

City of Mt. Pleasant, Michigan

CONTRACT DOCUMENTS

For Construction
of

2013 Parking Lot #2 Improvements



KATHLEEN L. LING
Mayor

KATHIE GRINZINGER
City Manager

Prepared By:
Fleis & VandenBrink Engineering, Inc.
Midland, MI

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DPW Director

February 2013

City of Mt. Pleasant, Michigan

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THE CITY OF MT. PLEASANT, MICHIGAN

CITY HALL

320 W. Broadway • 48858-2447
(989) 779-5300
(989) 773-4691 fax

PUBLIC SAFETY

804 E. High • 48858-3595
(989) 779-5100
(989) 773-4020 fax

PUBLIC WORKS

1303 N. Franklin • 48858-4682
(989) 779-5400
(989) 772-6250 fax

NOTICE TO BIDDERS

2013 Parking Lot #2 Improvements

The City of Mt. Pleasant, Michigan, is requesting sealed bids at the Office of the City Clerk, City Hall, 320 W. Broadway, Mt. Pleasant, Michigan 48858, until 1:30 p.m. (local time), on March 5, 2013, at which time and place the bids will be publicly opened and read. All bids shall be submitted in a sealed envelope, plainly marked "2013 Parking Lot #2 Improvements – March 5, 2013."

Proposals are solicited on a unit price basis, for the following work (approx. quantities):

Cold Milling HMA	1,900	TON
Aggregate Base, 8 inch	4,500	SYD
Subbase, CIP	1,650	CYD
Curb and Gutter Construction	720	FT
Conc Pavement	830	SYD
Dumpster Enclosure	1	LS
Sidewalk Construction	8,300	SFT
Bituminous Paving	1,050	TON

All bid proposals must be accompanied by a bid bond, bank cashier's check, bank draft, or certified check for not less than five percent (5%) of the bid price, made payable to the City of Mt. Pleasant.

A Mandatory Pre-Bid meeting will be held on Tuesday, February 19, 2013 at 2:00 p.m. at the Mt. Pleasant City Hall in Conference Room A.

This project is partially funded by MEDC and prevailing wages will apply.

To view and download complete Plans and Specifications at no charge, visit the City of Mt. Pleasant website at www.mt-pleasant.org and navigate to the [bids and quotes](#) page.

A non-refundable \$50.00 fee is required for plans and specifications picked up at the Public Works Building, 1303 N. Franklin Street, Mt. Pleasant, Michigan 48858, (989) 779-5401, Monday through Friday, 8:00 a.m. to 4:30 p.m. A non-refundable \$60.00 fee is required for plans and specifications that must be mailed.

The City of Mt. Pleasant reserves the right to accept or reject any or all bids, to waive any irregularities in the bids, and to select the bid considered most advantageous to the City.

Jason Moore
Engineering Aide
(989) 779-5405

Jeremy Howard
City Clerk

City of Mt. Pleasant, Michigan
INSTRUCTIONS TO BIDDERS

1. **Proposals**

Proposals must be made upon the forms provided therefore, with the Bid amount both written and shown in figures, and all other data required submitted.

The Proposal, bound together with all Proposal Documents, must be enclosed in a sealed envelope marked as specified in the Notice to Bidders for such Bid and clearly indicating the name and address of the Bidder and must be received by the City Clerk, City Hall, 320 West Broadway Street, Mt. Pleasant, Michigan 48858, no later than the time and date specified in the Notice to Bidders. At such specified time, Proposals shall be publicly opened and read aloud.

2. **Basis of Proposals**

Proposals are solicited on the basis of unit price(s) and/or lump sum(s), as specified on the Proposal form.

The City of Mt. Pleasant (also referred to as "Owner"), reserves the right to accept any Bid, to reject any or all Bids, to waive any irregularities in the Bids, and to select the Bid considered most advantageous to the city.

3. **Comparison of Bids**

In comparing Bids, consideration shall be given to the time proposed for completion of the Contract, qualifications of Bidder, price differentials, alternate Proposals for the alternate items listed in the Proposal (if applicable), and any other pertinent factors. **The City of Mt. Pleasant grants a preference to businesses located within the Mt. Pleasant City Limits. The preference given is a differential above the low bid if the low bid is not from a City of Mt. Pleasant bidder. The differential allowed is 3% of the total for bids between \$5,000 and \$9,999 and 2% of the total for bids over \$10,000. The maximum credit allowed is \$1500.00.** The Owner reserves the right to make an award to the Bidder whose Proposal is deemed to be in the best interest of the Owner.

4. **Time**

Time is of the essence in the performance of the Contract, and each Bidder, by submitting a Proposal, certifies his/her acceptance of the time allowed by the Contract for the completion of the work specified.

5. **Indemnification**

The Contractor shall save and hold harmless the city and its employees from and against all claims, damages, losses, or expenses, including attorney's fees, arising out of or resulting from the performance of the work; provided that any such claim, damage, loss or expense is caused in whole or in part by any negligent or willful act of omission of the contractor, subcontractor, employee, or anyone under their direction. The Contractor shall at his/her own expense, defend any and all such actions and shall pay all attorney's fees, costs, and expenses pertaining thereto.

6. **Bid Deposits**

Each Proposal shall be accompanied by a certified check, bank cashier's check, bank draft, or a Bid Bond by a recognized Surety Company similar to a U. S. Government Standard Form Bid Bond, in the amount of five percent (5%) of the total amount of the Bid, made payable to the City of Mt. Pleasant, subject to forfeiture to the Owner in the event of failure on the part of the successful Bidder to enter into the attached form of agreement to do the work specified by said Proposal at the price and within the time stated therein. The Bid Deposit of all Bidders, except the three (3) lowest acceptable Bidders, shall be returned within two (2) weeks after opening of bids. The bid deposits of the three (3) lowest acceptable bidders shall be returned within 48 hours after the executed Contract(s) have been finally approved by the Owner.

7. **Liquidated Damages**

A liquidated damage clause, as given in the Contract form, provides that the Contractor shall pay the Owner as liquidated damages, and not as a penalty, the amount as indicated in Section 108.10 of the 2012 MDOT Standard Specifications for Construction for each and every calendar day that the Contractor may be in default of substantial completion of the work required under said Contract.

8. **Insurance and Bonds**

The successful Bidder will be required to execute (2) Bonds, in the form attached hereto, with Surety acceptable to the Owner and insurance, as follows:

- a. Bond in the amount of 100% of the Estimated Contract Price running to the City of Mt. Pleasant, Michigan, to insure the completion of the entire work, according to the statutes of the State of Michigan in effect at that time.
- b. Bond in the amount of 100% of the Estimated Contract Price running to the People of the State of Michigan for the protection of Subcontractors and Labor and Material Men, according to the statutes of the State of Michigan in effect at that time.
- c. Insurance in the amounts required by City Ordinance as specified in the Section 1 - General Construction Specifications, attached hereto.

The successful bidder shall be required to furnish for each set of executed Contract Documents, and conformed copies thereof, an original conformed Performance Bond, Labor and Materials Bond, and Insurance Certificates.

9. **Permits and Local Codes**

The Owner shall procure the required permits for municipal sanitary sewer construction, municipal water system construction, and soil erosion control.

The Contractor shall obtain, at his/her expense, all other required local construction permits and shall comply with local building code and inspection requirements.

