excavation, (0-10 ft. deep) (Trench Det 1, Modified)	Ea	16	_____	_____
201	Certified Payroll Compliance and Reporting	LSUM	1	_____	_____
202	General Conditions, Max \$370,000	LSUM	1	_____	_____
203	Audio-visual Recording	LSUM	1	_____	_____
204	Traffic Regulator Control	LSUM	1	_____	_____
205	Barricade, Type III, High Intensity, Lighted, Furn & Oper	Ea	25	_____	_____
206	Channelizing Device, 42 inch, High Intensity, Furn & Oper	Ea	230	_____	_____
207	Plastic Drum, High Intensity, Furn & Oper	Ea	60	_____	_____
208	Sign, Type B, Temp, Prismatic, Special, Furn & Oper	Sft	500	_____	_____
209	Sign, Type A, Temp, Prismatic, Furn & Oper	Sft	60	_____	_____
210	Sign, Type B, Temp, Prismatic, Furn & Oper	Sft	1400	_____	_____
211	Lighted Arrow, Type C, Furn & Oper	Ea	4	_____	_____
212	Sign, Portable, Changeable Message, NTFCCIP- Compliant, Furn & Oper	Ea	4	_____	_____
213	Remove Special Marking	Sft	300	_____	_____
214	Concrete Barrier, Temp, Furn & Oper	Ft	100	_____	_____
215	Sign Cover	Ea	10	_____	_____
216	Pedestrian Barrier with Fence, Temp	Ft	100	_____	_____
217	Pedestrian Type II Barricade, Temp	Ea	30	_____	_____
218	Pedestrian Type II Channelizer, Temp	Ft	300	_____	_____
219	Pedestrian Path, Temp	Ft	100	_____	_____
220	Pedestrian Ramp, Temp	Ea	6	_____	_____
221	Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	Ft	8000	_____	_____
221	Pavt Mrkg, Sprayable Thermopl, 4 inch, White	Ft	4200	_____	_____
222	Pavt Mrkg, Thermoplastic, 24 inch Stop Bar	Ft	400	_____	_____
223	Pavt Mrkg, Thermopl, 12 inch Crosswalk	Ft	2300	_____	_____

Sub-Total This Page \$ _____

BID FORM

Section 1 – Schedule of Prices

Company: _____

Project: **Hoover, Greene, & Hill Improvement Project**

City of Ann Arbor File No.: 2018-031

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
224	Pavt Mrkg, Ovly Cold Plastic, Railroad Sym	Ea	4	_____	_____
224	Pavt Mrkg, Ovly Cold Plastic, Bike Arrow Sym	Ea	11	_____	_____
224	Pavt Mrkg, Ovly Cold Plastic, Bike Sym	Ea	11	_____	_____
224	Pavt Mrkg, Ovly Cold Plastic, Sharrow Sym	Ea	10	_____	_____
224	Pavt Mrkg, Ovly Cold Plastic, Rt Arrow Sym	Ea	7	_____	_____
224	Pavt Mrkg, Ovly Cold Plastic, Lt Arrow Sym	Ea	7	_____	_____
226	Minor Traffic Devices, Max \$180,000	LSUM	1	_____	_____
228	Parking Meters, Remove	Ea	7	_____	_____
229	Erosion Control, Inlet Filter	Ea	65	_____	_____
230	Sewer, Any Size or Depth, Rem	Ft	2500	_____	_____
231	Dr Structure, Any Size or Depth, Rem	Ea	21	_____	_____
233	Curb and Gutter, Any Type or Size, Rem	Ft	4000	_____	_____
234	Sidewalk and Ramps, Remove	Sft	10300	_____	_____
235	Driveway Approach, Remove	Sft	2600	_____	_____
236	Pavement, Remove	Syd	16500	_____	_____
238	Machine Grading, Modified, Greene	Sta	13.5	_____	_____
238	Machine Grading, Modified, Hill	Sta	5.75	_____	_____
238	Machine Grading, Modified, Hoover	Sta	27	_____	_____
240	Non-Hazardous Contrm'd Mat'l Handling & Disposal	Cyd	200	_____	_____
241	Subgrade Undercutting, Type IIB	Cyd	200	_____	_____
242	Structure Covers, Special	Lbs	39800	_____	_____
243	6 inch, Wrapped Underdrain	Ft	3500	_____	_____
244	Aggregate Base Course, 21AA, Modified	Ton	6400	_____	_____
245	Maintenance Gravel, 21AA, Modified	Ton	500	_____	_____
246	Flowable Fill (Backfill)	Cyd	30	_____	_____
250	Curb and Gutter, Conc, Match Existing, Special	Ft	1550	_____	_____
251	Curb and Gutter, Conc, AA Det SD-R-1, Special	Ft	1800	_____	_____

Sub-Total This Page \$ _____

BID FORM

Section 1 – Schedule of Prices

Company: _____

Project: **Hoover, Greene, & Hill Improvement Project**

City of Ann Arbor File No.: 2018-031

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
252	Driveway Opening, Conc, Detail M, P-NC	Ft	650	_____	_____
255	Sidewalk, Concrete, 4 inch, Special	Sft	2850	_____	_____
255	Sidewalk, Concrete, 6 inch, Special	Sft	80	_____	_____
256	Sidewalk Ramp, Concrete, 6 inch, Special	Sft	1000	_____	_____
257	Sidewalk, Concrete, 8 inch, S2 Special	Sft	5280	_____	_____
258	Sidewalk Ramp, Concrete, 8 inch, S2 Special	sft	1090	_____	_____
259	Drive Approach, Conc, 6 inch, Non-Reinf	Sft	2000	_____	_____
260	Concrete Drive Approach, 8 inch, Non-Reinf, P-NC,	Sft	600	_____	_____
261	Detectable Warning Surface, Modified Sidewalk, Conc or Clay Brick Pavers, Rem and	Ft	341	_____	_____
263	Reinstall	Sft	360	_____	_____
264	Cold Milling HMA Surface, Modified	Syd	1050	_____	_____
265	Hand Patching, Modified	Ton	50	_____	_____
266	HMA, 3E1	Ton	2805	_____	_____
267	HMA, 4E1	Ton	1750	_____	_____
268	HMA, 5E1	Ton	1875	_____	_____
270	No Parking Sign	Ea	120	_____	_____
272	Irrigation Systems, Protection and Maintenance	LSUM	1	\$10,000.00	\$10,000.00
274	Project Clean-Up and Restoration, Special - Greene	LSUM	1	_____	_____
274	Project Clean-Up and Restoration, Special - Hill	LSUM	1	_____	_____
274	Project Clean-Up and Restoration, Special - Hoover	LSUM	1	_____	_____
276	Topsoil Surface, 4 inch	Syd	1300	_____	_____
277	Seeding and Mulching	Syd	1300	_____	_____
278	Storm Control Structure, R1	Each	1	_____	_____
278	Storm Control Structure, R2	Each	1	_____	_____
278	Storm Control Structure, R3	Each	1	_____	_____
278	Storm Control Structure, 97-51067	Each	1	_____	_____

Sub-Total This Page \$ _____

BID FORM

Section 1 – Schedule of Prices

Company: _____

Project: **Hoover, Greene, & Hill Improvement Project**

City of Ann Arbor File No.: 2018-031

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
279	Line Stop, Ductile Iron Pipe, 8 inch	Ea	1	_____	_____
279	Line Stop, Ductile Iron Pipe, 6 inch	Ea	7	_____	_____
280	Line Stop, Additional Rental Day	Each	10	_____	_____
281	Pedestrian Light, Remove and Re-Install	Each	2	_____	_____
282	Handhole Assembly, 12 inch x 18 inch	Ea	17	_____	_____
283	Conduit, Directional Bore, 3 inch	Ft	2942	_____	_____
284	D.I., CI-56, Water Main, w/Poly Wrap, 12 inch, Bored in Steel Casing	Ft	232	_____	_____
285	PC 350, D.I. Water Main, w/Poly Wrap, 12 inch, Tr Det I, Mod	Ft	3297	_____	_____
285	PC 350, D.I. Water Main, w/Poly Wrap, 4 inch, Tr Det I, Mod	Ft	17	_____	_____
285	PC 350, D.I. Water Main, w/Poly Wrap, 8 inch, Tr Det I, Mod	Ft	105	_____	_____
286	90 deg Bend, 12 inch	Ea	2	_____	_____
286	45 deg Bend, 12 inch	Ea	80	_____	_____
286	22.5 deg Bend, 12 inch	Ea	2	_____	_____
286	11.25 deg Bend, 12 inch	Ea	2	_____	_____
286	90 deg Bend, 4 Inch	Ea	1	_____	_____
287	Reducer, 12 inch x 6 inch	Ea	14	_____	_____
287	Reducer, 8 inch x 6 inch	Ea	8	_____	_____
288	Tee, 12 inch x 12 inch x 12 inch	Ea	12	_____	_____
288	Tee, 12 inch x 12 inch x 10 inch	Ea	1	_____	_____
288	Tee, 12 inch x 12 inch x 4 inch	Ea	1	_____	_____
288	Tee, 12 inch x 12 inch x 6 inch	Ea	1	_____	_____
288	Tee, 12 inch x 12 inch x 8 inch	Ea	8	_____	_____
289	Fire Hydrant Assy, w/Extensions, Complete	Ea	9	_____	_____
290	Gate Valve-in-Box, 12 inch	Ea	6	_____	_____
290	Gate Valve-in-Box, 4 inch	Ea	1	_____	_____
291	Gate Valve-in-Well, 12 inch	Ea	14	_____	_____
292	Tapping Sleeve 16 inch x 16 inch x 12 inch, Valve and Box	Ea	1	_____	_____
292	Tapping Sleeve 10 inch x 10 inch x 4 inch, Valve and Box	Ea	1	_____	_____

Sub-Total This Page \$ _____

BID FORM

Section 1 – Schedule of Prices

Company: _____

Project: **Hoover, Greene, & Hill Improvement Project**

City of Ann Arbor File No.: 2018-031

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
294	6 inch Water Main, Abandon	Lft	4966	_____	_____
295	Water Main, Abandon w/Flowable Fill	Lft	145	_____	_____
296	Gate Valve-in-Box, Abandon	Ea	13	_____	_____
297	Gate Valve-in-Well, Abandon	Ea	10	_____	_____
298	Fire Hydrant, Rem	Ea	7	_____	_____
299	Tapping Sleeve, Valve and Well, Remove	Ea	1	_____	_____
320	RCP, Sewer, C76, CL-IV, 12 inch, Tr Det I	Ft	12	_____	_____
321	RCP, Sewer, C76, CL-IV, 15 inch, Tr Det I	Ft	40	_____	_____
322	RCP, Sewer, C76, CL- IV, 36 inch, Tr Det I	Ft	754	_____	_____
323	RCP, Sewer, C76, CL- IV, 48 inch, Tr Det I	Ft	491	_____	_____
335	SDR 35, PVC Tee	Ea	2	_____	_____
350	SDR 35 PVC Riser	Vft	10	_____	_____
353	SDR 35 PVC Service Lead	Ft	40	_____	_____
360	Type I Manhole (0-10 ft. Deep)	Ea	2	_____	_____
361	Type I Manhole Add'l Depth	Vf	10	_____	_____
362	Type II Manhole (6 ft. Dia.) (0-10 ft. deep)	Ea	8	_____	_____
363	Type II Manhole (6 ft. Dia.) Add'l Depth	Vf	9	_____	_____
367	Single Inlet	Ea	6	_____	_____
460	Excavate & Backfill for Water Service Tap and Lead	Lft	400	_____	_____
564	Reconstruct Structure	Ea	3	_____	_____
566	Adjust Structure Cover	Ea	75	_____	_____
567	Adjust Monument Box or Gate Valve Box	Ea	4	_____	_____
568	Additional Depth Structure-Adjustment/Repair	Vft	20	_____	_____
703	Silt Fence	Ft	1000	_____	_____

Sub-Total This Page \$ _____

Sub-Total Page BF-1 \$ _____

Sub-Total Page BF-2 \$ _____

Sub-Total Page BF-3 \$ _____

Sub-Total Page BF-4 \$ _____

Grand Total Bid **\$ _____**

BID FORM

Section 2 – Material, Equipment and Environmental Alternates

The Base Bid 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 Contractor 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 an environmental alternative is bid the City strongly encourages bidders to provide recent examples of product testing and previous successful use for the City to properly evaluate the environmental alternative. Testing data from independent accredited organizations are strongly preferred.

<u>Item Number</u>	<u>Description</u>	<u>Add/Deduct Amount</u>
--------------------	--------------------	--------------------------

If the Bidder does not suggest any material or equipment alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any material or equipment alternate under the Contract.

Signature of Authorized Representative of Bidder _____ Date _____

BID FORM

Section 3 - Time Alternate

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 below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any time alternate under the Contract.

Signature of Authorized Representative of Bidder _____ Date _____

BID FORM

Section 4 - Major Subcontractors

For purposes of this Contract, a Subcontractor is anyone (other than the Contractor) who performs work (other than or in addition to the furnishing of materials, plans or equipment) at or about the construction site, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of Contract with the Contractor), but shall not include any individual who furnishes merely the individual's own personal labor or services.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision to Section 4 of the General Conditions covering subcontractor's employees who perform work on this contract.

For the work outlined in these documents the Bidder expects to engage the following major subcontractors to perform the work identified:

<u>Subcontractor (Name and Address)</u>	<u>Work</u>	<u>Amount</u>
---	-------------	---------------

If the Bidder does not expect to engage any major subcontractor, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT expect to engage any major subcontractor to perform work under the Contract.

Signature of Authorized Representative of Bidder _____ Date _____

BID FORM

Section 5 – References

Include a minimum of **three (3)** reference from similar project completed within the past **five (5)** years.

[Refer also to Instructions to Bidders for additional requirements, if any]

1) _____
Project Name Cost Date Constructed

Contact Name Phone Number

2) _____
Project Name Cost Date Constructed

Contact Name Phone Number

3) _____
Project Name Cost Date Constructed

Contact Name Phone Number

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

WT:VCM

1 of 2

03/01/19

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 the Detailed Specification for Turf Establishment.

b. Materials.- The materials shall meet the requirements specified in the 2012 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>
Item 274: 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.

'Topsoil Surface, 4 inch" and "Seeding and Mulching" are paid for separately as specified elsewhere.

CITY OF ANN ARBOR
SPECIAL PROVISION
FOR
TEMPORARY WATER MAIN LINE STOP

WT:VCM

1 of 6

03/01/19

a. Description.- The Contractor shall furnish all materials, labor and equipment to properly install and set water main line stops into the existing Ductile Iron Main(s) at the locations as shown on the plans and as directed by the Engineer. All work shall be performed in accordance with the requirements as detailed herein.

The existing mains, upstream and downstream of the proposed line stop(s) cannot be shut down or taken out of service. To ensure that the entire operation shall be accomplished without interruption of service or flow, the installation shall be accomplished by Contractor personnel skilled and experienced in the procedures specific to line stops of the required size(s).

The work shall include, but not be limited to; pavement saw-cutting; excavation and disposal of excavated material; the furnishing, installation, and removal of sheeting and/or shoring where needed; the furnishing, placement and compaction of approved bedding and backfill materials; furnishing and placing suitable, clean, gravel to create a stable working surface at the bottom of the excavation; de-watering; pipe cleaning, measuring, and performing all advance work necessary to prepare for the performance of the line stop; nighttime lighting as required; the removal of all materials and equipment associated with the work when no longer needed; and backfill, restoration and compaction of subgrade. This work shall also include all traffic maintenance and control items in accordance with the Michigan Manual of Uniform Traffic Control Devices.

b. Materials.- Bedding and backfill for areas contained within a segment of water main designated as Trench Detail I (under roadbed), Modified, shall be Granular Material, Class II, meeting the requirements of Section 902. For work within a segment of water main designated as Trench Detail V (outside of the 1:1 influence line of roadbed or curb and gutter), Modified, Granular Material, Class II and Engineer approved native material, placed in accordance with the trench details, shall be used.