10. **Qualifications of Bidders**

It is the intent of the Owner to award the Contract to a Bidder fully capable, both financially and with regard to experience, to perform and complete all work in a satisfactory and timely manner. Evidence of such competency must be furnished on the forms included in the proposal, listing projects of similar difficulty, scope of work, and size, which the Bidder has satisfactorily undertaken and completed.

It is the intention of the City to award the contract to a Contractor whose ability and financial resources are fully equal to the task of performing the work in a satisfactory manner. With this in view, the Proposal calls for at least five (5) references, using specific names of persons to contact concerning the Contractor's ability to do this particular class of work. References from municipalities are preferred. The mere ability to furnish a Performance Bond shall not be accepted as sufficient evidence of responsibility on the part of the Bidder. The Bidder may also be required to furnish evidence of his current financial status.

11. **Interpretation of Documents**

If any Bidder is in doubt as to the true meaning of any part of the Plans, Specifications or any Contract Document, he/she may submit to the Owner a written request for an interpretation thereof. Any interpretation made in response to such a query shall be made only by Addendum, duly issued, and a copy of such Addendum shall be mailed or duly delivered to each prospective Bidder. The Owner shall not be responsible for any other explanation or interpretation of the Contract Documents. Alternative proposals that are suggested by bidders will be given consideration, if presented before the bid opening. If accepted, an addendum will be issued and sent out to all potential bidders, so that they may bid on the alternatives that have been identified.

12. **Execution of Bid Proposal**

A Bid Proposal, which is not signed by the individual making it, should have attached thereto a Power of Attorney evidencing authority to sign the Bid Proposal in the name of the person for whom it is signed.

A Bid Proposal, which is signed by a partnership, shall be signed by all of the partners or by an Attorney-in-Fact. If signed by an Attorney-in-Fact, there should be attached to the Bid a Power of Attorney evidencing authority to sign the Bid Proposal in the name of the partnership and such Power of Attorney shall be signed by all partners of the partnership.

A Bid Proposal, which is signed for a corporation, should have the correct corporate name thereof and the signature of the President, or other authorized officer(s) of the corporation, manually written below the corporate name and on the line indicating "By:_____." If such a Bid Proposal is manually signed by an officer other than the President of the corporation, a certified copy of a Resolution of the Board of Directors evidencing the authority of such officer(s) to sign the Bid Proposal should be attached thereto. Such a Bid Proposal should also bear the attested signature of the Secretary of the corporation and an impression of the corporate seal.

13. **Execution of Contract**

The successful Bidder to whom an award is made shall be required to enter into a written agreement, in the form attached hereto, within ten (10) days after receipt of a Notice of Award and copies of the documents to be executed. In the event the successful Bidder fails to comply with this provision, he/she may be considered by the Owner to have abandoned all his/her rights and interests in the award and his/her certified check or amount of the Bid Bond may be declared to be forfeited to the Owner, and the Contract may be awarded to another.

14. **Bidder Responsibility For Conditions of Work and Site**

The Bidder, or his/her representative, shall make personal investigation of the site of work and of existing structures and shall determine to his/her own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved in making connections to existing structures and pipes, and any and all other factors affecting the work proposed under the Contract.

The Bidder to whom the Contract is awarded shall not be entitled to any additional compensation by reason of conditions being different from those anticipated or by reason of his/her failure to fully acquaint himself/herself with the conditions at the site affecting the work of the Contract.

15. **Changes in Work**

If any change is required to be made in the work of the Contract, a payment adjustment therefore shall be determined as specified in Section 103 of the 2012 MDOT Standard Specifications for Construction.

Revised: March 2011

City of Mt. Pleasant, Michigan
BID PROPOSAL

2013 PARKING LOT #2 IMPROVEMENTS

TO: City Hall/City Clerk
320 W. Broadway Street
Mt. Pleasant, MI 48858

BID DATE: March 5, 2013
TIME: 1:30 p.m.

The undersigned, as Bidder, hereby declares that his bid is made in good faith without fraud or collusion with any person or persons bidding on the same Contract; that he has carefully read and examined the Contract Documents, including the Notice to Bidders, Instructions, Bond Forms, Technical and Detailed Specifications, and Contract Drawings, for the designated work and understands all of the same; that he, or his representative, has made such a personal investigation at the site as is necessary to determine the character and difficulties attending the execution of the proposed work; and he proposes and agrees that if this Proposal is accepted, he will contract with the Owner in the form of the Contract hereto annexed, to provide necessary machinery, tools, apparatus and other means of construction, including utility and transportation services, necessary to do all the work and furnish all the materials and equipment specified or referred to in the Contract Documents, including Addenda No. __, __, and __, in the manner and time therein prescribed, and according to the requirements of the Owner as therein set forth to furnish Contractor Bonds and Insurance required of the Contractor by the Contract Documents, and that he will take in full payment therefore the unit prices set forth in the following Proposal.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any irregularities in the bidding.

The Bidder agrees that his bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving the bids.

Upon receipt of a written Notice of Award of the Bid, the Bidder shall execute the formal Contract Agreement attached hereto within ten (10) days and shall deliver to the Owner a Surety Bond or Bonds required. In the event the Contract and Bond are not executed within the time above set forth, the Bid Deposit attached in the sum of five percent (5%) of the Bid Proposal shall become the property of the Owner as liquidated damages for the delay and additional expense to the Owner caused thereby.

The Bidder hereby agrees to commence work under this Contract on or before date to be specified in the written Notice to Proceed executed by the Owner and to fully complete the project as stipulated in the Special Conditions. The Bidder further agrees to pay as liquidated damages the sum of Two Hundred Dollars (\$200.00) for each consecutive calendar day thereafter, as provided.

The below unit prices shall include all labor, materials, overhead, profit, insurance, etc., to cover the finished work of the several kinds specified, and the Bidder agrees to perform all of the work described in the Specifications and/or shown on the Plans for the following unit prices:

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL COST
1	Cold Milling HMA Surface	1900	LS	\$	\$
2	Excavation, Earth	1500	CYD	\$	\$
3	Embankment, CIP	400	CYD	\$	\$
4	Curb and Gutter, Rem	2400	FT	\$	\$
5	Sidewalk, Rem	900	SYD	\$	\$
6	Structures, Removal, Portion (Conc Steps)	1	LS	\$	\$
7	Tree, Rem	7	EA	\$	\$
8	Stump, Rem	7	EA	\$	\$
9	Dr Structure, Rem	1	EA	\$	\$
10	Sewer, Rem, Less that 24 inch	48	FT	\$	\$
11	Subbase, CIP	1500	CYD	\$	\$
12	Aggregate Base, 8 inch	4500	SYD	\$	\$
13	Concrete Pavt, Rem, Special	1300	CYD	\$	\$
14	Curb, Conc, Det F2	800	FT	\$	\$
15	Curb, Conc, Det F4	20	FT	\$	\$
16	Driveway, Opening, Conc, Det M	200	FT	\$	\$
17	Dr Structure, 24 inch dia	5	EA	\$	\$
18	Dr Structure Cover, CB, Modified	6	EA	\$	\$
19	Dr Structure Cover, STM, Modified	2	EA	\$	\$
20	Dr Structure Cover, Adj, Case 2	6	EA	\$	\$
21	Dr Structure, Tap, 12 inch	2	EA	\$	\$
22	Sewer, Cl A, 8 inch, Tr Det	60	FT	\$	\$
23	Sewer, Cl A, 12 inch, Tr Det	90	FT	\$	\$
24	Downspout Connection	3	EA	\$	\$
25	Sewer Tap, 12 inch	2	EA	\$	\$
26	Gas/Water Shutoff Cover, Adj, Case 1	2	EA	\$	\$
27	Water Service, 1½"	1	EA	\$	\$
28	Meter Box & Yard Hydrant	1	LS	\$	\$
29	Irrigation System	1	LS	\$	\$
30	Sidewalk, Conc, 4 inch	7000	SF	\$	\$
31	Sidewalk, Decorative Colored, 4 inch	1100	SF	\$	\$
32	Sidewalk Ramp, Conc, 6 inch	200	SF	\$	\$