The Contractor shall submit to the Engineer two (2) sets of drawings, furnished by manufacturers, fully and distinctly illustrated and describing the Line Stop fittings proposed to be furnished. Work shall not commence until such time as the drawings have been reviewed and accepted by the Engineer.

Line Stop Fittings shall be full encirclement, pressure retention type split tee. It shall consist of two steel weldments; an upper line stop flange saddle plate and a lower saddle plate. These two saddle plates shall be contiguous.

Line Stop Flange: The outlet of each fitting shall be machined from a 150 lb. forged steel flange (ASTM A181 or A105) or from pressure vessel quality steel plate (ASTM A285, Grade C); flat faced and drilled per ANSI B16.5). Suitable independently operated locking devices shall be provided in the periphery of the flange to secure the completion plug.

Line stop Nozzle: The nozzle, which lies between the saddle and the flange shall be fabricated from steel pipe (ASTM A234). After welding and stress relief, the nozzle shall be accurately bored as follows to accommodate the Line stop plugging head:

- a) Machine an internal circular shoulder to seal against the circumferential gasket carried on the plugging head.

Completion Plug: The completion plug shall be machined from a stress relieved carbon steel weldment. It shall contain two (2) circumferential grooves: one to receive the locking devices from the Line stop flange, and the second to contain a compressible "O" ring to seal pressure tight against the bore of the flange.

Blind Flange: Each Line stop fitting shall be closed with a blind flange. Facing and drilling of the blind flange shall be compatible with that of the Line stop flange. Minimum blind flange thickness shall be that of AWWA Spec. 207, Class D.

Saddle Alignment Marking: Each saddle-half shall be matched and marked with serial numbers, to insure proper alignment in the field.

Fasteners: All bolts, studs, and nuts used on Line stop, drain/equalization fittings, blind flange, and other elements that shall remain upon completion of the work shall be stainless steel and meet the requirements of ASTM F 593.

General: Manufacturer will exercise extreme care to ensure that weldments are of adequate strength, properly shaped, securely reinforced, and free from distortion that could stress the ductile iron main during installation, pressure tapping, or Line stopping operations. All steel shall meet the requirements of ASTM A36, as a minimum. All weldments shall be braced and stress relieved.

Gaskets: Shall be molded from elastomer compounds that resist compression setting and are compatible with water in the 32 to 140 deg. F temperature range.

Upper Line stop Flange Saddle: Shall consist of a saddle plate, a Line stop flange, and a Line Stop nozzle. The interior of the saddle plate, adjacent to and concentric with the O.D. of the nozzle, shall be grooved to retain a gasket which shall seal the saddle plate to the exterior of the ductile iron main. This gasket shall constitute the only seal between the main and the fitting. The flange saddle shall also meet the following requirements:

- a) Saddle plate shall be of a minimum of 0.375" in thickness. It shall be shaped to be concentric to the outside of the ductile iron main. The smallest I.D. of the saddle and its interior rings shall exceed the O.D. of the main by a minimum of 0.250" to allow for ovality of the main;
- b) Line stop nozzle of 0.375" min. wall thickness shall be securely welded to the saddle plate;
- c) The Line Stop flange shall be securely welded to the nozzle. After welding, the assembly shall be braced, stress relieved, and bored to receive the completion plug and the circumferential gasket of the Line Stop machine plugging head; and,
- d) Bolt, nut of stud, nut, and washer assemblies shall be furnished to draw the upper and lower saddles together for sealing. Bolting brackets shall be gusseted.

Lower Saddle Plate: Saddle plate shall be of a minimum 0.375" thickness and shall be shaped to be concentric to the outside brackets shall match upper half.

c. Equipment.- The equipment shall consist of a cylindrical plugging head that contains a flat, expandable elastomer sealing element. The plugging head shall be advanced into and retracted from the main by means of a linear actuator. When retracted, the plugging head and carrier are housed in an adapter, bolted pressure tight between the tapping valve and the actuator.

Sealing Element: The element shall be monolithically molded from a suitable polyurethane compound. The element shall be flat in a plane perpendicular to the flow in the main. Minimum thickness of the element shall be 4". The bottom of the element shall be semi-circular to conform to the bore of the main.

Drilling equipment: Shall be in good working condition, equipped with power drive to insure smooth cutting, and to minimize shock and vibration. Cutting equipment shall be carbide tipped and capable of being replaced without removal from the jobsite.

Plugging Head: The diameter of the cylindrical plugging head shall be slightly smaller than the bore of the Line Stop nozzle. The plugging head shall have a suitable circumferential gasket to seal against the shoulder in the Line stop nozzle. This gasket shall also seal against the sealing element to prevent bypass flow around the Line stop.

Deposits in Bore of Main: The semi-cylindrical bottom of the plugging head shall be designed to break and dislodge tuberculation and other deposits in the bore of the main which might interfere with a satisfactory Line stop.

d. Method of Construction.- Installation of proposed line stops 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 MIOSHA Standards; the Contractor is solely responsible for determining all excavation and trench safety requirements.

If necessary, The City will reduce the pressure to 100 psig or less for the duration of the installations. The entire operation of installing the line stop shall be accomplished without reduction of water pressure in the main(s) below 100 psig. It shall be the responsibility of the Contractor to verify pressure prior to commencing the installation.

Preliminary Field Inspection of Water Main:

Dimensional, specification, and other data regarding the existing mains have been taken from existing records. This information may be inaccurate, out of date, and/or inadequate. The data have not been verified by field inspections. Further, the water main consists of ductile iron pipe which may contain dimensional and structural flaws. In addition, the Contractor shall anticipate that exterior main conditions, bells, service connections, or presence of adjoining utilities may require relocation of proposed line stop. Prior to proceeding with the installation of any line stop, it is necessary to know the exact main outside diameter of the water main, if it has any ovality, and the internal diameter of the pipe before line stop fittings and plugging head sealing elements can be manufactured and/or ordered.

Prior to ordering material, Contractor shall excavate at each proposed location and carefully measure the outside diameter of the water main with calipers along at least four (4) locations to determine ovality and the critical outside diameter of the water main. The Contractor shall determine main wall thickness, uniformity, and structural integrity by means of ultrasonic testing. Data shall be taken to determine extent of internal deposits, tuberculation, etc.

If the Engineer determines that Contractor's data are not adequate, the Engineer may direct Contractor to make one or more pressure taps on main to obtain test pipe coupons for the Engineer's evaluation. The minimum size of the test coupon shall be 5" diameter, drilled through a nominal 6" valve. Pressure tapping saddles and other materials used for inspection taps shall conform to the requirements of this Special Provision. The Contractor shall anticipate that heavy interior corrosion and/or tuberculation exists within the water main.

If, in Engineer's opinion, the proposed location is unsatisfactory based on measurements of the existing pipe at the locations of the proposed line stops, the Engineer will direct excavation at another site. Excavating, de-watering, inspections, backfill, and restoration will be paid for separately in accordance with the applicable contract unit prices or Section 109.05.C and 109.05.D whichever the Engineer deems most appropriate.

Because of possible internal corrosion and deposits in existing water mains, a "bottle-

tight" shut down may not occur. A satisfactory shutdown which allows the work to be accomplished (i.e. valve replacement, water main tie-in, etc.) using drainage pumps to de-water excavations, with workmen wearing boots and raingear, if necessary, must be obtained. The Contractor will not be allowed to proceed with further work until an acceptable shutdown is achieved. The Contractor shall be aware that this may require the halting of work and re-scheduling of all work operations.

Contractor shall power wire brush and grind the exterior of the water main to remove any debris, corrosion deposits, or other surface irregularities that might interfere with proper seating and sealing of each line stop fitting against each main. Any structural defects in the water main, service connections, appurtenances, adjacent utilities, etc., that could interfere with the line stop installation shall be immediately reported to Engineer.

All line stop fittings and appurtenances shall be cleaned and disinfected in accordance with the current City of Ann Arbor Public Services Area Standard Specifications prior to bolting any of the line stop fittings in place or commencing any pipe cutting.

Contractor shall fit upper and lower saddle plate assemblies to main, thoroughly checking for proper fit to main. Under no circumstances shall Contractor attempt to force, reshape, or bend saddle plates by excessive tightening of saddle studs while the line stop fitting is assembled around the main. Any required retrofitting shall be accomplished with the fitting removed from the main. Any damage to fitting, accessories, or main shall be repaired at Contractor's expense to the satisfaction of Engineer.

Upper and Lower saddle halves shall be drawn together by bolt assemblies and the Saddle plates shall be bolted together in the horizontal position.

All line stop work shall be performed in accordance with the equipment manufacturers approved work procedures and installation guidelines.

Final closure of the water main shall be accomplished by insertion of a manufacturer-approved completion plug. The Contractor shall test the completion plug sealing through the use of a bleed off assembly in the machine housing.

The Contractor shall remove the temporary valve and the installation of a blind flange shall be completed.

The Contractor shall place polyethylene encasement meeting the requirements of the City of Ann Arbor Standard Specifications for Construction around the upper and lower saddle halves, the blind flange, and to a point at least 1 foot on either side of the saddle halves. All polyethylene encasement shall be securely taped to the water main such that water entry is minimized to the greatest extent possible.

Lighting Requirements for Nighttime Water Main Work:

Night work shall be lighted to an average intensity of 108 lux 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. Nighttime water main 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, including pipe, fitting, and valve installations, disinfection of the pipe, pipe cleaning, and all other night work.

Lighting systems may be fixed, portable, or equipment mounted. A power source shall be supplied with sufficient capacity to operate the lighting system. The lighting system(s) shall be arranged such that they do not interfere with the vision of motorists or unnecessarily illuminate surrounding properties or residences.

e. 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>
Item 278: Line Stop, Ductile Iron Pipe, __ inch.....	Each
Item 279: Line Stop, Additional Rental Day	Each

All work shall be paid in full at the contract unit prices which shall include all the labor, materials, and equipment required to perform the work as detailed herein. This shall also include all required costs associated with night time work, supplemental lighting, and all other required elements of the work, including all traffic maintenance and control.

“Additional Rental Day” will be paid for each day after the first installation and day of use of a temporary water main line stop, regardless of size, until, in the opinion of the Engineer, the line stop is no longer needed.

Pavement removal, aggregate base course, bituminous pavement, and traffic control items as necessary to construct the line stop (as determined by the Engineer), shall be paid for separately as specified elsewhere; all other items shall be included in the pay item for the line stop.

General Decision Number: MI190001 01/25/2019 MI1

Superseded General Decision Number: MI20180001

State: Michigan

Construction Types: Highway (Highway, Airport & Bridge xxxxx and Sewer/Incid. to Hwy.)

Counties: Michigan Statewide.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 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 calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/04/2019
1	01/25/2019

CARP0004-004 06/01/2018

REMAINDER OF STATE

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 27.12	20.19

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 06/04/2018

STATEWIDE

	Rates	Fringes
Line Construction		
Groundman/Driver.....	\$ 28.33	6.45+29%
Journeyman Signal Tech, Communications Tech, Tower Tech & Fiber Optic Splicers.	\$ 39.31	6.45+29%
Journeyman Specialist.....	\$ 45.21	6.45+29%
Operator A.....	\$ 33.22	6.45+29%
Operator B.....	\$ 31.02	6.45+29%

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 06/01/2018

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LENAWEЕ, 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.....	\$ 45.37	23.85
GROUP 2.....	\$ 46.37	23.85
GROUP 3.....	\$ 43.87	23.85
GROUP 4.....	\$ 44.87	23.85
GROUP 5.....	\$ 42.37	23.85
GROUP 6.....	\$ 43.37	23.85
GROUP 7.....	\$ 42.10	23.85
GROUP 8.....	\$ 43.10	23.85
GROUP 9.....	\$ 41.65	23.85
GROUP 10.....	\$ 42.65	23.85
GROUP 11.....	\$ 40.92	23.85
GROUP 12.....	\$ 41.92	23.85
GROUP 13.....	\$ 40.56	23.85
GROUP 14.....	\$ 41.56	23.85
GROUP 15.....	\$ 39.92	23.85
GROUP 16.....	\$ 37.82	23.85
GROUP 17.....	\$ 23.64	11.00

GROUP 18.....\$ 27.08 11.00

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 06/01/2018

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.....	\$ 45.37	23.85
GROUP 2.....	\$ 42.10	23.85
GROUP 3.....	\$ 40.56	23.85
GROUP 4.....	\$ 37.82	23.85
GROUP 5.....	\$ 23.64	11.00
GROUP 6.....	\$ 27.08	11.00
AREA 2		
GROUP 1.....	\$ 45.37	23.85
GROUP 2.....	\$ 42.10	23.85
GROUP 3.....	\$ 40.56	23.85
GROUP 4.....	\$ 37.82	23.85
GROUP 5.....	\$ 23.64	11.00
GROUP 6.....	\$ 27.08	11.00

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 09/01/2018

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.....	\$ 32.53	23.85
GROUP 2.....	\$ 27.80	23.85
GROUP 3.....	\$ 27.07	23.85
GROUP 4.....	\$ 26.50	23.85
AREA 2:		
GROUP 1.....	\$ 30.82	23.85
GROUP 2.....	\$ 25.93	23.85
GROUP 3.....	\$ 25.43	23.85
GROUP 4.....	\$ 25.15	23.85

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

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); Fire person; Hydraulic pipe pushing machine; Mulching equipment; Oiler; 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); End dump operator; Sweeper (Wayne type); Water wagon and Extend-a boom forklift

 ENGI0324-006 06/01/2018

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW 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, 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)

	Rates	Fringes
AREA 1		
GROUP 1.....	\$ 33.36	23.90
GROUP 2.....	\$ 26.63	23.90
GROUP 3.....	\$ 27.93	23.90
GROUP 4.....	\$ 25.90	23.90
GROUP 5.....	\$ 20.70	11.00
AREA 2		
GROUP 1.....	\$ 33.36	23.90
GROUP 2.....	\$ 26.63	23.90
GROUP 3.....	\$ 27.93	23.90
GROUP 4.....	\$ 25.90	23.90
GROUP 5.....	\$ 20.70	11.00

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

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); Vacuum truck operator; Batch plant (concrete dry batch)

GROUP 3: Grease Truck

GROUP 4: Air compressor operator (600 cu. ft. per min or more); Air compressor operator (two or more, less than 600 cfm); Wagon drill operator; Concrete breaker; Tractor operator (farm type with attachment)

GROUP 5: Boiler fire tender; Oiler; Fire tender; Trencher (service); Flexplane operator; Cleftplane operator; Grader operator (self-propelled fine-grade or form (concrete)); Finishing machine operator (concrete); Boom or winch hoist truck operator; Endloader operator (under 1 yd. capacity); Roller operator (other than asphalt); Curing equipment operator (self-propelled); Concrete saw operator (40 h.p. or over); Power bin operator; Plant drier operator (asphalt); Vibratory compaction equipment operator (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); Tractor operator (farm type); End dump; Skid steer

ENGI0324-007 05/01/2018

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.....	\$ 29.58	23.60
Crane operator, main boom & jib 120' or longer.....	\$ 35.57	23.60
Crane operator, main boom & jib 140' or longer.....	\$ 35.85	23.60
Crane operator, main boom & jib 220' or longer.....	\$ 36.39	23.60
Mechanic with truck and tools.....	\$ 34.76	23.60
Oiler and fireman.....	\$ 28.16	23.60
Regular operator.....	\$ 33.12	23.60

ENGI0324-008 10/01/2015

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
OPERATOR: Power Equipment (Sewer Relining)		
GROUP 1.....	\$ 30.70	12.93
GROUP 2.....	\$ 29.17	12.93

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 05/01/2018

	Rates	Fringes
Power equipment operators - gas distribution and duct installation work:		
GROUP 1.....	\$ 30.68	23.85
GROUP 2.....	\$ 30.56	23.85
GROUP 3.....	\$ 28.85	23.85

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).