33	Detectable Warning Surface	26	FT	\$	\$
34	Planter and Planter Pad	4	EA	\$	\$
35	Pipe Bollards	7	EA	\$	\$
36	Conc Pavt, Reinf, 6 inch	850	SYD	\$	\$
37	Conc Pavt, Reinf, Decorative Colored, 6 inch	650	SF	\$	\$
38	Header Strip, Conc, 24 inch wide	305	FT	\$	\$
39	Underdrain, Subgrade, Open-Graded, 4 inch, Modified	350	FT	\$	\$
40	HMA, 3C, Leveling Course	520	TON	\$	\$
41	HMA, 4C, Top Course	520	TON	\$	\$
42	Pavt Mrkg, Waterborne, 4 inch, white	2400	LS	\$	\$
43	Pavt Mrkg, Waterborne, 4 inch, Blue	450	EA	\$	\$
44	Pavt Mrkg, Waterborne, "NO PARKING - LOADING ONLY"	2	EA	\$	\$
45	Pavt Mrkg, Ovly Cold Plastic, Barrier Free Symbol	4	EA	\$	\$
46	Dumpster Enclosure	1	LS	\$	\$
47	Car Charging Station	1	LS	\$	\$
48	Light Standard Shaft and Luminaire, 15 foot	8	EA	\$	\$
49	Light Standard Shaft and Luminaire, 24 foot	5	EA	\$	\$
50	Light Std Fdn, Short	8	EA	\$	\$
51	Light Std Fdn, Tall	5	EA	\$	\$
52	Electrical Distribution, Panel and Wiring	1	LS	\$	\$
53	Modify Handrails and Fencing	1	LS	\$	\$
54	Bench with Back	2	EA	\$	\$
55	Bench without Back	2	EA	\$	\$
56	Bike Rack	2	EA	\$	\$
57	Trash Receptacle	4	EA	\$	\$
58	Plant Hanger Bracket and Basket	26	EA	\$	\$
59	Ginkgo biloba, 3 inch	2	EA	\$	\$
60	Acer x freemanii 'Autumn Blaze', 3 inch	6	EA	\$	\$
61	Zelkova serrata 'Green Vase', 3 inch	1	EA	\$	\$
62	Euonymus alatus (Burning Bush), #5 cont.	15	EA	\$	\$
63	Signage (Allowance)	1	LS	\$ 8,000.00	\$ 8,000.00
64	Restoration, Modified	600	SYD	\$	\$
65	Minor Traffic Devices	1	LS	\$	\$

EXPERIENCE QUESTIONNAIRE

To be furnished by Bidder
City of Mt. Pleasant, Michigan

The signatory of this proposal guarantees the truth and accuracy of all statements and of all answers hereinafter made.

1. How many years have you been in business as a contractor under your present name?

2. How many years have you been a principal officer of a firm under a different name?

Name of Firm _____

3. What projects of a similar nature has your organization contracted for within the past five years? (NOTE: Fill out each blank completely.)

Name of Owner & Location	Name/Address/Phone # of Person in Charge as Reference	Type of Work	Value of Work	Date Completed
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1. _____

2. _____

3. _____

4. _____

**City of Mt. Pleasant, Michigan
SUPPLEMENTAL SPECIFICATIONS**

2013 Parking Lot #2 Improvements

Construction Specifications

The work under this contract shall be completed following the 2012 MDOT Standard Specifications for Construction along with the City of Mt. Pleasant 2012 Standard Special Provisions, except as modified herein. This is not a state sponsored project; therefore, the payment of prevailing wages is not a requirement of this contract.

1. Time Constraints

Completion of this project within the time constraints described below is essential. The Contractor shall begin work on the project on April 1, 2013. In the event that weight restrictions make it impossible to start by April 1, 2013, the Contractor shall start no later than April 22, 2013. Contractor has 8 weeks to complete the project from start of construction.

2. Construction Phasing

This project will be completed in two phases.

Prior to Phase I starting, the curb and island in the Phase II (western portion) area will need to be removed to two feet below existing grade and filled with sand and topped with 8" of 22A aggregate flush to the existing pavement. This area will also need to be temporarily re-striped for use during Phase I.

As indicated on the plans, the eastern portion of the parking lot will be completed in Phase I, including the entire dumpster and equipment enclosure, top course of HMA, and final striping of the parking spaces.

The existing sidewalk adjacent to the buildings will remain in place until the parking area of Phase I is complete. The existing sidewalk must be removed and the new sidewalk placed within a 1 week period.

After completion of Phase I, Phase II can commence in a similar manner.

Mosher Street must be complete, cleaned, and open to traffic for Le Tour de Mont Pleasant bicycle race from 6/7/13 to 6/9/13.

3. Holidays

No work is to be scheduled by the contractor on Sundays, nor on the following holidays or holiday weekends:

Memorial Weekend

5/25/2012 to 5/28/2012

4. Access

Access to driveways for local residents, schools, and businesses shall be maintained and available for use. All driveways shall be opened by the contractor when the contractor is not working, including all evenings, Sundays, and holidays, except as approved in writing by the inspector and with written notification to the residents/owners.

5. Refuse and Recyclable Collection

The Contractor shall schedule the work to allow and provide access for refuse and recycling contractors to provide their services to the businesses. If the refuse and recycling contractors are unable to collect materials due to construction operations, then the construction contractor shall collect and dispose of the refuse and collect and deliver the recyclable material to the Material Recovery Facility (MRF) on River Road at no cost to the City. It is the responsibility of the construction contractor to contact the refuse and recycling contractors to coordinate operations.

6. Audio-Video Recording

An aboveground audio-video recording of the construction area along and adjacent to the project meeting the requirements of the Special Provision for Preconstruction Audio-Video Recording is required. Deliver to DPW prior to mobilization.

7. Location Verification

The Contractor shall excavate, as the Contractor deems necessary, or at the direction of the Engineer, all points of the pipe connection or reconnection to verify the material, condition, location, alignment, and elevation prior to setting of manholes, valves, tees, or bends. The cost of this work and the temporary and permanent restoration thereof shall be included in the various unit prices for the project.

8. Concrete Removal

Sidewalk, concrete drives, and curb and gutter removal shall be to existing construction joints. Unbroken joints shall be saw cut prior to removal. If a saw cut can be made where the remaining section is undisturbed, unbroken or unjointed, and is five feet (5') in length at its least direction, then removal may be to that point.

9. Excavated Material

All excavated material, concrete, asphalt, broken pipe, and other material shall become the property of the Contractor for disposal, except as noted.

10. Tree Protection and Preservation

The Contractor shall protect and preserve trees within the construction area. If the Contractor causes tree damage resulting from non-compliance with the tree crossing detail, or if excessive damage occurs to the trunk or main limbs of a tree, the Contractor shall pay for the damages to the tree. The value of the tree shall be the amount appraised by the City's tree consultant. The Contractor shall also pay for the cost of removal in the event the damaged tree must be removed within a two-year period.

11. Truck Route Streets

The Contractor shall not allow any trucks, or equipment associated with this project to be driven on non-truck route City streets. The Contractor shall ensure that all trucks and equipment associated with the project travel only on streets identified as truck route streets on the Truck Route Map in the construction specification details. If any of the Contractors, the Contractors' subs, and/or suppliers, are seen driving on other City streets, the Contractor shall be required to pay for resurfacing the street with a polymer-modified asphalt approved by the City at a rate of application determined by the City.

12. Utility Location

The Contractor shall expose all existing utilities and services that will be crossed by proposed pipe. Utility locations and elevations, as shown on the plans, are approximations and shall be verified by the Contractor prior to beginning any work. The Contractor is required to call the MISS DIG system as noted in the Standard Construction Specifications.

13. Soil Borings

Should a bidder desire to make additional soil borings within the parking lot, the Contractor making the borings shall first obtain a permit from Public Works. Insurance meeting the requirements of the City of Mt. Pleasant is required. The soil boring permit fee is \$25.00 per hole, and will be refunded if the results of the soil boring in the form of a soil-boring log are submitted to the City Engineer within one week after the close of bidding.

14. Insurance

The contractor shall carry insurance that will provide for the full replacement cost of any property that is damaged during the project. The contractor shall also pay the immediate costs of the homeowner/resident in the

event an incident occurs, while waiting for the insurance company to make compensation. Immediate costs include but are not limited to: Hotel/Motel bills and meals if the building is unusable, costs for basic necessities such as beds or clothes in the event they are damaged.

15. Project Meetings

The contractor shall attend weekly progress meetings with the Engineer to provide updates on the project, the schedule of work for the following week, and to resolve outstanding issues.

16. Pre-Bid Meeting

There will be a mandatory pre-bid meeting on. This meeting will take place in the City Commission Chambers at City Hall, 320 W. Broadway Street, at The intent of the meeting will be to answer questions about the project and about the administration of the project.

SECTION 3 CLAUSE

1. All contractors and subcontractors and the City itself when acting as a contractor shall be asked to indicate a good faith effort to meet the Section 3 requirement by signing contracts which contain the clause set forth in 24 CFR 135.20(b) as follows:
 - A. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
 - B. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
 - C. The contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
 - D. The contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the application for or recipient of Federal financial assistance, take appropriate action pursuant to the contract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development 24 CFR Part 135. The Contractor will not subcontract with any subcontractor where it has notice of knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
 - E. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance its successors, and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal Assistance is provided, and to such sanctions.

EQUAL OPPORTUNITY CLAUSE (EXECUTIVE ORDER 11246)

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept.

24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LENAWEE, LIVINGSTON, MACOMB, MIDLAND, MONROE, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLAIR, SANILAC, SHIAWASSEE, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
GROUP 1.....	\$ 42.62	19.95
GROUP 2.....	\$ 43.62	19.95
GROUP 3.....	\$ 41.12	19.95
GROUP 4.....	\$ 42.12	19.95
GROUP 5.....	\$ 39.62	19.95
GROUP 6.....	\$ 40.62	19.95
GROUP 7.....	\$ 39.35	19.95
GROUP 8.....	\$ 40.35	19.95
GROUP 9.....	\$ 38.90	19.95
GROUP 10.....	\$ 39.90	19.95
GROUP 11.....	\$ 38.17	19.95
GROUP 12.....	\$ 39.17	19.95
GROUP 13.....	\$ 37.81	19.95
GROUP 14.....	\$ 38.81	19.95
GROUP 15.....	\$ 37.17	19.95
GROUP 16.....	\$ 35.47	19.95
GROUP 17.....	\$ 30.36	19.95
GROUP 18.....	\$ 28.95	19.95

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

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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.....	\$ 29.34	20.20
GROUP 2.....	\$ 29.09	20.20
GROUP 3.....	\$ 28.59	20.20
GROUP 4.....	\$ 23.49	20.20
GROUP 5.....	\$ 21.84	20.20
GROUP 6.....	\$ 19.24	20.20
AREA 2		
GROUP 1.....	\$ 29.34	20.20
GROUP 2.....	\$ 29.09	20.20
GROUP 3.....	\$ 28.09	20.20
GROUP 4.....	\$ 23.19	20.20

GROUP 3.....	\$ 22.88	20.25
GROUP 4.....	\$ 22.60	20.25

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

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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)		
AREA 1		
GROUP 1.....	\$ 29.11	20.25
GROUP 2.....	\$ 22.38	20.25
GROUP 3.....	\$ 23.68	20.25
GROUP 4.....	\$ 21.82	20.25
GROUP 5.....	\$ 21.65	20.25
AREA 2		
GROUP 1.....	\$ 29.11	20.25
GROUP 2.....	\$ 22.23	20.25
GROUP 3.....	\$ 23.53	20.25
GROUP 4.....	\$ 21.67	20.25
GROUP 5.....	\$ 21.35	20.25

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 05/01/2012

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.....	\$ 24.03	19.95
Crane operator, main boom & jib 120' or longer.....	\$ 27.78	19.95
Crane operator, main boom & jib 140' or longer.....	\$ 28.03	19.95
Crane operator, main boom & jib 220' or longer.....	\$ 28.28	19.95
Mechanic with truck and tools.....	\$ 28.78	19.95
Oiler and fireman.....	\$ 22.73	19.95
Regular operator.....	\$ 27.28	19.95

 ENGI0324-008 10/01/2012

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.....	\$ 29.65	12.39
GROUP 2.....	\$ 28.12	12.39

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

ENGI0325-010 05/01/2012

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

	Rates	Fringes
OPERATOR: Power Equipment (Underground Construction)		
Crane operator, main boom & jib 120' or longer.....	\$ 27.38	19.95
Crane operator, main boom & jib 140' or longer.....	\$ 27.63	19.95
Crane operator, main boom & jib 220' or longer.....	\$ 27.88	19.95
GROUP 1.....	\$ 26.88	19.95
GROUP 2.....	\$ 23.63	19.95
GROUP 3.....	\$ 23.05	19.95
GROUP 4.....	\$ 22.11	19.95
Mechanic with truck and tools.....	\$ 28.38	19.95

FOOTNOTES: Swing boom truck operator over 15 tons: \$.50 per hour additional. Hydraulic crane operator 75 tons and under: \$.75 per hour additional. Hydraulic crane operator over 75 tons: \$1.00 per hour additional. Lattice boom crane operator: \$1.50 per hour additional. Crusher pit, shafts and tunnel workers: \$2.00 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Regular equipment operator, crane, dozer, front end

loader, job mechanic, pumpcrete and squeezeconcrete, concrete pump, excavator, milling and pulverizing machines, scraper (self-propelled and tractor drawn), welder

GROUP 2: Air track drill, boom truck (non-swing), concrete mixer, material hoist and tugger, pump 6" and over, beltcrete, sweeping machine, trencher, winches, well points and freeze systems

GROUP 3: Air compressor, conveyor, concrete saw, farm tractor (without attachments), fork truck, generator, guard post driver, mulching machine, pumps under 6-in., welding machine and grease person

GROUP 4: Oiler, fire tender, heater operator, brock concrete breaker, elevators (other than passenger), end dumps and skid steer

Crane Operator with main boom and jib 300' or longer shall be paid an additional one dollar and fifty cents (\$1.50) per hour above the 220' of boom and jib wage rate.