GROUP 3: Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

IRON0008-007 06/01/2017

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.....	\$ 30.17	26.40
General contracts less than \$10,000,000.....	\$ 30.17	26.40

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0025-002 06/01/2018

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...	\$ 35.52	28.65
Reinforcing.....	\$ 29.48	27.74

IRON0055-005 07/01/2017

LENAWEE AND MONROE COUNTIES:

	Rates	Fringes
IRONWORKER		
Pre-engineered metal buildings.....	\$ 23.59	19.35
All other work.....	\$ 29.77	21.30

IRON0292-003 06/01/2017

BERRIEN AND CASS COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector).....	\$ 29.30	20.96

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

LABO0005-006 10/01/2017

	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.....	\$ 18.00	12.85
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 16.45	12.75
class a.....	\$ 17.00	12.85
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.....	\$ 21.63	12.88
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 20.63	12.88
Laborers - hazardous waste abatement: (ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, IONIA COUNTY (except the city of Portland); KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH AND VAN BUREN COUNTIES - Zone 9)		
Levels A, B or C.....	\$ 20.95	12.85
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 19.95	12.85
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.....\$ 20.65	12.85
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 19.65	12.85

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.....\$ 24.65	12.85
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 23.65	12.85

Laborers - hazardous waste
abatement: (GENESEE, LAPEER
AND SHIAWASSEE COUNTIES -
Zone 7)

Levels A, B or C.....\$ 23.61	13.41
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 22.61	13.41

Laborers - hazardous waste
abatement: (HILLSDALE,
JACKSON AND LENAWEE COUNTIES
- Zone 4)

Levels A, B or C.....\$ 24.19	12.85
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 23.19	12.85

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.....\$ 29.70	14.20
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	

Also, Level D.....\$ 28.70	14.20
Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1)	
Levels A, B or C.....\$ 28.35	16.75
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 27.35	16.75
Laborers - hazardous waste abatement: (MONROE COUNTY - Zone 4)	
Levels A, B or C.....\$ 30.85	14.45
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 29.84	14.45
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.....\$ 28.85	16.75
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 27.85	16.75
Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5)	
Levels A, B or C.....\$ 25.19	15.86
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 24.19	15.86

LABO0259-001 09/01/2018

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, OGEAW, 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.....	\$ 22.57	16.80
GROUP 2.....	\$ 22.68	16.80
GROUP 3.....	\$ 22.74	16.80
GROUP 4.....	\$ 22.92	16.80
GROUP 5.....	\$ 23.17	16.80
GROUP 6.....	\$ 23.50	16.80
GROUP 7.....	\$ 16.78	16.80
AREA 2		
GROUP 1.....	\$ 24.10	12.85
GROUP 2.....	\$ 24.19	12.85
GROUP 3.....	\$ 24.29	12.85
GROUP 4.....	\$ 24.45	12.85
GROUP 5.....	\$ 24.71	12.85
GROUP 6.....	\$ 25.02	12.85
GROUP 7.....	\$ 17.29	12.85

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, tugger, 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.

 LABO0334-001 09/01/2018

	Rates	Fringes
Laborers - open cut:		
ZONE 1 - MACOMB, OAKLAND AND WAYNE COUNTIES:		
GROUP 1.....	\$ 22.42	16.80
GROUP 2.....	\$ 22.53	16.80
GROUP 3.....	\$ 22.58	16.80
GROUP 4.....	\$ 22.66	16.80
GROUP 5.....	\$ 22.72	16.80
GROUP 6.....	\$ 20.17	16.80
GROUP 7.....	\$ 16.79	16.80
ZONE 2 - LIVINGSTON COUNTY (east of M-151 (Oak Grove Rd.)); MONROE AND WASHTENAW COUNTIES:		
GROUP 1.....	\$ 23.75	12.85
GROUP 2.....	\$ 23.86	12.85
GROUP 3.....	\$ 23.98	12.85
GROUP 4.....	\$ 24.05	12.85
GROUP 5.....	\$ 24.20	12.85
GROUP 6.....	\$ 21.50	12.85
GROUP 7.....	\$ 18.14	12.85
ZONE 3 - CLINTON, EATON, GENESEE, HILLSDALE AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); JACKSON, LAPEER AND LENAWEЕ COUNTIES; LIVINGSTON COUNTY (west of M-151 Oak Grove Rd.); SANILAC, ST. CLAIR AND SHIAWASSEE COUNTIES:		
GROUP 1.....	\$ 21.94	12.85
GROUP 2.....	\$ 22.08	12.85
GROUP 3.....	\$ 22.20	12.85
GROUP 4.....	\$ 22.25	12.85
GROUP 5.....	\$ 22.39	12.85
GROUP 6.....	\$ 19.69	12.85
GROUP 7.....	\$ 16.84	12.85
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.....	\$ 20.97	12.85
GROUP 2.....	\$ 21.10	12.85
GROUP 3.....	\$ 21.21	12.85
GROUP 4.....	\$ 21.28	12.85
GROUP 5.....	\$ 21.40	12.85
GROUP 6.....	\$ 18.62	12.85
GROUP 7.....	\$ 16.96	12.85

ZONE 5 - ALGER, BARAGA,
 CHIPPEWA, DELTA,
 DICKINSON, GOGEBIC,
 HOUGHTON, IRON,
 KEWEENAW, LUCE, MACKINAC,
 MARQUETTE, MENOMINEE,
 ONTONAGON AND SCHOOLCRAFT
 COUNTIES:

GROUP 1.....	\$ 21.19	12.85
GROUP 2.....	\$ 21.33	12.85
GROUP 3.....	\$ 21.46	12.85
GROUP 4.....	\$ 21.51	12.85
GROUP 5.....	\$ 21.56	12.85
GROUP 6.....	\$ 18.94	12.85
GROUP 7.....	\$ 17.05	12.85

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.

LABO0465-001 06/01/2018

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.....	\$ 26.12	12.85
GROUP 2.....	\$ 26.25	12.85
GROUP 3.....	\$ 26.43	12.85
GROUP 4.....	\$ 26.51	12.85
GROUP 5.....	\$ 26.72	12.85
GROUP 6.....	\$ 27.02	12.85
LABORER (AREA 2)		
GROUP 1.....	\$ 24.02	12.85
GROUP 2.....	\$ 24.22	12.85
GROUP 3.....	\$ 24.46	12.85
GROUP 4.....	\$ 24.81	12.85
GROUP 5.....	\$ 24.68	12.85
GROUP 6.....	\$ 25.02	12.85
LABORER (AREA 3)		
GROUP 1.....	\$ 23.27	12.85
GROUP 2.....	\$ 23.48	12.85
GROUP 3.....	\$ 23.77	12.85
GROUP 4.....	\$ 24.21	12.85
GROUP 5.....	\$ 23.83	12.85
GROUP 6.....	\$ 24.26	12.85
LABORER (AREA 4)		
GROUP 1.....	\$ 23.32	12.85
GROUP 2.....	\$ 23.53	12.85
GROUP 3.....	\$ 23.82	12.85
GROUP 4.....	\$ 24.26	12.85
GROUP 5.....	\$ 23.88	12.85
GROUP 6.....	\$ 24.31	12.85

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.

LABO1076-005 04/01/2018

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1.....	\$ 20.27	12.85
Zone 2.....	\$ 18.59	12.85
Zone 3.....	\$ 16.76	12.85
Zone 4.....	\$ 16.12	12.85
Zone 5.....	\$ 16.12	12.85

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 06/03/2018

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

Rates Fringes

PAINTER.....\$ 25.31 12.78

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

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 06/01/2018

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.....\$ 24.92 14.68

All other work, including maintenance of industrial plant.....\$ 24.92 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 06/01/2018

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.....	\$ 26.55	.50 + a+b
Trucks under 8 cu. yds.....	\$ 26.30	.50 + a+b
Trucks, 8 cu. yds. and		
over.....	\$ 26.40	.50 + a+b
AREA 2		
Euclids, double bottomms		
and lowboys.....	\$ 24.895	.50 + a+b
Euclids, double bottoms		
and lowboys.....	\$ 26.65	.50 + a+b
Trucks under 8 cu. yds.....	\$ 26.40	.50 + a+b
Trucks, 8 cu. yds. and		
over.....	\$ 26.50	.50 + a+b

Footnote:

a. \$446.70 per week

b. \$67.00 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)....	\$ 18.98	12.85
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE).....	\$ 17.14	12.85
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 25.74	12.85
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 23.17	12.85
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 23.67	12.85
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 21.30	12.85

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.
=====

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 www.dol.gov/whd/govcontracts.

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 Regional Office for the area in which the survey was conducted because those Regional Offices have 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.

=====
END OF GENERAL DECISION

POWER EQUIPMENT OPERATORS: Underground Construction (Including Sewer)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 32.53	23.85
GROUP 2.....	\$ 27.80	23.85
GROUP 3.....	\$ 27.07	23.85
GROUP 4.....	\$ 26.50	23.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/ Excavator, Boring Machine, Bulldozer, Crane, Grader/ Blade, Loader, Roller, Scraper, Trencher (over 8 ft. digging capacity)

GROUP 2: Trencher (8-ft digging capacity and smaller)

GROUP 3: Boom Truck (non-swinging, non- powered type boom)

GROUP 4: Broom/ Sweeper, Fork Truck, Tractor, Bobcat/ Skid Steer /Skid Loader

 ENGI0326-008 06/01/2018

EXCLUDES UNDERGROUND CONSTRUCTION

	Rates	Fringes
OPERATOR: Power Equipment		
GROUP 1.....	\$ 40.99	23.95
GROUP 2.....	\$ 39.49	23.95
GROUP 3.....	\$ 37.99	23.95
GROUP 4.....	\$ 37.69	23.95
GROUP 5.....	\$ 36.87	23.95
GROUP 6.....	\$ 36.01	23.95
GROUP 7.....	\$ 35.04	23.95
GROUP 8.....	\$ 33.33	23.95
GROUP 9.....	\$ 24.99	23.95

FOOTNOTES: Tower cranes: to be paid the crane operator rate determined by the combined length of the mast and the boom.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane with boom & jib or leads 400' or longer

GROUP 2: Crane with boom & jib or leads 300' or longer

GROUP 3: Crane with boom & jib or leads 220' or longer

GROUP 4: Crane with boom & jib or leads 140' or longer

GROUP 5: Crane with boom & jib or leads 120' or longer

GROUP 6: Regular crane operator

GROUP 7: Backhoe/Excavator, Bobcat/Skid Loader, Boring Machine, Broom/Sweeper, Bulldozer, Grader/Blade, Loader, Roller, Scraper, Tractor, Trencher

GROUP 8: Forklift

GROUP 9: Oiler

IRON0025-006 06/17/2018

	Rates	Fringes
IRONWORKER		
Reinforcing.....	\$ 29.48	27.74
Structural.....	\$ 35.52	28.65

LABO0334-009 06/01/2018

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
Landscape Laborer		
GROUP 1.....	\$ 20.52	6.90
GROUP 2.....	\$ 18.52	6.90

LANDSCAPE LABORER CLASSIFICATIONS

GROUP 1: Landscape specialist, including air, gas and diesel equipment operator, lawn sprinkler installer and skidsteer (or equivalent)

GROUP 2: Landscape laborer: small power tool operator, material mover, truck driver and lawn sprinkler installer tender

LABO0334-018 09/01/2018

SCOPE OF WORK:

OPEN CUT CONSTRUCTION: Excavation of earth and sewer, utilities, and improvements, including underground piping/conduit (including inspection, cleaning, restoration, and relining)

	Rates	Fringes
LABORER		
(1) Common or General.....	\$ 23.75	12.85
(2) Mason Tender- Cement/Concrete.....	\$ 23.86	12.85
(4) Grade Checker.....	\$ 24.05	12.85
(5) Pipelayer.....	\$ 22.90	12.75
(524.20) Pipelayer.....	\$ 22.90	12.85
(7) Landscape.....	\$ 18.14	12.85

LABO0499-020 08/01/2017

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 28.70	14.20
GROUP 2.....	\$ 28.91	14.20
GROUP 3.....	\$ 29.03	14.20

LABORER CLASSIFICATIONS

GROUP 1: Common or General; Grade Checker

GROUP 2: Mason Tender - Cement/Concrete

GROUP 3: Pipelayer

PAIN0022-005 07/01/2008

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 25.06	14.75
Spray.....	\$ 25.86	14.75

PLAS0514-002 06/01/2018

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 31.47	13.81

PLUM0190-010 06/01/2017

	Rates	Fringes
PLUMBER.....	\$ 40.13	21.62

TEAM0007-006 06/01/2018

	Rates	Fringes
TRUCK DRIVER		
Dump Truck under 8 cu. yds.; Tractor Haul Truck....	\$ 26.40	.50 + a+b
Dump Truck, 8 cu. yds. and over.....	\$ 26.50	.50 + a+b
Lowboy/Semi-Trailer Truck....	\$ 26.65	.50 + a+b

FOOTNOTE:

a. \$446.70 per week.

b. \$67.00 daily.

SUMI2010-072 11/09/2010

	Rates	Fringes
TRUCK DRIVER: Off the Road Truck.....	\$ 20.82	3.69

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
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 www.dol.gov/whd/govcontracts.

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 Regional Office for the area in which the survey was conducted because those Regional Offices have 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.

=====
END OF GENERAL DECISION

CONSTRUCTION NOTES:

- DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY, AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WHEN APPROVED BY THE ENGINEER. VEHICULAR AND PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL NECESSARY DRIVEWAY CLOSURES WITH THE PROPERTY OWNER(S) AND RESIDENT(S) IN THE AREAS OF CONSTRUCTION.
- THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND SERVICE LEADS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- LOCATION AND DEPTH OF UTILITIES AS DEPICTED ON THE PLANS IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND ADJUST DEPTH OF CONFLICT UTILITIES ACCORDINGLY. ANY DAMAGE TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID AND/OR REPAIR AS NECESSARY.
- THE CONTRACTOR IS TO TAKE SPECIAL CARE TO PROTECT THE EXISTING WATER MAIN AND BE RESPONSIBLE FOR MAINTAINING CONSISTENT WATER SERVICE.
- DURING NON-WORKING HOURS NO TRENCH SHALL REMAIN OPEN; ANY OPEN TRENCH SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS, MAX".
- TRENCHES FOR NEW WATER SERVICES SHALL BE EXCAVATED TO MIOSHA AND CITY OF ANN ARBOR PUBLIC WORKS REQUIREMENTS.
- CITY OF ANN ARBOR PUBLIC WORKS WILL INSTALL THE CORPORATION AND COPPER SERVICE LEAD(S) TO TRANSFER THE CONNECTION(S). IF AN EXISTING WATER SERVICE IS FOUND TO BE FAILING OR IS NOT COPPER, THE LEAD WILL BE REPLACED TO THE CURB BOX BY PUBLIC WORKS.
- FOR THE INSTALLATION OF CORPORATIONS, OR ANY OTHER RELATED ACTIVITIES, THE CONTRACTOR SHALL NOT RECEIVE ADDITIONAL COMPENSATION FOR DELAYS DUE TO THE SCHEDULING OF OR COORDINATION WITH THE CITY OF ANN ARBOR PUBLIC WORKS.
- THE CONTRACTOR SHALL BACKFILL TRENCHES IN ACCORDANCE WITH TRENCH DETAIL SPECIFIED ON PLANS. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "EXCAVATE AND BACKFILL FOR WATER SERVICE TAP AND LEAD". ALL CONCRETE REMOVALS AND REPLACEMENTS REQUIRED FOR THIS WORK WILL BE PAID FOR SEPARATELY.
- ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLYETHYLENE WRAPPED PER ANSI/AWWA C105/A21.5.
- COR-BLU BOLTS TO BE USED AT ALL MECHANICAL WATER MAIN JOINTS AT HYDRANTS AND MEGALUG FITTINGS
- THE CONTRACTOR SHALL CONSTRUCT, FLUSH, AND BACTERIOLOGICALLY TEST THE WATER MAIN PER DETAILED SPECIFICATION "WATER MAIN INSTALLATION AND TESTING" AND AS APPROVED BY THE ENGINEER. ALL CHLORINATED WATER SHALL BE DISCHARGED DIRECTLY INTO AN APPROVED SANITARY SEWER. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY HOSES, FITTINGS AND THE LIKE TO ACCOMPLISH THIS WORK.
- WATER MAIN FITTINGS, OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SUCH AS BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PIPE PAY ITEMS.
- "NO PARKING" SIGNS SHALL BE INSTALLED BY THE CONTRACTOR AT LOCATIONS AS APPROVED OR DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.
- POSTAL DELIVERY AND REFUSE PICKUP SERVICE SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
- ALL FITTINGS, HYDRANTS, VALVES AND CASTINGS REMOVED DURING CONSTRUCTION ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR WITHIN 48 HOURS SHALL DELIVER TO CITY OF ANN ARBOR PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD.
- WHERE STREET CURBS ARE UNDERMINED DUE TO CONSTRUCTION ACTIVITIES, THEY SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.