Crane Operator with main boom and jib 400' or longer shall be paid an additional one dollar and fifty cents (\$1.50) per hour above the 300 foot of boom wage rate (\$3.00)

ENGI0325-011 10/01/2011

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, 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, 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, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

Power equipment operators -
hazardous waste removal:
(AREA 1)

AREA 1: LEVEL A

Engineer when operating crane with boom and jib or leads 140' or longer....\$ 34.68	19.70
Engineer when operating crane with boom and jib	

or leads 220' or longer.....\$	34.98	19.70
GROUP 1.....\$	32.03	19.70
GROUP 2.....\$	27.80	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$	33.00	19.70
AREA 1: LEVEL B AND C		
Engineer when operating crane with boom and jib or leads 140' or longer.....\$	33.73	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$	34.03	19.70
GROUP 1.....\$	31.08	19.70
GROUP 2.....\$	26.85	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$	32.05	19.70
AREA 1: LEVEL D WHEN CAPPING LANDFILL		
Engineer when operating crane with boom and jib or leads 140' or longer.....\$	32.18	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$	32.48	19.70
GROUP 1.....\$	29.53	19.70
GROUP 2.....\$	25.30	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$	29.88	19.70
AREA 1: LEVEL D		
Engineer when operating crane with boom and jib or leads 140' or longer.....\$	32.43	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$	32.73	19.70
GROUP 1.....\$	29.78	19.70
GROUP 2.....\$	25.55	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$	30.75	19.70
Power equipment operators - hazardous waste removal:		

(AREA 2)

AREA 2: LEVEL A

Engineer when operating crane with boom and jib or leads 140' or longer.....\$ 32.97	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$ 33.27	19.70
GROUP 1.....\$ 30.32	19.70
GROUP 2.....\$ 25.92	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$ 31.29	19.70

AREA 2: LEVEL B AND C

Engineer when operating crane with boom and jib or leads 140' or longer.....\$ 31.91	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$ 32.23	19.70
GROUP 1.....\$ 29.37	19.70
GROUP 2.....\$ 24.98	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$ 30.34	19.70

AREA 2: LEVEL D WHEN

CAPPING LANDFILL

Engineer when operating crane with boom and jib or leads 140' or longer.....\$ 30.47	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$ 30.77	19.70
GROUP 1.....\$ 27.82	19.70
GROUP 2.....\$ 23.43	19.70
Regular crane operator, mechanic, dragline operator, boom truck operator and concrete pump with boom operator, power shovel operator.....\$ 28.79	19.70

AREA 2: LEVEL D

Engineer when operating crane with boom and jib or leads 140' or longer.....\$ 30.72	19.70
Engineer when operating crane with boom and jib or leads 220' or longer.....\$ 31.02	19.70
GROUP 1.....\$ 28.07	19.70
GROUP 2.....\$ 23.68	19.70
Regular crane operator,	

mechanic, dragline
operator, boom truck
operator and concrete
pump with boom operator,
power shovel operator.....\$ 29.04 19.70

HAZARDOUS WASTE REMOVAL CLASSIFICATIONS

Group 1: Backhoe, batch plant operator, clamshell, concrete breaker when attached to hoe, concrete cleaning decontamination machine operator, concrete pump, concrete paver, crusher, dozer, elevating grader, endloader, farm tractor (90 h.p. and higher), gradall, grader, heavy equipment robotics operator, loader, pug mill, pumpcrete machines, pump trucks, roller, scraper (self-propelled or tractor drawn), side boom tractor, slip form paver, slope paver, trencher, ultra high pressure waterjet cutting tool system, vactors, vacuum blasting machine operator, vertical lifting hoist, vibrating compaction equipment (self-propelled), well drilling rig and hydro excavator

GROUP 2: Air compressor, concrete breaker when not attached to hoe, elevator, end dumps, equipment decontamination operator, farm tractor (less than 90 h.p.), forklift, generator, heater, mulcher, pigs (portable reagent storage tanks), power screens, pumps (water), stationary compressed air plant, sweeper, welding machine and water wagon

ENGI0325-012 05/01/2012

AREA 1: MACOMB, MONROE, OAKLAND, ST. CLAIR, 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, 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, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

Power equipment operators -
gas distribution and duct
installation work:

AREA 1		
GROUP 1.....	\$ 26.68	20.20
GROUP 2.....	\$ 26.55	20.20
GROUP 3.....	\$ 25.42	20.20
GROUP 4.....	\$ 24.85	20.20
AREA 2		

GROUP 1.....	\$ 25.77	20.20
GROUP 2-A.....	\$ 25.67	20.20
GROUP 2-B.....	\$ 25.45	20.20
GROUP 3.....	\$ 24.67	20.20
GROUP 4.....	\$ 24.17	20.20

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.

AREA 1:

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).

GROUP 3: 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 4: Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

AREA 2:

GROUP 1: Mechanic, crane (over 1/2 yd. capacity), backhoe (over 1/2 yd. capacity), grader (Caterpillar 12 equivalent or larger)

GROUP 2-A: Trencher(except service), backhoe (1/2 yd. capacity or less)

GROUP 2-B: Crane (1/2 yd. capacity or less), compressor (2 or more), dozer (D-4 equivalent or larger), endloader (1 yd. capacity or larger), pump (1 or 2 six-inch or larger), side boom (D-4 equivalent or larger)

GROUP 3: Backfiller, boom truck (powered), concrete saw (20 hp or larger), dozer (less than D-4 equivalent), endloader (under 1 yd. capacity), farm tractor (with attachments), pump (2 - 4 under six-inch capacity), side boom tractor(less than D-4 equivalent), tamper (self-propelled),

trencher service and grader maintenance

GROUP 4: Oiler, grease person and hydrostatic testing operator

IRON0008-007 07/01/2012

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.....	\$ 25.60	22.67
General contracts less		
than \$10,000,000.....	\$ 22.51	22.67

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

IRON0025-002 06/04/2012

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).	\$ 22.17	20.13
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...	\$ 23.39	21.13

IRONWORKER		
Ornamental and Structural...	\$ 33.29	25.34
Reinforcing.....	\$ 28.74	23.35

IRON0055-005 07/01/2012

LENAWEE AND MONROE COUNTIES:

	Rates	Fringes
IRONWORKER		
Pre-engineered metal buildings.....	\$ 23.59	18.95
All other work.....	\$ 28.32	18.95

IRON0292-003 06/01/2012

BERRIEN AND CASS COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector).....	\$ 26.38	17.91