CONSTRUCTION NOTES (con't):

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS MAINTENANCE OF THE TEMPORARY ROAD SURFACE AND SOIL EROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA UNTIL THE FULL COMPLETION OF THE PROJECT. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS, MAX".
- ALL CURB, SIDEWALK, DRIVEWAY APPROACH REMOVALS SHALL BE APPROVED BY ENGINEER BEFORE THE WORK IS DONE.
- SAWED SEWER PIPE CONNECTIONS SHALL BE COUPLED WITH A FERNCO FLEXIBLE COUPLING AND A STAINLESS STEEL SHEAR RING.
- THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS TO BE APPROVED BY THE ENGINEER.
- FOR MAINLINE PAVING, THE WIDTH OF THE MAT FOR EACH PASS OF THE PAVER SHALL BE NOT LESS THAN 10.5' OR GREATER THAN 15', AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DIRECT THE LAYOUT OF THE LONGITUDINAL JOINTS DURING CONSTRUCTION.
- ALL STRUCTURES SHALL RECEIVE NEW CASTINGS AS DIRECTED BY THE ENGINEER, AS SPECIFIED ON THE STANDARD CASTING SCHEDULE. THE EXISTING CASTINGS ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL DELIVER TO CITY OF ANN ARBOR PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD.
- PAYMENT FOR DRAINAGE STRUCTURE SUMPS, WHERE SPECIFIED, SHALL BE INCLUDED IN THE PAYMENT FOR THE VARIOUS DRAINAGE STRUCTURE SIZES AND OR TYPES.
- WHERE SEWER PIPES OF DIFFERENT SIZES OR MATERIALS ARE JOINED, FERNCO FLEXIBLE COUPLINGS WITH STAINLESS STEEL SHEAR RINGS SHALL BE USED. THE CONTRACTOR'S PURCHASE PRICE FOR THESE DEVICES, INCLUDING SHIPPING, SHALL BE PAID AS AN EXTRA. PRIOR TO PAYMENT FOR THIS ITEM, THE CONTRACTOR SHALL SUBMIT RECEIPTS FOR THE ENGINEER'S REVIEW AND APPROVAL. ALL OTHER COSTS ASSOCIATED WITH THE INSTALLATION OF THESE DEVICES SHALL BE INCLUDED IN THE PAYMENT FOR THE SEWER.
- WHERE SEWER AND WATER MAIN ARE TO BE REMOVED & REPLACED OR ADDED, ALL PIPE SHALL BE INSTALLED USING TRENCH DETAIL DETAILED IN THE SPECIFICATIONS OR SHOWN ON PLANS. BACKFILL FOR SEWER AND WATER CONSTRUCTION SHALL BE MDOT GRANULAR MATERIAL, CLASS II, MODIFIED.
- EXISTING STREET NAME, GUIDE, AND REGULATORY SIGNS, AND MAILBOXES WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED PRIOR TO CONSTRUCTION, STORED IN A MANNER WHICH WILL PREVENT DAMAGE, AND RE-SET IN LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN "MACHINE GRADING, MODIFIED, _____"
- IN AREAS WHERE EDGE DRAIN CANNOT BE INSTALLED IN ACCORDANCE WITH CITY OF ANN ARBOR DETAIL SD-TD-11, THE EDGE DRAIN SHALL BE INSTALLED AT THE DEPTH AS INDICATED ON THE PLANS, OR AS DIRECTED BY ENGINEER. IN NO CASE SHALL THE EDGE DRAIN BE INSTALLED AT A GRADE LESS THAN 0.50% OR AT A DEPTH OF LESS THAN 2' BELOW TOP OF PROPOSED PAVEMENT.

CITY OF ANN ARBOR STANDARD DETAILS

DETAILS REQUIRED ON THIS PROJECT AND NOT INCLUDED IN THE PLAN SET ARE AS FOLLOWS:	
ITEM OF WORK	DETAIL
SEWER CONNECTION	SD-S-6
SANITARY SEWER CONNECTION WITH RISER	SD-S-7
SEWER BORE	SD-S-13
MAILBOX/NEWSPAPER TUBE INSTALLATION AND RELOCATION	SD-M-2

WATER MAIN CONSTRUCTION NOTES

- SEE EROSION CONTROL SHEETS FOR DETAILS ON PLACEMENT, MAINTENANCE, AND REMOVAL OF EROSION CONTROL ITEMS.
- THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY DURING CONSTRUCTION OPERATIONS ALL UTILITIES, SITE FEATURES, LANDSCAPING, AND OTHER ITEMS NOT DESIGNATED FOR REMOVAL OR ABANDONMENT. PAYMENT FOR PROTECTION OF UTILITIES INCLUDED IN "GENERAL CONDITIONS, MAX". EXISTING FACILITIES NOT DESIGNATED FOR REMOVAL OR ABANDONMENT, BUT WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS SOLE EXPENSE, AS DETERMINED BY THE ENGINEER.
- THE EXISTING UTILITIES SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED THROUGH SURVEYS AND/OR EXISTING PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES. IF STORM OR WATERMANS CROSS OTHER UTILITIES, CONTACT THEIR RESPECTIVE OWNERS FOR INFORMATION ON HOW TO PROCEED. PAYMENT FOR THE COORDINATION EFFORTS AND ASSOCIATED ITEMS SHALL BE INCLUDED IN ASSOCIATED PROPOSED STORM OR WATERMAIN ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY THE EXISTING WATER MAIN DURING CONSTRUCTION OPERATIONS. ANY DAMAGE TO THIS FACILITY BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE, AS DETERMINED BY THE ENGINEER. PAYMENT FOR PROTECTION OF THE EXISTING WATER MAIN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS, MAX".
- THE CONTRACTOR SHALL NOT REMOVE OR DAMAGE EXISTING SANITARY SEWER OR WATER MAIN LEADS FOR EASE OF CONSTRUCTING OTHER ASPECTS OF WORK. THE CONTRACTOR SHALL CAREFULLY PROTECT ALL LEADS FROM DAMAGE OR INJURY.
- THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH CURRENT PUBLIC SERVICE DEPARTMENT STANDARD SPECIFICATIONS AND DETAILS.
- ALL WATER MAIN SHALL BE PRESSURE CLASS 350 DUCTILE IRON WATER MAIN, CEMENT-LINED (DOUBLE THICKNESS), WITH POLYWRAP UNLESS NOTED OTHERWISE.
- RESTRAINED JOINT SYSTEMS FOR WATER MAIN SHALL BE UTILIZED WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. RESTRAINED JOINT GASKET SYSTEMS ARE TO BE USED. (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUAL)
- ALL WATER MAIN TO HAVE 5.5 FEET OF COVER. MAINTAIN A MINIMUM OF 18-INCH VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12-INCH VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
- NEW FIRE HYDRANTS SHALL BE EJW 5BR-250 WITH 4-INCH STORZ QUICK CONNOC AND 2-1/2 HYDRANT OUTLETS .
- FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY HYDRANT EXTENSIONS, THRUST BLOCKS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE COMPANION VALVE. FIRE HYDRANT ASSEMBLY INCLUDES 6-INCH COMPANION VALVE LOCATED THREE FEET FROM THE HYDRANT.
- ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II GRANULAR MATERIAL (SEE UTILITY TRENCH TYPE I DETAIL).
- CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW MAIN HAS BEEN SUCCESSFULLY TESTED AND HAS PASSED ALL HYDROSTATIC AND BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER.
- THE CONTRACTOR SHALL PERFORM ALL WATER SYSTEM SHUT DOWNS AFTER APPROPRIATE NOTIFICATION TO THOSE AFFECTED AND APPROVAL HAS BEEN GRANTED BY THE ENGINEER.
- WATER SERVICES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE BASED ON RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE CITY IN LOCATING, VERIFYING AND RECONNECTING ALL EXISTING ACTIVE SERVICES.
- ALL LINE STOP LOCATIONS SHALL BE DETERMINED BY THE CITY ENGINEER AS NEEDED. THIS ITEM OF WORK SHALL BE PAID FOR AS "LINE STOP, DUCTILE IRON PIPE, ___-INCH."

MISCELLANEOUS QUANTITIES

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED IN THE PLAN AND PROFILE SHEETS.

Pay Code	Description	Units	Quantity
130	Protective Fencing	Ft	2000
140	Exploratory Excavation, (0-10 ft. deep) (Trench Det 1, Modified)	Ea	16
205	Barricade, Type III, High Intensity, Lighted, Furn & Oper	Ea	25
206	Channelizing Device, 42 inch, High Intensity, Furn & Oper	Ea	230
207	Plastic Drum, High Intensity, Furn & Oper	Ea	60
208	Sign, Type B, Temp, Prismatic, Special, Furn & Oper	Sft	500
209	Sign, Type A, Temp, Prismatic, Furn & Oper	Sft	60
210	Sign, Type B, Temp, Prismatic, Furn & Oper	Sft	1400
211	Lighted Arrow, Type C, Furn & Oper	Ea	4
212	Sign, Portable, Changeable Message, NTFICIP-Compliant, Furn & Oper	Ea	4
213	Remove Special Marking	Sft	300
214	Concrete Barrier, Temp, Furn & Oper	Ft	100
215	Sign Cover	Ea	10
216	Pedestrian Barrier with Fence, Temp	Ft	100
217	Pedestrian Type II Barricade, Temp	Ea	30
218	Pedestrian Type II Channelizer, Temp	Ft	300
219	Pedestrian Path, Temp	Ft	100
220	Pedestrian Ramp, Temp	Ea	6
241	Subgrade Undercutting, Type IIB	Cyd	200
242	Structure Covers, Special	Lbs	39800
243	6 inch, Wrapped Underdrain	Ft	3500
244	Aggregate Base Course, 21AA, Modified	Ton	6400
245	Maintenance Gravel, 21AA, Modified	Ton	500
246	Flowable Fill (Backfill)	Cyd	30
270	No Parking Sign	Ea	120
279	Line Stop, Ductile Iron Pipe, 8 inch	Ea	1
279	Line Stop, Ductile Iron Pipe, 6 inch	Ea	7
280	Line Stop, Additional Rental Day	Each	10
335	SDR 35, PVC Tee	Ea	2
350	SDR 35 PVC Riser	Vft	10
353	SDR 35 PVC Service Lead	Ft	40
460	Excavate & Backfill for Water Service Tap and Lead	Lft	400
564	Reconstruct Structure	Ea	3
568	Additional Depth Structure-Adjustment/Repair	Vft	20
703	Silt Fence	Ft	1000

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR ENGINEERING
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.


PERMIT	ISSUING AUTHORITY
M.D.E.Q. WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
OMEGA RAIL PERMIT	OMEGA RAIL MANAGEMENT, INC.
WASHTENAW COUNTY WATER RESOURCE COMMISSIONER PERMIT	WASHTENAW COUNTY WATER RESOURCE COMMISSIONER

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER		
SANITARY	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	(734) 794-6350
STORM		
FORESTRY		
SIGNS SIGNALS STREET LIGHTS		(734) 794-6361
ALLEN CREEK DRAIN	WASHTENAW COUNTY WATER RESOURCE COMMISSIONER 705 N ZEEB ROAD P.O. BOX 8645 ANN ARBOR, MI 48107	(734) 222-6860
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016
STEAM/MISC UTILITIES	UNIVERSITY OF MICHIGAN	

WATER MAIN QUANTITIES-FOR MDEQ PERMIT PROCESS ONLY

3297	LFT	PC 350 D.I. WATER MAIN, W/ POLYWRAP, 12-INCH, TR DET I, MOD
232	LFT	D.I., CL-56 WATER MAIN, W/ POLYWRAP, 12-INCH, BORED IN STEEL CASING
105	LFT	PC 350 D.I. WATER MAIN, W/ POLYWRAP, 8-INCH, TR DET I, MOD
9	EA	FIRE HYDRANT ASSEMBLY
14	EA	GATE VALVE AND WELL, 12-INCH
6	EA	GATE VALVE IN BOX, 12-INCH
1	EA	TAPPING SLEEVE 16 INCH X 16 INCH X 12 INCH, VALVE AND BOX



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

HOOVER, GREENE, & HILL

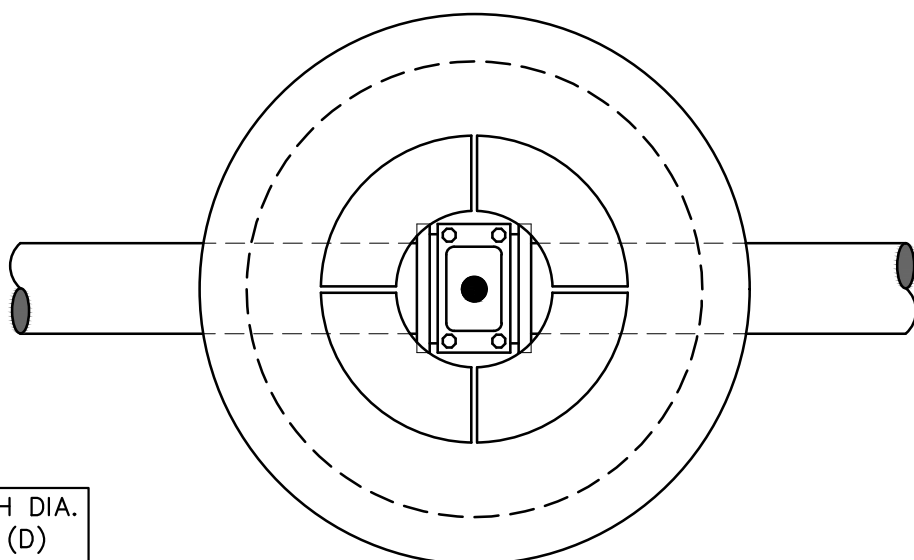
IMPROVEMENT PROJECT

NOTES

SCALE: NTS

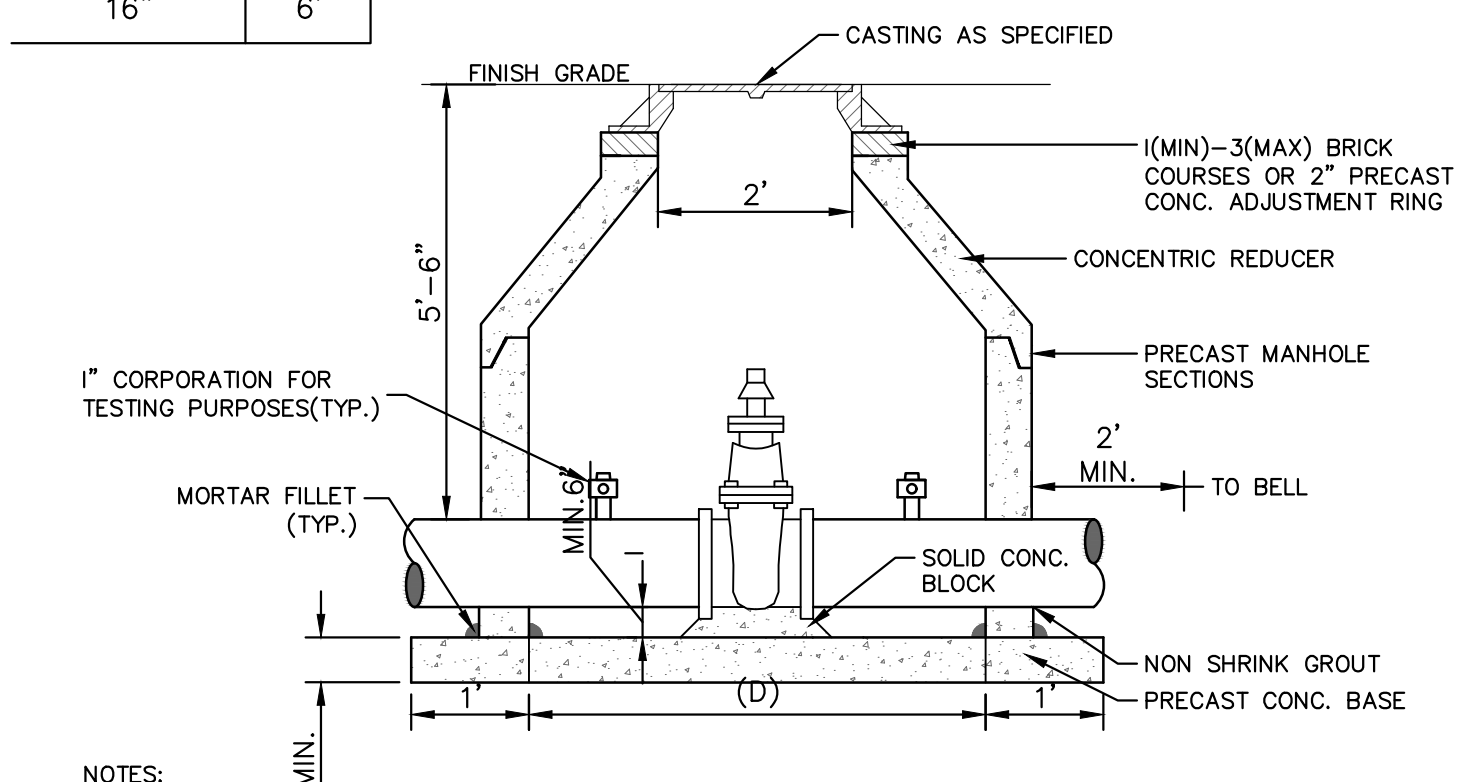
DRAWING No. 2018-031-3

SHEET No. 3 OF 83



PIPE SIZE	MH DIA. (D)
12" OR LESS	5'
16"	6'