IRON0340-001 06/01/2012

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).....	\$ 20.68	23.32

LABO0005-006 10/01/2012

	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.....	\$ 18.62	12.17
Work performed in conjunction with site		

preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 17.62	12.17
Laborers - hazardous waste abatement: (ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES - Zone 11)		
Levels A, B or C.....	\$ 23.55	12.20
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 22.55	12.20
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.....	\$ 20.33	12.17
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 19.33	12.17
Laborers - hazardous waste abatement: (ARENAC, BAY, CLARE, GLADWIN, GRATIOT, HURON, ISABELLA, MIDLAND, OGEMAW, ROSCOMMON, SAGINAW AND TUSCOLA COUNTIES - Zone 8)		
Levels A, B or C.....	\$ 21.31	12.17
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 20.31	12.17
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.....\$ 22.21	12.17
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 21.21	12.17
Laborers - hazardous waste abatement: (GENESEEE, LAPEER AND SHIAWASSEE COUNTIES - Zone 7)	
Levels A, B or C.....\$ 23.31	12.21
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 22.31	12.21
Laborers - hazardous waste abatement: (HILLSDALE, JACKSON AND LENAWEE COUNTIES - Zone 4)	
Levels A, B or C.....\$ 21.92	11.99
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 20.92	11.99
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.....\$ 28.19	13.13
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 27.19	13.13
Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1)	
Levels A, B or C.....\$ 27.34	15.92
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 26.34	15.92
Laborers - hazardous waste abatement: (MONROE COUNTY - Zone 4)	
Levels A, B or C.....\$ 29.35	13.49
Work performed in	

conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 28.35	13.49
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.....\$ 27.34 Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 26.34	15.92
Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5)	
Levels A, B or C.....\$ 24.83 Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 23.83	14.61

 * LABO0259-001 09/01/2012

AREA 1: MACOMB, OAKLAND AND WAYNE COUNTIES
 AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,
 BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
 TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,
 IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,
 KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE,
 MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE,
 MIDLAND, MISSAUKEE, MONROE, MONTCALM, MONTMORENCY, MUSKEGON,
 NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO,
 OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST.
 JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN,
 WASHTENAW AND WEXFORD COUNTIES

	Rates	Fringes
Laborers - tunnel, shaft and caisson:		
AREA 1		
GROUP 1.....\$ 21.37	21.37	15.53
GROUP 2.....\$ 21.48	21.48	15.53
GROUP 3.....\$ 21.54	21.54	15.53
GROUP 4.....\$ 21.72	21.72	15.53

GROUP 5.....	\$ 21.97	15.53
GROUP 6.....	\$ 22.30	15.53
GROUP 7.....	\$ 15.58	15.53
AREA 2		
GROUP 1.....	\$ 22.43	12.17
GROUP 2.....	\$ 22.52	12.17
GROUP 3.....	\$ 22.62	12.17
GROUP 4.....	\$ 22.78	12.17
GROUP 5.....	\$ 23.04	12.17
GROUP 6.....	\$ 23.35	12.17
GROUP 7.....	\$ 15.62	12.17

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 09/01/2012

Rates

Fringes

Laborers - open cut:

ZONE 1 - MACOMB, OAKLAND		
AND WAYNE COUNTIES:		
GROUP 1.....	\$ 21.22	15.53
GROUP 2.....	\$ 21.33	15.53
GROUP 3.....	\$ 21.38	15.53
GROUP 4.....	\$ 21.46	15.53
GROUP 5.....	\$ 21.52	15.53
GROUP 6.....	\$ 18.97	15.53
GROUP 7.....	\$ 15.59	15.53
ZONE 2 - LIVINGSTON COUNTY		
(east of M-151 (Oak Grove		
Rd.)); MONROE AND		
WASHTENAW COUNTIES:		
GROUP 1.....	\$ 22.08	12.17
GROUP 2.....	\$ 22.19	12.17
GROUP 3.....	\$ 22.31	12.17
GROUP 4.....	\$ 22.38	12.17
GROUP 5.....	\$ 22.53	12.17
GROUP 6.....	\$ 19.83	12.17
GROUP 7.....	\$ 16.47	12.17
ZONE 3 - CLINTON, EATON,		
GENESEE, HILLSDALE AND		
INGHAM COUNTIES; IONIA		
COUNTY (City of Portland);		
JACKSON, LAPEER AND		
LENAWEE COUNTIES;		
LIVINGSTON COUNTY (west of		
M-151 Oak Grove Rd.);		
SANILAC, ST. CLAIR AND		
SHIAWASSEE COUNTIES:		
GROUP 1.....	\$ 20.27	12.17
GROUP 2.....	\$ 20.41	12.17
GROUP 3.....	\$ 20.53	12.17
GROUP 4.....	\$ 20.58	12.17
GROUP 5.....	\$ 20.72	12.17
GROUP 6.....	\$ 18.02	12.17
GROUP 7.....	\$ 15.17	12.17
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, OSTEGO,
 OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SAGINAW, ST.
 JOSEPH, TUSCOLA, VAN BUREN
 AND WEXFORD COUNTIES:

GROUP 1.....	\$ 19.28	12.17
GROUP 2.....	\$ 19.41	12.17
GROUP 3.....	\$ 19.52	12.17
GROUP 4.....	\$ 19.59	12.17
GROUP 5.....	\$ 19.71	12.17
GROUP 6.....	\$ 16.93	12.17
GROUP 7.....	\$ 15.27	12.17

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

GROUP 1.....	\$ 19.49	12.17
GROUP 2.....	\$ 19.63	12.17
GROUP 3.....	\$ 19.76	12.17
GROUP 4.....	\$ 19.81	12.17
GROUP 5.....	\$ 19.86	12.17
GROUP 6.....	\$ 17.24	12.17
GROUP 7.....	\$ 15.35	12.17

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 06/01/2012

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.....	\$ 24.89	12.17
GROUP 2.....	\$ 25.02	12.17
GROUP 3.....	\$ 25.20	12.17
GROUP 4.....	\$ 25.28	12.17
GROUP 5.....	\$ 25.49	12.17
GROUP 6.....	\$ 25.79	12.17
LABORER (AREA 2)		
GROUP 1.....	\$ 22.89	12.17
GROUP 2.....	\$ 23.09	12.17
GROUP 3.....	\$ 23.33	12.17
GROUP 4.....	\$ 23.68	12.17
GROUP 5.....	\$ 23.55	12.17
GROUP 6.....	\$ 23.89	12.17
LABORER (AREA 3)		
GROUP 1.....	\$ 22.14	12.17
GROUP 2.....	\$ 22.35	12.17
GROUP 3.....	\$ 22.64	12.17
GROUP 4.....	\$ 23.08	12.17
GROUP 5.....	\$ 22.70	12.17
GROUP 6.....	\$ 23.13	12.17
LABORER (AREA 4)		
GROUP 1.....	\$ 22.14	12.17
GROUP 2.....	\$ 22.35	12.17
GROUP 3.....	\$ 22.64	12.17
GROUP 4.....	\$ 23.08	12.17
GROUP 5.....	\$ 22.70	12.17
GROUP 6.....	\$ 23.13	12.17

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 04/01/2012

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1.....	\$ 18.28	12.07
Zone 2.....	\$ 16.85	12.07
Zone 3.....	\$ 15.08	12.07
Zone 4.....	\$ 14.45	12.07
Zone 5.....	\$ 14.45	12.07

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 06/01/2012

EXCLUDES: ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); INCLUDES: Barry, Berrian, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, St. Joseph, Van Buren

	Rates	Fringes
PAINTER		
Brush and roller.....	\$ 21.05	11.89
Spray, Sandblast, Sign		
Painting.....	\$ 22.25	11.89

 PAIN0845-003 06/01/2011

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.....	\$ 20.74	11.50

PAIN0845-015 06/01/2011

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.....	\$ 20.74	11.50

PAIN0845-018 06/01/2011

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.....	\$ 20.74	11.50

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.