TOP VIEW



- NOTES:
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE
 2. ALL JOINTS SHALL BE MADE WATER TIGHT WITH RUBBER GASKET JOINTS
 3. NO STEPS ARE PERMITTED
 4. MANHOLE SECTIONS SHALL MEET ASTM C-478

GATE WELL FOR MAIN 16" & SMALLER SD-W-3
PAID FOR AS GATE VALVE-IN-WELL, 12 INCH

MINIMUM STANDARDS

THE MDOT GRADE PI OR P-NC CONCRETE AT THE FITTING FACE SHALL EXTEND TO WITHIN 2 INCHES OF THE BELL AND SHALL EXTEND FROM THE FITTING FACE A MINIMUM OF 2 FEET TO THE UNDISTURBED SOLID GROUND.

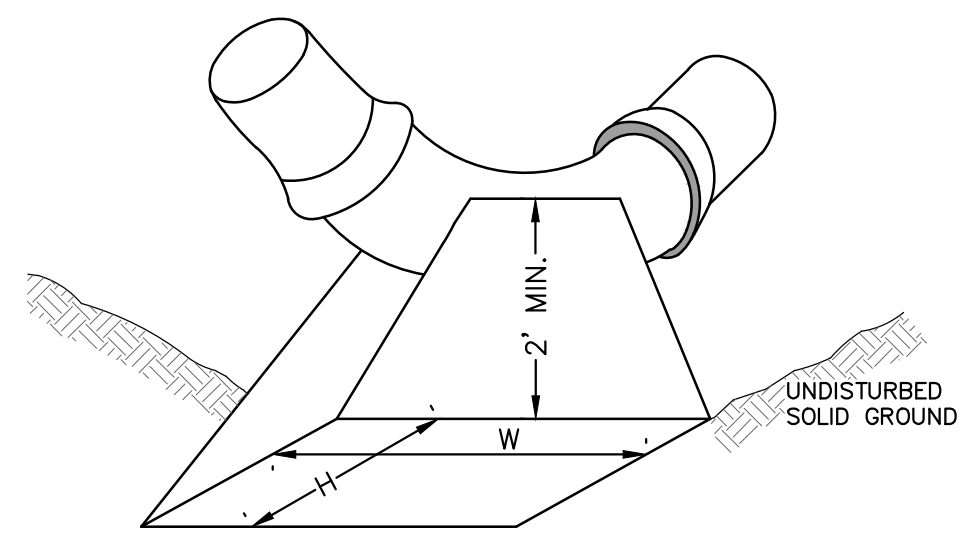
THE DIMENSIONS OF THE THRUST BLOCK AT THE FACE OF THE UNDISTURBED SOLID GROUND SHALL BE AS SHOWN IN THE TABLE BELOW.

IF THERE ISN'T SUFFICIENT SPACE FOR THE INSTALLATION OF THE THRUST BLOCK WITHOUT INTERFERENCE WITH OTHER SERVICES, ANOTHER ARRANGEMENT SATISFACTORY TO THE ENGINEER SHALL BE USED.

FITTINGS I.D.	PLUG TEE CROSS	BENDS								HYDRANT	
		90°		45°		22½°		11¼°		W	H
4	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0	2.0	1.5	
6	2.0 1.5	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.5	2.0	
8	2.5 2.0	3.5 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.5	2.0	
12	3.5 3.0	5.5 3.0	3.5 3.0	3.5 3.0	3.5 3.0	3.5 3.0	3.5 3.0	3.5 3.0	2.0	1.0	
16	6.0 3.5	6.0 4.0	5.0 3.0	3.5 2.5	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0			

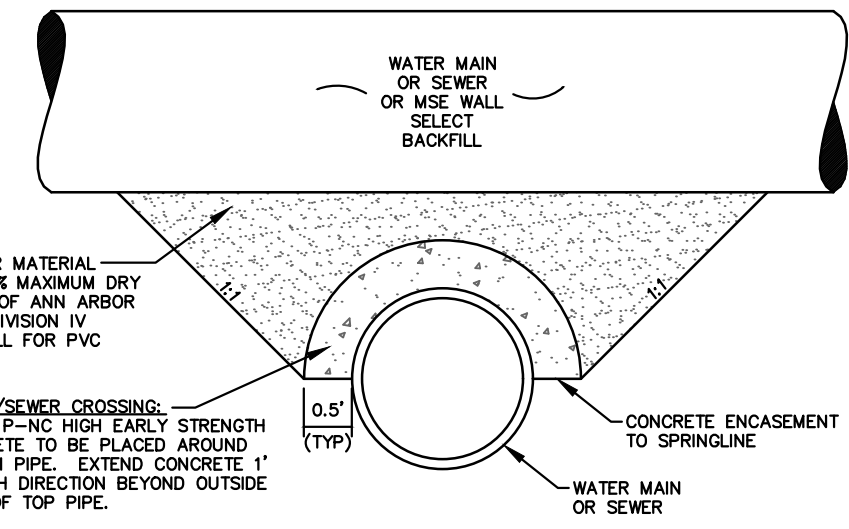
FOR FITTING SIZES LARGER THAN 16", THRUST BLOCK DIMENSIONS SHALL BE AS SPECIFIED BY ENGINEER.

W = WIDTH IN FEET
H = HEIGHT IN FEET



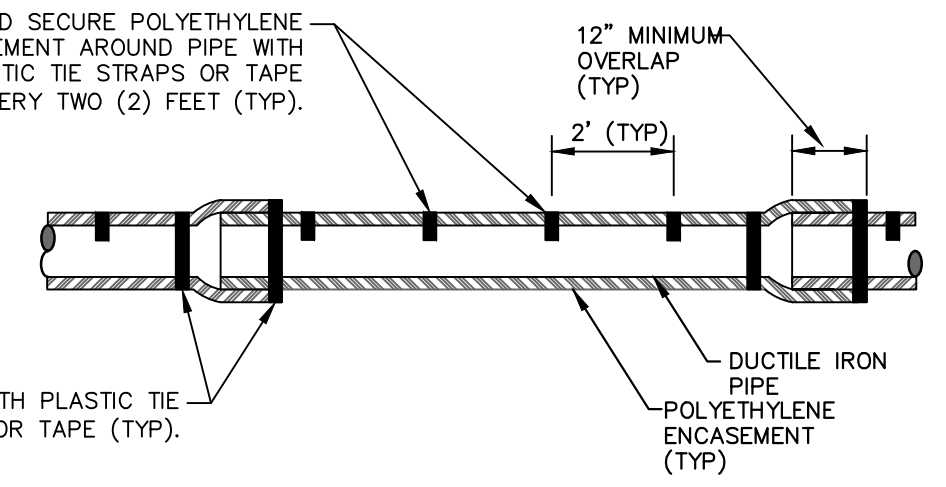
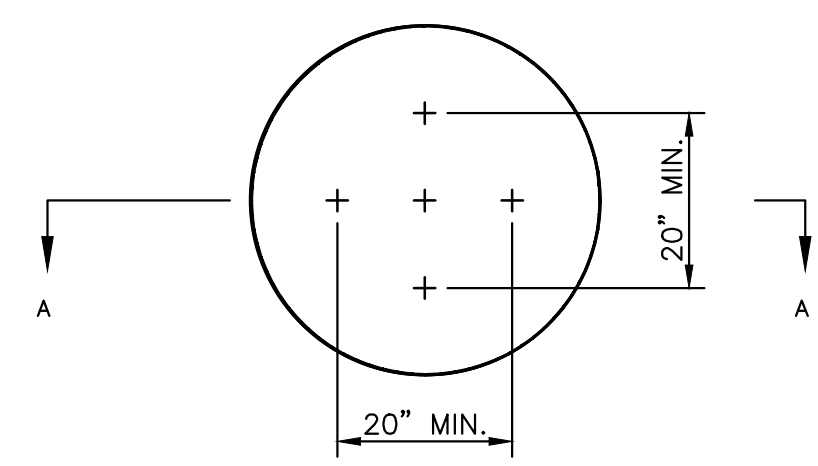
- NOTE:
- THESE ARE MINIMUM STANDARDS. WHERE SOIL CONDITIONS DICTATE, ADJUSTMENTS IN SIZE SHALL BE MADE AS DIRECTED BY THE PUBLIC SERVICES AREA ADMINISTRATOR.

THRUST BLOCK SD-W-2
INCLUDED IN PIPE PAY ITEM



APPLIES TO: WATER AND/OR SEWER CROSSINGS WITH LESS THAN 1.5' OF VERTICAL CLEARANCE

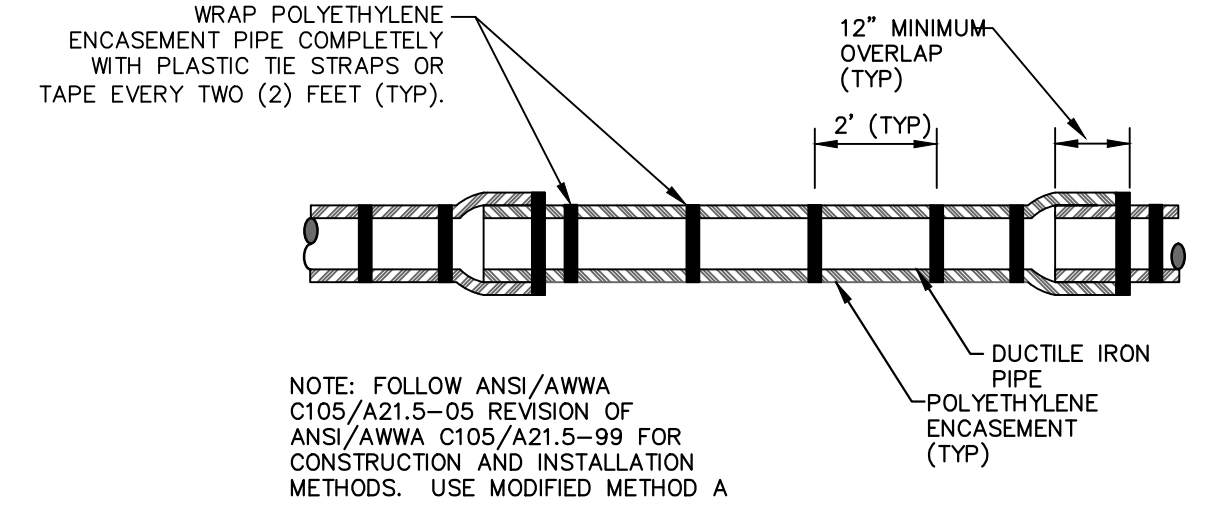
CONCRETE UTILITY SADDLE
INCLUDED IN PIPE PAY ITEM



NOTE: FOLLOW ANSI/AWWA C105/A21.5-05 REVISION OF ANSI/AWWA C105/A21.5-99 FOR CONSTRUCTION AND INSTALLATION METHODS. USE MODIFIED METHOD A

APPLIES TO: POLYETHYLENE WRAPPED D.I. WATERMAIN SEE PLANS FOR LOCATIONS

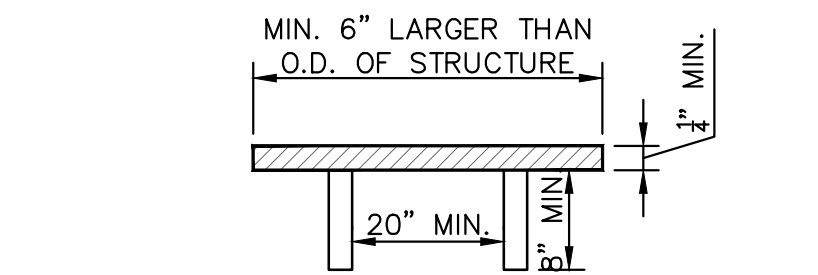
POLYETHYLENE ENCASMENT (DRY INSTALLATION)



NOTE: FOLLOW ANSI/AWWA C105/A21.5-05 REVISION OF ANSI/AWWA C105/A21.5-99 FOR CONSTRUCTION AND INSTALLATION METHODS. USE MODIFIED METHOD A

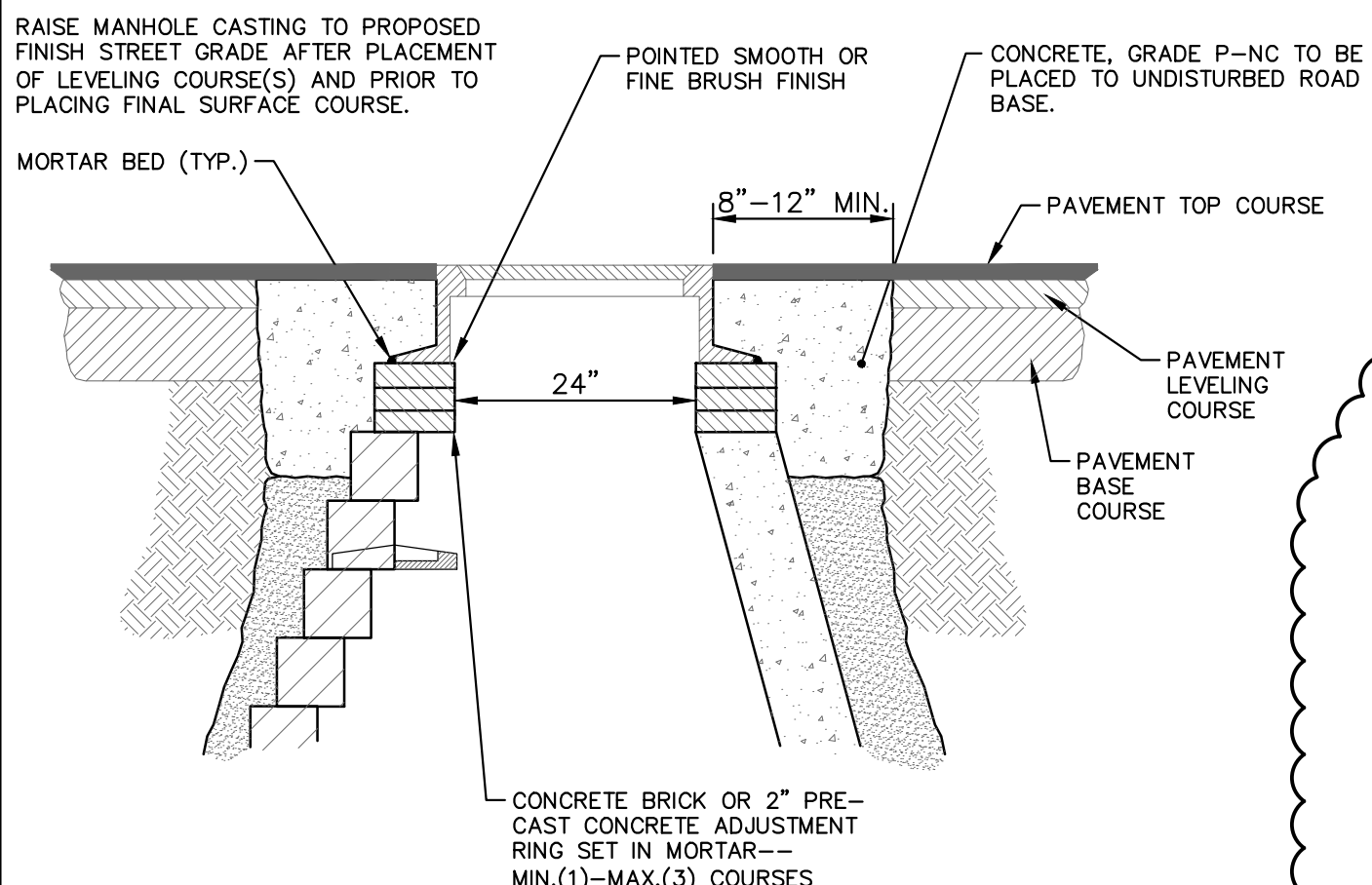
APPLIES TO: POLYETHYLENE WRAPPED D.I. WATERMAIN SEE PLANS FOR LOCATIONS

POLYETHYLENE ENCASMENT (WET INSTALLATION)
INCLUDED IN PIPE PAY ITEM



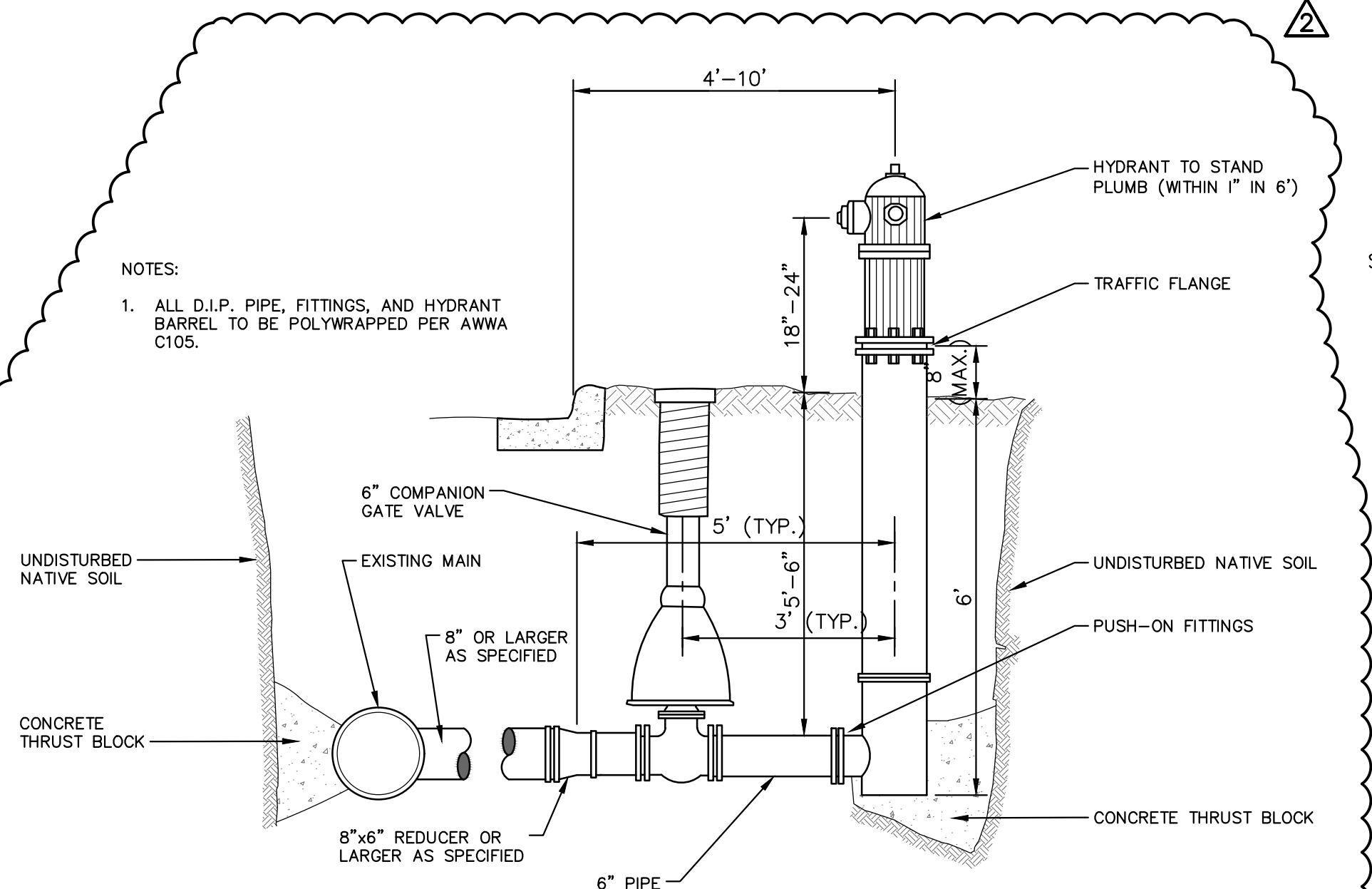
1/4" MIN. THICKNESS AND SUFFICIENT TO CARRY THE CONSTRUCTION LOAD.

STRUCTURE PLATE SD-GU-8



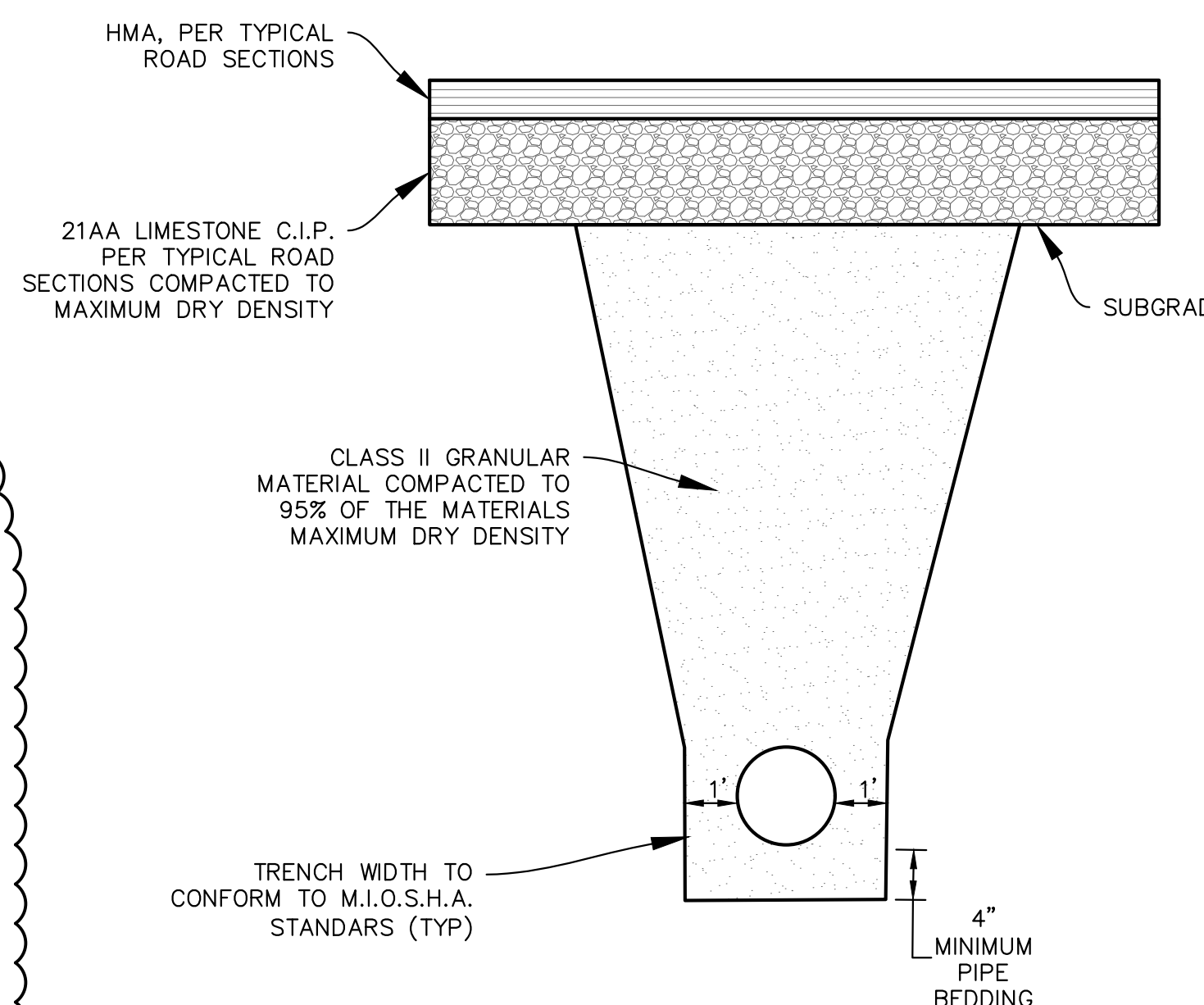
- NOTE:
- IF MANHOLE WILL BE PLACED IN GRAVEL ROAD, CASTING TO BE SET 6" TO 8" BELOW ROADWAY GRADE. ALL CONSTRUCTION METHODS SHALL REMAIN AS SHOWN ABOVE.

MANHOLE CASTING ADJUSTMENT SD-GU-6
PAID FOR AS ADJUST STRUCTURE COVER

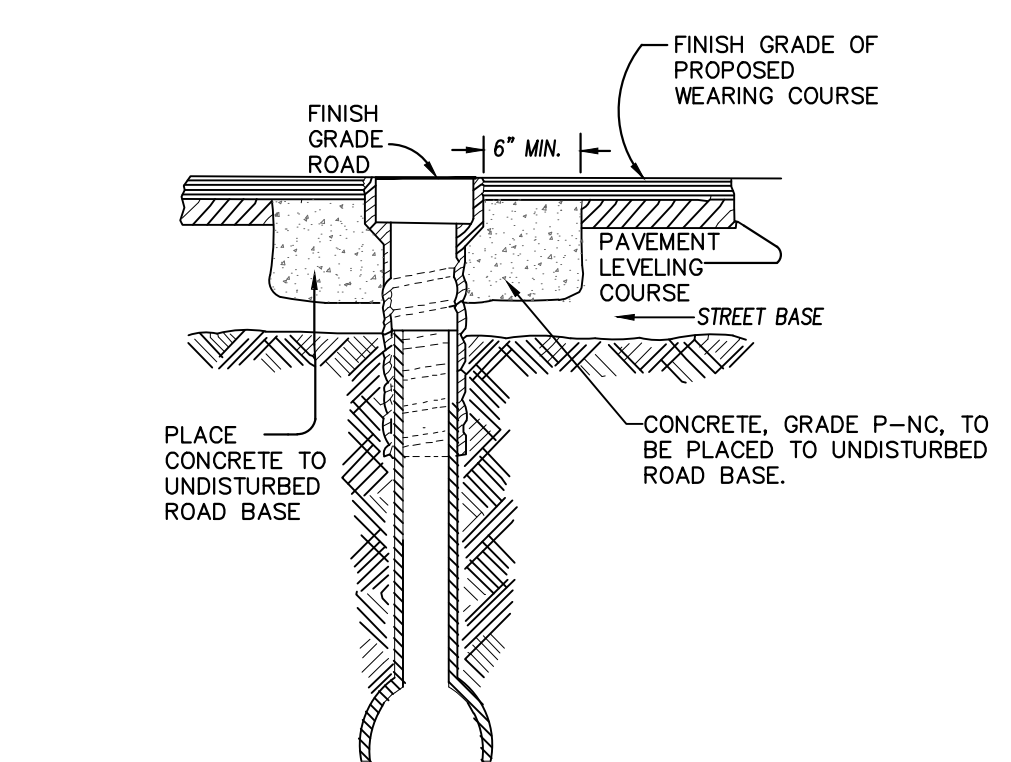


- NOTES:
1. ALL D.I.P. PIPE, FITTINGS, AND HYDRANT BARREL TO BE POLYWRAPPED PER AWWA C105.

FIRE HYDRANT ASSEMBLY
PAID FOR AS FIRE HYDRANT ASSY, W/EXTENSIONS, COMPLETE



TRENCH DETAIL I
APPLIES TO WATERMAIN AND STORM SEWER UNDER ROADBED OR WITHIN INFLUENCE OF ROADBED - SEE PLANS FOR LOCATIONS
INCLUDED IN PIPE PAY ITEM



- NOTE: RAISE CASTING TO PROPOSED FINISH STREET GRADE AFTER PLACEMENT OF LEVELING COURSE(S) AND PRIOR TO PLACING FINAL SURFACE COURSE

WATER VALVE BOX ADJUSTMENT
PAID FOR AS ADJUST MONUMENT BOX OR GATE VALVE BOX

C:\pwork\mianagon\00849816\WATER DETAILS.dwg Dwg Created: 11-Jan-19 - 02 standard bw.stb = Plot Date: 1-Mar-19

811 Know what's below. Call before you dig.

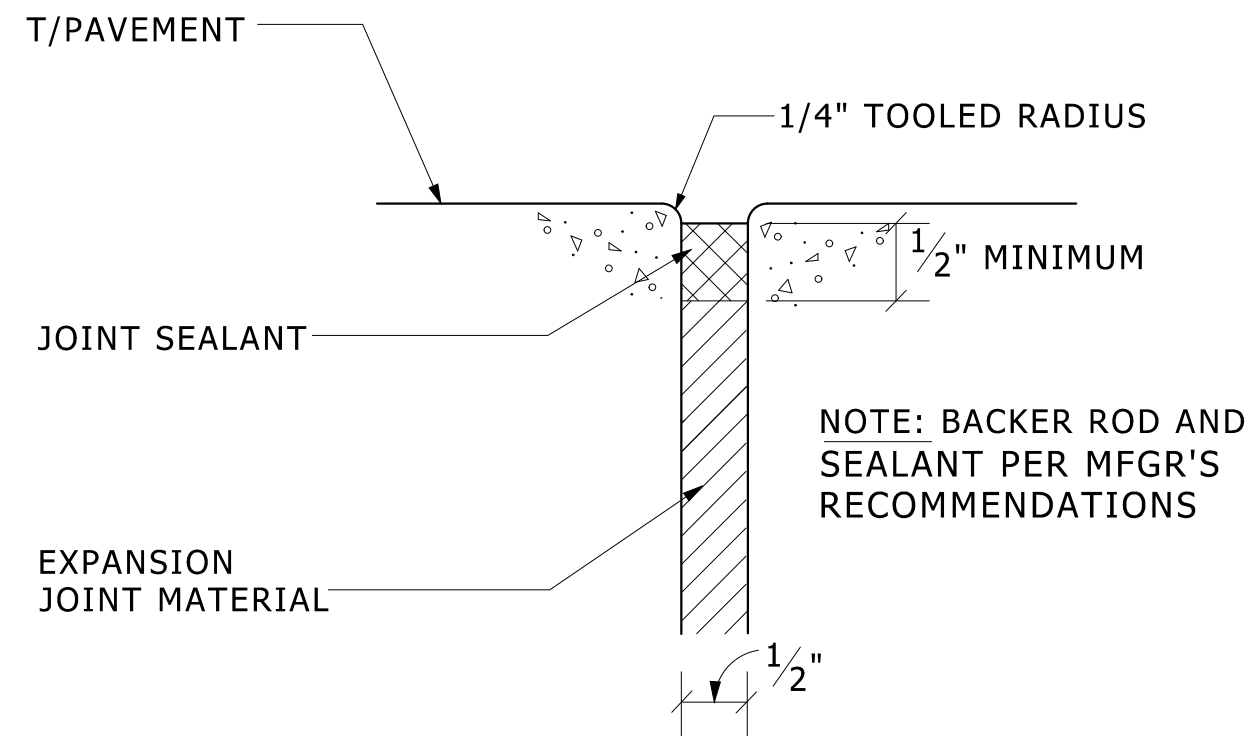
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
HOOVER, GREENE, & HILL
IMPROVEMENT PROJECT
WATER DETAILS