PAIN1011-003 06/17/2012

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

	Rates	Fringes
PAINTER.....	\$ 24.00	9.56

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 07/23/2012

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.....	\$ 22.85	12.30
All other work, including maintenance of industrial plant.....	\$ 21.78	10.75

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 06/01/2012

ZONE 1: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, SAGINAW, WASHTENAW AND WAYNE COUNTIES

ZONE 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGO, 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, OSTEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
ZONE 1.....	\$ 29.03	12.05
ZONE 2.....	\$ 27.53	12.05

PLUM0190-003 05/01/2010

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.....	\$ 27.68	18.29
All other work:.....	\$ 20.72	11.15

SUMI2002-001 05/01/2002

	Rates	Fringes
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Flag Person.....	\$ 7.25	
LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)....	\$ 18.98	9.57
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE).....	\$ 17.14	10.02
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 23.72	9.57
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 21.35	9.57
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 21.42	10.02
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 19.28	10.02

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.

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGO, 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, OSTEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASEE, 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.....	\$ 24.795	.50 + a+b
Trucks under 8 cu. yds.....	\$ 24.895	.50 + a+b
Trucks, 8 cu. yds. and		
over.....	\$ 25.045	.50 + a+b
AREA 2		
Euclids, double bottoms		
and lowboys.....	\$ 24.895	.50 + a+b
Trucks under 8 cu. yds.....	\$ 24.995	.50 + a+b
Trucks, 8 cu. yds. and		
over.....	\$ 25.145	.50 + a+b

Footnote:

a. \$351.00 per week

b. \$49.90 daily

TEAM0247-004 06/01/2004

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGO, 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, OSTEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
Sign Installer		
AREA 1		
GROUP 1.....	\$ 20.18	.15 + a
GROUP 2.....	\$ 19.93	.15 + a
AREA 2		
GROUP 1.....	\$ 21.73	.15 + a
GROUP 2.....	\$ 21.48	.15 + a

FOOTNOTE:

a. \$132.70 per week, plus \$17.80 per day.

SIGN INSTALLER CLASSIFICATION:S

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 04/29/2012

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.....	\$ 21.97329.50/wk+52.90/day	
GROUP 2.....	\$ 22.06329.50/wk+52.90/day	
GROUP 3.....	\$ 22.27329.50/wk+52.90/day	
AREA 2		
GROUP 1.....	\$ 22.27329.50/wk+52.90/day	
GROUP 2.....	\$ 22.41329.50/wk+52.90/day	
GROUP 3.....	\$ 22.60329.50/wk+52.90/day	

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

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

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 union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows 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. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the

rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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.

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END OF GENERAL DECISION

City of Mt. Pleasant
SPECIAL PROVISION
FOR
TECHNICAL SPECIFICATIONS

City of MtPleasant

1 of 1

April 12

GENERAL REQUIREMENT

The 2012 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION shall govern all technical specifications of this contract. The following parts of the contract will prevail over all other parts in the following order:

- A. Special Provisions
- B. Supplemental Specifications
- C. Project Plans and Drawings
- D. City of Mt. Pleasant Standard Special Provisions
- E. MDOT Standard Plans
- F. MDOT Standard Specifications
- G. City of Mt. Pleasant Standard Construction Specifications

The Contractor shall not take advantage of any apparent error or omission in the contract documents. If any uncertainty, inconsistency, omission, or conflict is discovered in the contract documents, the Engineer will decide as to the true intent.

City of Mt. Pleasant
SPECIAL PROVISION
FOR
LINES, LEVELS, AND SURVEYS

City of MtPleasant

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April 12

Staking by the City of Mt. Pleasant or its agent shall meet the Engineering staking requirements of Section 104.08A. The contractor shall carefully preserve all benchmarks, reference points, grade stakes, and other necessary control points and be held responsible for all errors that may result from their loss or disturbances. The engineer shall make the final determination as to what lines or grades were disturbed by the contractor.

A minimum of three (3) working days (excluding Saturdays) notice to the City Engineer is required for staking or re-staking. Re-staking will be at a rate of \$75.00 per hour with a \$150.000 minimum.

City of Mt. Pleasant
SPECIAL PROVISION
FOR
UTILITY COORDINATION

City of MtPleasant

1 of 1

January 29, 2013

The contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the 2012 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 109.05E of the 2012 MDOT Standard Specifications for Construction.

A) General

For protection of underground utilities, the Contractor shall call the Miss Dig system at (800) 482-7171 a minimum of three (3) working days prior to excavating. Members will thus be routinely notified. This does not relieve the Contractor of the responsibility of notifying utility owners who may not be a part of the Miss Dig alert system.

B) Coordination with Utilities

During the course of the construction, the Contractor will encounter both overhead and underground utilities. The contact information of the utility company representatives are as follows:

Consumers Energy - Electric
Richard Klender
1325 Wright Avenue
Alma, MI 48801
(517) 466-4279

Winn Telecom – Communications
Paul Labrai
402 N. Mission St.
Mt. Pleasant, MI 48858
(989) 621-8788 cell

DTE Energy/MichCon – Gas
Ronald Marrow
1011 Hastings
Traverse City, MI 49684
(231) 258-3785
Cell: (231) 590-1284

City of Mt. Pleasant – Water, Sanitary &
Storm Sewer
Jason Moore
1303 N. Franklin Ave.
Mt. Pleasant, MI 48858
(989) 779-5405 or (989) 779-5401

Frontier – Telephone
Jeff James
345 Pine Street
Alma, MI 48801
(989) 463-0392

Charter Communication – Cable TV
Jeff Price
915 E. Broomfield Rd.
Mt. Pleasant, MI 48858
(989) 773-7090

The Contractor's attention is directed to existing underground gas mains, which are located adjacent to or near the work. The Contractor shall use extreme care when working in these areas, and shall notify DTE Energy/MichCon Gas Company at least three (3) working days in advance before beginning any excavation in these areas.

C) Relocation

The City will be coordinating the relocation of the overhead facilities along Jockey Alley that are on the power poles to an underground location. Service leads will also be installed to each building from the utility main.

As part of the relocation, the contractor will be responsible to coordinate their work with the appropriate utility company's relocation work.

It will be necessary to provide the utility with a "clean route" for the installation of their utilities (removal of the pavement and concrete). The exact location has not been determined.

A coordination meeting will be held prior to start of construction to review the utility companies relocation schedules.

City of Mt. Pleasant

SPECIAL PROVISION
FOR
DECORATIVE CONCRETE PAVEMENT, SIDEWALK, AND HEADER STRIP

City of MtPleasant

1 of 1

January 29, 2013

A) Description. This work consists of constructing decorative colored concrete sidewalks, pavements, and header strips and decorative finished sidewalks at the locations specified on the plans. Complete this work in accordance with the standard specifications, except as modified in the details on the plans and in this special provision.

1. **Submittals:** Submit a plan showing the types and locations of joints, reinforcement, and sequence of construction. Submit a report detailing the concrete mix designs to be used, including manufacturers and/or suppliers of mixture components. Submit technical data sheets for a single manufacturer's complete system for products and/or materials including admixtures, colorants, curing compounds, decorative concrete sealer, dry-shake finish materials, imprinting tools, and any other products requested by the Engineer. Submit Test Data Certification with test results conducted by an independent testing laboratory within the past 24 months reporting that the coloring pigment conforms to the general requirements of ASTM C 979. Obtain approval from the Engineer prior to beginning work.