SCALE PLAN: #####
DRAWING No. 2018-031-21
SHEET No. 21 OF 83

REV.	DATE	DESCRIPTION
01	2/22/19	ADDENDUM #2

PG./JC
CEW
DRAWN
CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
PO BOX 8640
ANN ARBOR MI 48106-8647
www.a3gov.org

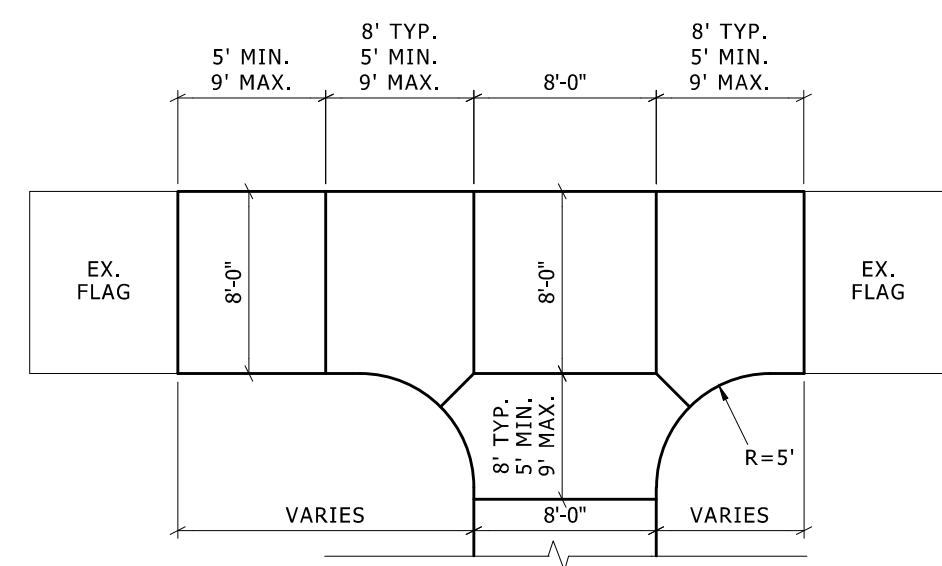


PAVEMENT EXPANSION JOINT (E.J.)

NO SCALE

- VERTICAL SURFACES:
PROVIDE MANUFACTURER'S STANDARD, NON-MODIFIED, TWO-OR-MORE-PART, POLY-SULFIDE-BASED, ELASTOMERIC SEALANT; COMPLYING WITH EITHER ASTM C 920 TYPE M CLASS 25, OR FS TT-S-00227E CLASS A; NON-SAG GRADE/TYP.
- HORIZONTAL SURFACES:
PROVIDE MANUFACTURER'S STANDARD, NON-MODIFIED, TWO-OR-MORE-PART, POLYURETHANE-BASED, ELASTOMERIC SEALANT; COMPLYING WITH EITHER ASTM C 920 TYPE M CLASS 25, OR FS TT-S-00227E CLASS A; SELF-LEVELING GRADE/TYP.
- SET UP TIME FOR SEALANT ON WALKING SURFACES SHALL BE NO LONGER THAN 8 HOURS.
- PROVIDE PRODUCT OF ONE OF THE FOLLOWING MANUFACTURERS:
 - CONTECH/SONNEBORN
 - MAMECO INTERNATIONAL
 - W.R. MEADOWS, INC.
 - PECORA CORP.
 - PRODUCTS RESEARCH & CHEMICAL CORP.
 - SIKA CHEMICAL CORP.
 - TREMCO, INC.
 - TOCH/CARBOLINE
- DO NOT ALLOW SEALANTS TO OVERFLOW OR SPILL ONTO ADJOINING SURFACES. REMOVE EXCESS AND SPILLAGE OF SEALANTS PROMPTLY.
- SEALED ZIP STRIPS ARE ACCEPTABLE.

INCLUDED IN THE APPLICABLE SIDEWALK PAY ITEMS.

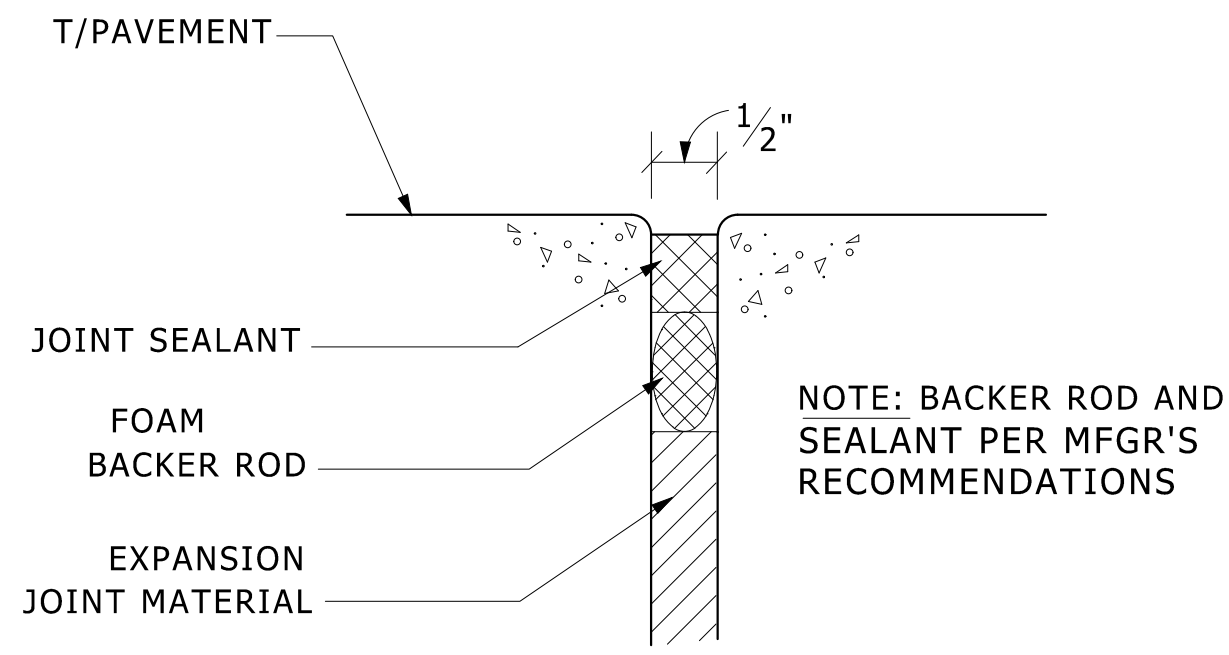


SIDEWALK CONTROL JOINT LAYOUT

NO SCALE

INCLUDED IN THE APPLICABLE SIDEWALK PAY ITEMS.

SD-SW-CTRL_JNT



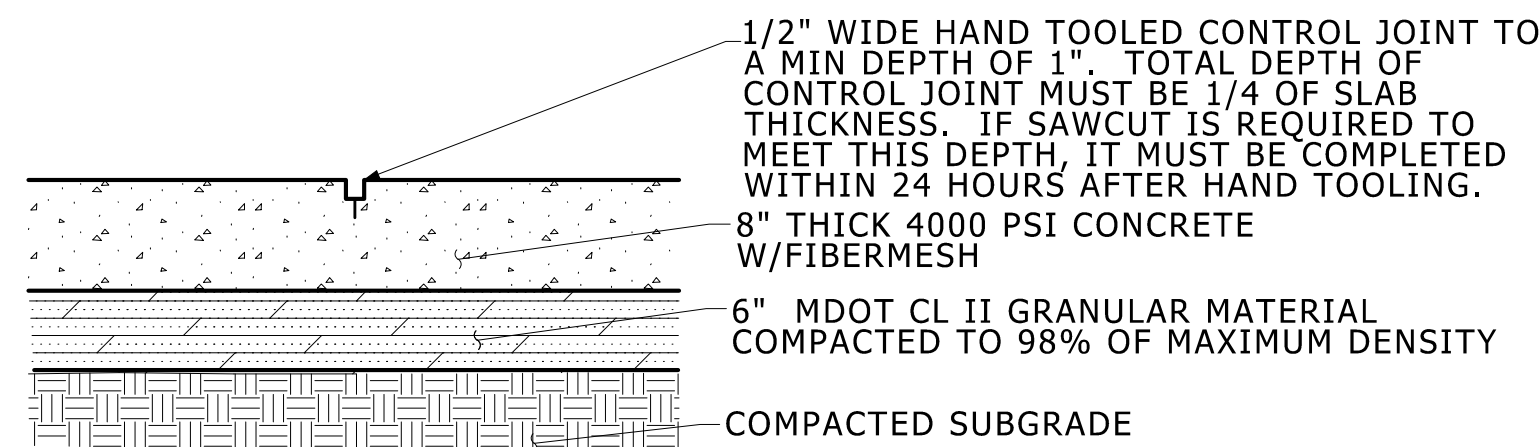
EXPANSION JOINT REPLACEMENT

NO SCALE

- VERTICAL SURFACES:
PROVIDE MANUFACTURER'S STANDARD, NON-MODIFIED, TWO-OR-MORE-PART, POLY-SULFIDE-BASED, ELASTOMERIC SEALANT; COMPLYING WITH EITHER ASTM C 920 TYPE M CLASS 25, OR FS TT-S-00227E CLASS A; NON-SAG GRADE/TYP.
- HORIZONTAL SURFACES:
PROVIDE MANUFACTURER'S STANDARD, NON-MODIFIED, TWO-OR-MORE-PART, POLYURETHANE-BASED, ELASTOMERIC SEALANT; COMPLYING WITH EITHER ASTM C 920 TYPE M CLASS 25, OR FS TT-S-00227E CLASS A; SELF-LEVELING GRADE/TYP.
- SET UP TIME FOR SEALANT ON WALKING SURFACES SHALL BE NO LONGER THAN 8 HOURS.
- PROVIDE PRODUCT OF ONE OF THE FOLLOWING MANUFACTURERS:
 - CONTECH/SONNEBORN
 - MAMECO INTERNATIONAL
 - W.R. MEADOWS, INC.
 - PECORA CORP.
 - PRODUCTS RESEARCH & CHEMICAL CORP.
 - SIKA CHEMICAL CORP.
 - TREMCO, INC.
 - TOCH/CARBOLINE
- DO NOT ALLOW SEALANTS TO OVERFLOW OR SPILL ONTO ADJOINING SURFACES. REMOVE EXCESS AND SPILLAGE OF SEALANTS PROMPTLY.

INCLUDED IN THE APPLICABLE SIDEWALK PAY ITEMS.

SD-SW-EXP_JNT



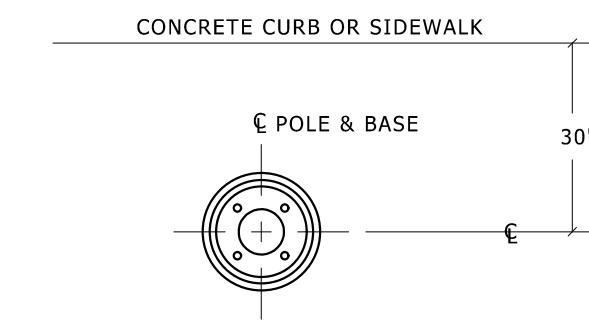
SIDEWALK - 8" THICKNESS

NO SCALE

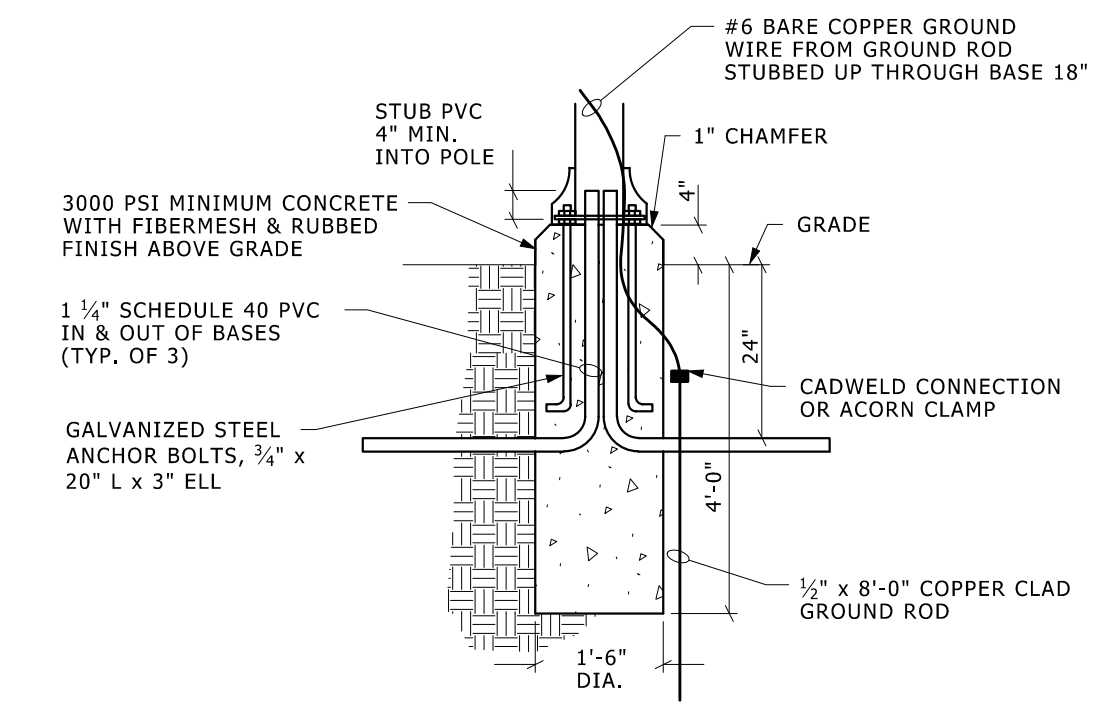
- NOTES:
- EXPANSION JOINTS SHALL BE INSTALLED SUCH THAT NO SINGLE DIMENSION EXCEEDS 50 FT. AREA BETWEEN EXPANSION JOINTS NOT TO EXCEED 320 SQ.FT.
 - 1/2" EXPANSION PAPER SHALL BE PLACED AT ALL LOCATIONS WHERE NEW SIDEWALK ABUTS CONCRETE CURB, EXISTING SIDEWALK, LIGHT POLE BASES AND RETAINING WALLS.
 - SNAP-CAP EXPANSION JOINT STRIPS CAN BE USED ON ALL EXPANSION JOINTS.
 - ALL EXPANSION JOINTS SHALL BE SEALED.
 - BROOM FINISH PARALLEL TO JOINTS AND PERPENDICULAR TO TRAFFIC (IF BROOMING PATTERN NOT SHOWN).

INCLUDED IN THE APPLICABLE SIDEWALK PAY ITEMS.

SD-SW-STD



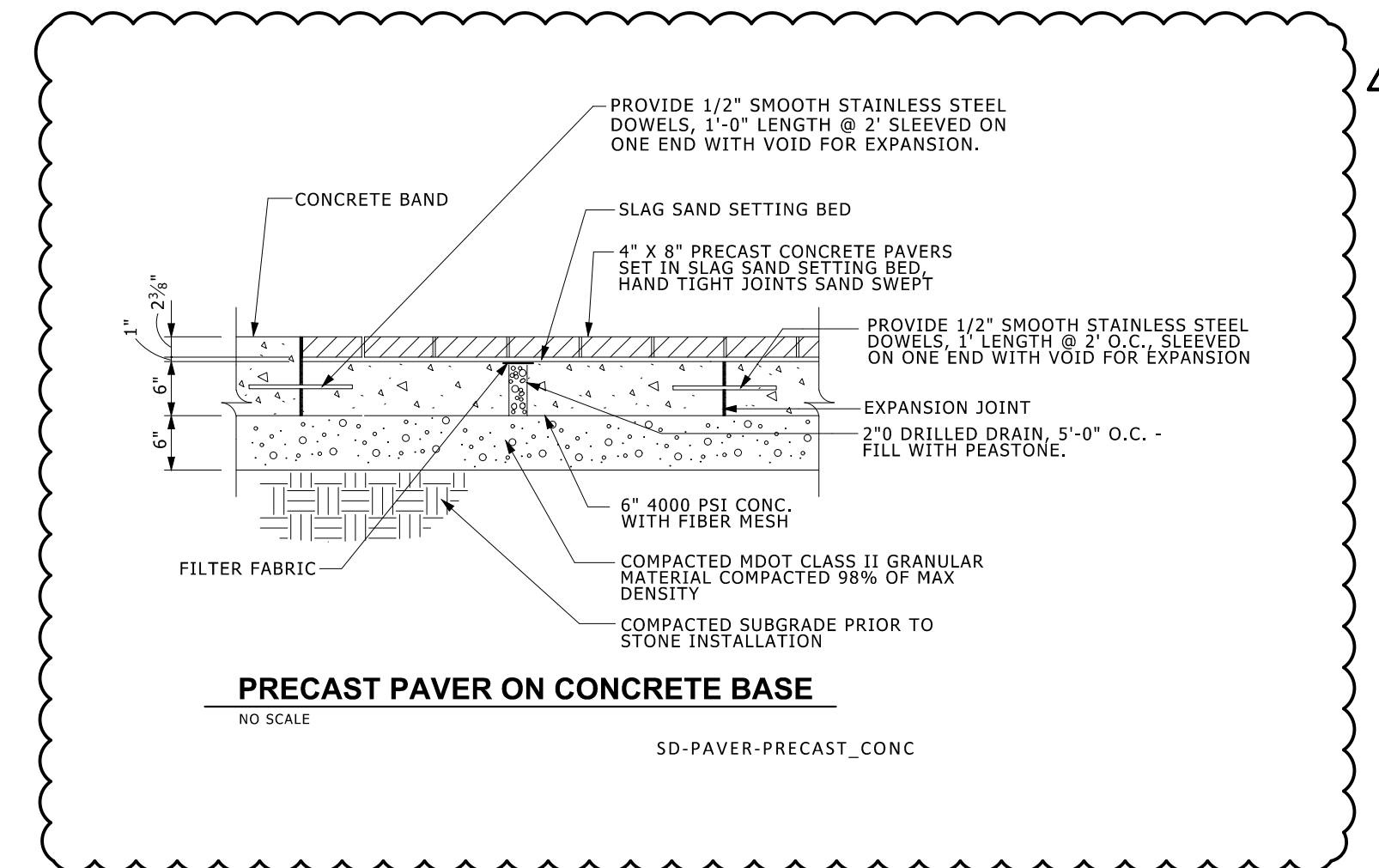
BASE PLAN VIEW



TYPICAL PEDESTRIAN LIGHT POLE BASE IN LAWN

NO SCALE

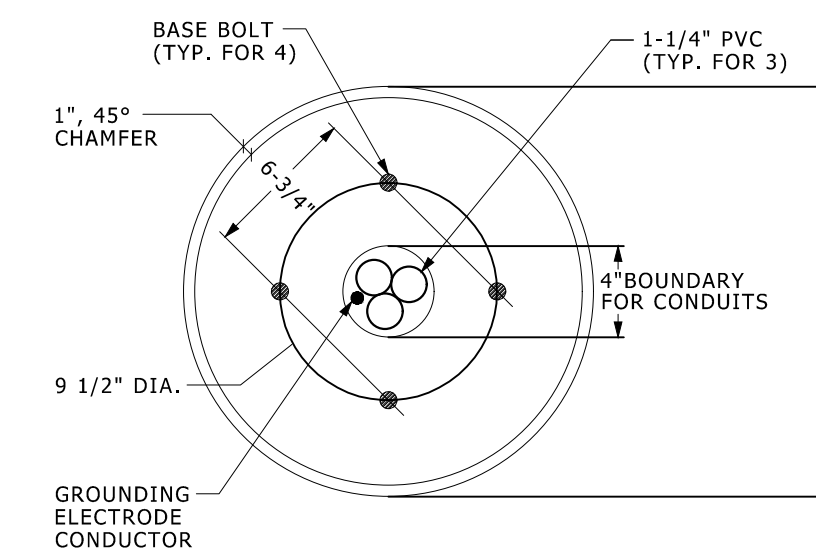
INCLUDED IN THE PAY ITEM PEDESTRIAN LIGHT, REMOVE AND RE-INSTALL. 26560013.dgn



PRECAST PAVER ON CONCRETE BASE

NO SCALE

SD-PAVER-PRECAST_CONC



PEDESTRIAN POLE BASE - PLAN VIEW

NO SCALE

INCLUDED IN THE PAY ITEM PEDESTRIAN LIGHT, REMOVE AND RE-INSTALL. 26560017.dgn

REV.	DATE	DESCRIPTION
02	3/01/19	ADDENDUM #3
01	2/22/19	ADDENDUM #2

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-0647
www.a3gov.org

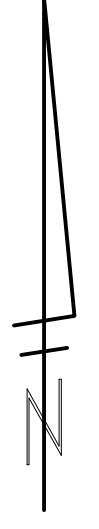
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
HOOVER, GREENE, & HILL
IMPROVEMENT PROJECT
MISCELLANEOUS DETAILS

SCALE NTS
DRAWING No. 2018-031-25

Pay Code	Description	Units	Quantity
130	Protective Fencing	Ft	2000
140	Exploratory Excavation, (0-10 ft. deep) (Trench Det 1, Modified)	Ea	16
201	Certified Payroll Compliance and Reporting	LSUM	1
202	General Conditions, Max \$370,000	LSUM	1
203	Audio-visual Recording	LSUM	1
204	Traffic Regulator Control	LSUM	1
205	Barricade, Type III, High Intensity, Lighted, Furn & Oper	Ea	25
206	Channelizing Device, 42 inch, High Intensity, Furn & Oper	Ea	230
207	Plastic Drum, High Intensity, Furn & Oper	Ea	60
208	Sign, Type B, Temp, Prismatic, Special, Furn & Oper	Sft	500
209	Sign, Type A, Temp, Prismatic, Furn & Oper	Sft	60
210	Sign, Type B, Temp, Prismatic, Furn & Oper	Sft	1400
211	Lighted Arrow, Type C, Furn & Oper	Ea	4
212	Sign, Portable, Changeable Message, NTFClP-Compliant, Furn & Oper	Ea	4
213	Remove Special Marking	Sft	300
214	Concrete Barrier, Temp, Furn & Oper	Ft	100
215	Sign Cover	Ea	10
216	Pedestrian Barrier with Fence, Temp	Ft	100
217	Pedestrian Type II Barricade, Temp	Ea	30
218	Pedestrian Type II Channelizer, Temp	Ft	300
219	Pedestrian Path, Temp	Ft	100
220	Pedestrian Ramp, Temp	Ea	6
221	Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	Ft	8000
221	Pavt Mrkg, Sprayable Thermopl, 4 inch, White	Ft	4200
222	Pavt Mrkg, Thermoplastic, 24 inch Stop Bar	Ft	400
223	Pavt Mrkg, Thermopl, 12 inch Crosswalk	Ft	2300
224	Pavt Mrkg, Ovly Cold Plastic, Railroad Sym	Ea	4
224	Pavt Mrkg, Ovly Cold Plastic, Bike Arrow Sym	Ea	11
224	Pavt Mrkg, Ovly Cold Plastic, Bike Sym	Ea	11
224	Pavt Mrkg, Ovly Cold Plastic, Sharrow Sym	Ea	10
224	Pavt Mrkg, Ovly Cold Plastic, Rt Arrow Sym	Ea	7
224	Pavt Mrkg, Ovly Cold Plastic, Lt Arrow Sym	Ea	7
226	Minor Traffic Devices, Max \$180,000	LSUM	1
228	Parking Meters, Remove	Ea	7
229	Erosion Control, Inlet Filter	Ea	65
230	Sewer, Any Size or Depth, Rem	Ft	2500
231	Dr Structure, Any Size or Depth, Rem	Ea	21
233	Curb and Gutter, Any Type or Size, Rem	Ft	4000
234	Sidewalk and Ramps, Remove	Sft	10300
235	Driveway Approach, Remove	Sft	2600
236	Pavement, Remove	Syd	16500
238	Machine Grading, Modified, Greene	Sta	13.5
238	Machine Grading, Modified, Hill	Sta	5.75
238	Machine Grading, Modified, Hoover	Sta	27
240	Non-Hazardous Contrm'd Mat'l Handling & Disposal	Cyd	200
241	Subgrade Undercutting, Type IIB	Cyd	200
242	Structure Covers, Special	Lbs	39800
243	6 inch, Wrapped Underdrain	Ft	3500
244	Aggregate Base Course, 21AA, Modified	Ton	6400
245	Maintenance Gravel, 21AA, Modified	Ton	500
246	Flowable Fill (Backfill)	Cyd	30
250	Curb and Gutter, Conc, Match Existing, Special	Ft	1550
251	Curb and Gutter, Conc, AA Det SD-R-1, Special	Ft	1800
252	Driveway Opening, Conc, Detail M, P-NC	Ft	650
255	Sidewalk, Concrete, 4 inch, Special	Sft	2850
255	Sidewalk, Concrete, 6 inch, Special	Sft	80
256	Sidewalk Ramp, Concrete, 6 inch, Special	Sft	1000
257	Sidewalk, Concrete, 8 inch, S2 Special	Sft	5280
258	Sidewalk Ramp, Concrete, 8 inch, S2 Special	sft	1090
259	Drive Approach, Conc, 6 inch, Non-Reinf	Sft	2000
260	Concrete Drive Approach, 8 inch, Non-Reinf, P-NC,	Sft	600
261	Detectable Warning Surface, Modified	Ft	341
263	Sidewalk, Conc or Clay Brick Pavers, Rem and Reinstall	Sft	360
264	Cold Milling HMA Surface, Modified	Syd	1050
265	Hand Patching, Modified	Ton	50

Pay Code	Description	Units	Quantity
266	HMA, 3E1	Ton	2805
267	HMA, 4E1	Ton	1750
268	HMA, 5E1	Ton	1875
270	No Parking Sign	Ea	120
272	Irrigation Systems, Protection and Maintenance	LSUM	1
274	Project Clean-Up and Restoration, Special - Greene	LSUM	1
274	Project Clean-Up and Restoration, Special - Hill	LSUM	1
274	Project Clean-Up and Restoration, Special - Hoover	LSUM	1
276	Topsoil Surface, 4 inch	Syd	1300
277	Seeding and Mulching	Syd	1300
278	Storm Control Structure, R1	Each	1
278	Storm Control Structure, R2	Each	1
278	Storm Control Structure, R3	Each	1
278	Storm Control Structure, 97-51067	Each	1
279	Line Stop, Ductile Iron Pipe, 8 inch	Ea	1
279	Line Stop, Ductile Iron Pipe, 6 inch	Ea	7
280	Line Stop, Additional Rental Day	Each	10
281	Pedestrian Light, Remove and Re-Install	Each	2
282	Handhole Assembly, 12 inch x 18 inch	Ea	17
283	Conduit, Directional Bore, 3 inch	Ft	2942
284	D.I., Cl-56, Water Main, w/Poly Wrap, 12 inch, Bored in Steel Casing	Ft	232
285	PC 350, D.I. Water Main, w/Poly Wrap, 12 inch, Tr Det I, Mod	Ft	3297
285	PC 350, D.I. Water Main, w/Poly Wrap, 4 inch, Tr Det I, Mod	Ft	17
285	PC 350, D.I. Water Main, w/Poly Wrap, 8 inch, Tr Det I, Mod	Ft	105
286	90 deg Bend, 12 inch	Ea	2
286	45 deg Bend, 12 inch	Ea	80
286	22.5 deg Bend, 12 inch	Ea	2
286	11.25 deg Bend, 12 inch	Ea	2
286	90 deg Bend, 4 Inch	Ea	1
287	Reducer, 12 inch x 6 inch	Ea	14
287	Reducer, 8 inch x 6 inch	Ea	8
288	Tee, 12 inch x 12 inch x 12 inch	Ea	12
288	Tee, 12 inch x 12 inch x 10 inch	Ea	1
288	Tee, 12 inch x 12 inch x 4 inch	Ea	1
288	Tee, 12 inch x 12 inch x 6 inch	Ea	1
288	Tee, 12 inch x 12 inch x 8 inch	Ea	8
289	Fire Hydrant Assy, w/Extensions, Complete	Ea	9
290	Gate Valve-in-Box, 12 inch	Ea	6
290	Gate Valve-in-Box, 4 inch	Ea	1
291	Gate Valve-in-Well, 12 inch	Ea	14
292	Tapping Sleeve 16 inch x 16 inch x 12 inch, Valve and Box	Ea	1
292	Tapping Sleeve 10 inch x 10 inch x 4 inch, Valve and Box	Ea	1
294	6 inch Water Main, Abandon	Lft	4966
295	Water Main, Abandon w/Flowable Fill	Lft	145
296	Gate Valve-in-Box, Abandon	Ea	13
297	Gate Valve-in-Well, Abandon	Ea	10
298	Fire Hydrant, Rem	Ea	7
299	Tapping Sleeve, Valve and Well, Remove	Ea	1
320	RCP, Sewer, C76, CL-IV, 12 inch, Tr Det I	Ft	12
321	RCP, Sewer, C76, CL-IV, 15 inch, Tr Det I	Ft	40
322	RCP, Sewer, C76, CL-IV, 36 inch, Tr Det I	Ft	754
323	RCP, Sewer, C76, CL-IV, 48 inch, Tr Det I	Ft	491
335	SDR 35, PVC Tee	Ea	2
350	SDR 35 PVC Riser	Vft	10
353	SDR 35 PVC Service Lead	Ft	40
360	Type I Manhole (0-10 ft. Deep)	Ea	2
361	Type I Manhole Add'l Depth	Vf	10
362	Type II Manhole (6 ft. Dia.) (0-10 ft. deep)	Ea	8
363	Type II Manhole (6 ft. Dia.) Add'l Depth	Vf	9
367	Single Inlet	Ea	6
460	Excavate & Backfill for Water Service Tap and Lead	Lft	400
564	Reconstruct Structure	Ea	3
566	Adjust Structure Cover	Ea	75
567	Adjust Monument Box or Gate Valve Box	Ea	4
568	Additional Depth Structure-Adjustment/Repair	Vft	20
703	Silt Fence	Ft	1000

2



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

HOOVER, GREENE, & HILL


IMPROVEMENT PROJECT

QUANTITY SHEET

SCALE PLAN: #####

DRAWING No. 2018-031-83

SHEET No. 83 OF 83



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-6647
www.aagov.org

ADDENDUM #3
ADDENDUM #2

3/01/19
2/22/19

DATE

REV.

DESCRIPTION

CHECKED
DRAWN
MFF
PG/JC
CEW
CEW

811
Know what's below.
Call Before you dig.