2. **Certification:** Provide proof of Michigan Concrete Association (MCA) Decorative Concrete Certification, or proven equivalent manufacturer training and certification for placing decorative concrete, to the Engineer

B) Materials. Provide materials for the sidewalks in accordance with subsection 803.02 and for the pavements and header strips in accordance with subsection 602.02 of the Standard Specifications for Construction, except as modified herein. Provide material for an aggregate base course under the header strips in accordance with subsection 302.02 of the Standard Specifications for Construction. Provide detectable warning surfaces meeting the requirements of subsection 803.02.B of the Standard Specifications for Construction.

1. Use a single manufacturer's complete system for products and/or materials.

a. Concrete Colorant. Use complete pigment system including integral colorants, and/or release hardeners from one of the following manufacturers, or other sources as approved by the Engineer.

Brickform	989-792-9009
Decorative Concrete Resources	866-792-9000
Increte Systems	800-752-4626
L.M. Scofield Co.	586-292-1492
Prism Pigments	888-440-4250
Proline Concrete Tools	800-795-4750
Vexcon Chemicals	616-299-8897

- I. Concrete Integral Color (full depth). Use a Terra Cotta and Quarry Red, or approved equal, pre-weighed and packaged coloring pigment in either powder, granular, or liquid form. Ensure that materials comply with ASTM C 979 standards for integrally colored concrete.
- b. Curing Compound. Do not use standard curing compounds on decorative concrete. Instead use a surface sealer as listed in section d.3 of this special provision.
- c. Surface Sealer. Use a Type I, Class A solvent acrylic sealer conforming to the requirements of ASTM C 1315 from the approved list below, or other as approved by the Engineer.
 - I. Brickform.
 - Safety-Seal MS-5.
 - II. Vexcon Chemicals.
 - Certi-Vex AC 1315 solvent base sealer.
 - Certi-Vex Gloss Sealer FT solvent base sealer.
- d. Slip resistant additive. Mix slip resistant additive with the sealer according to the manufacturer's recommendations.
 - I. Increte
 - Shur-Grip.
 - II. Vexcon Chemicals
 - Certi-Vex Grip.
 - III. H & C
 - SharkGrip.

C) Construction

1. **Equipment.** Use tools capable of producing the light broom finish pattern(s) shown on the plans and/or as required by the Engineer.
2. **Field-Constructed Mock-up.** Prior to installation of colored concrete and/or textured concrete work, construct mock-up panels in place to verify color and texture selections and processes for qualities of appearance, materials, and construction. Build mock-ups to comply with the following requirements:
 - a. **Size.** Cast a minimum 8 foot by 8 foot mock-up to demonstrate typical joints, surface finish, texture, color, and standard of workmanship.
 - b. **Acceptance.** If Engineer determines that mock-up does not meet requirements, demolish and remove it from the site, and cast another until the mock-up is accepted. All costs associated with mock-ups in addition to the first will be borne by the Contractor.

c. Use. Keep accepted mock-up undisturbed during construction as a standard for comparison to completed work. Undamaged mock-up may be incorporated into the work or demolished and removed from the site when directed by the Engineer.

3. Construction. Construct sidewalks in accordance with subsection 803.03 of the Standard Specifications for Construction and Standard Plans R-28 and R-29 Series, except as modified in this special provision and the details on the plans. Construct the pavements and header strips in accordance with subsection 602.03 of the Standard Specifications for Construction and applicable standard plans, except as modified in this special provision and the details on the plans. Construct an aggregate base course under the header strips in accordance with subsection 302.03 of the Standard Specifications for Construction and the details on the plans. Install detectable warning surface according to the manufacturer's instructions and Standard Plan R-28 Series.

a. Preparation. Carefully lay out the locations of forms and joints, taking into consideration the orientation of the pattern as shown on the plans, intended aesthetics, and construction sequence.

b. Integral Color. Comply with the color manufacturer's published recommendations and instructions for mix designs, admixtures, concrete temperature, mixing, installing, finishing, and curing. Coordinate stamped colored concrete to ensure consistency in color, texture, and quality.

c. Pattern. Comply with MCA practices. Lay out to proper alignment and tool to a consistent depth while concrete is plastic. Do not allow the surface to crust over or harden before finishing pattern. For the decorative finished concrete, match the pattern used at the roundabout at the corner of Main St and Mosher St.

d. Acid Washing. Acid washing of decorative surface may be required to achieve the desired finish as directed by the Engineer. A minimum of 36 hours after placement, apply a solution of 1 part muriatic acid to 30 parts potable water to the surface of the pavement and lightly scrub with a straw broom. Wash the surface until proper color has been achieved and then flush thoroughly.

e. Sealing Decorative Surface. Seal the surface with approved sealer according to the manufacturer's recommendations. Refer to section d.3. of this special provision for approved products and to the manufacturer's technical data sheets for proper installation procedures, including moisture content restrictions at time of application.

D) Measurement and Payment

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

Contract Item (Pay Item)	Pay Unit
Concrete Pavt, Reinf, Decorative Colored, 6 inch.....	Square Foot
Sidewalk, Decorative Colored, 4 inch.....	Square Foot
Header Strip, Conc, 24 inch wide	Foot

City of Mt. Pleasant

SPECIAL PROVISION
FOR
CURB AND GUTTER, CONC, _____

City of MtPleasant

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January 29, 2013

A) Description

Install Curb and Gutter, Conc, _____, Modified according to this Special Provision and as shown on the plans.

B) Materials

The materials used for this work shall meet the requirements of Section 802.02 of the 2012 Standard Specifications for Construction.

C) Construction

Construct Curb and Gutter, Conc, _____, Modified in accordance with the requirements of Section 802 of the 2012 Standard Specifications for Construction. The material placed directly under the Curb and Gutter, Conc, _____, Modified shall be 22A aggregate, and shall be included in the bid price for Curb and Gutter, Conc, _____, Modified, as detailed on the proposed cross-section plan sheet. Thickness of this material shall be approximately 1.5 inches for local streets and 2.25 inches for major streets.

D) Measurement and Payment

The complete work as measured for Curb and Gutter, Conc, _____, Modified will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item.

Contract Item (Pay Item)

Pay Unit

Curb and Gutter, Conc, _____, ModifiedFoot

City of Mt. Pleasant
SPECIAL PROVISION
FOR
DRIVEWAY OPENING, CONC, DET M, MODIFIED

City of MtPleasant

1 of 1

April 12

A) Description

Construct Driveway Opening, Conc, Det M, Modified in accordance with the requirements of Standard Plan R-29 series and Section 802 of the 2012 Standard Specifications for Construction.

B) Materials

The materials used for this work shall meet the requirements of Section 802.02 of the 2012 Standard Specifications for Construction except that the reinforcing steel shall be eliminated.

C) Construction

Construct Driveway Opening, Conc, Det M, Modified in accordance with the requirements of Standard Plan R-29 series and Section 802 of the 2012 Standard Specifications for Construction except that the reinforcing steel shall be eliminated. The approximate 2 inches to 2.5 inches of material placed under the Construct Driveway Opening, Conc, Det M, Modified shall be 22A aggregate, and shall be included in the bid price for Construct Driveway Opening, Conc, Det M, Modified.

Measurement and Payment

The complete work as measured for Driveway Opening, Conc, Det M, Modified will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item.

Contract Item (Pay Item) Pay Unit

Drive Opening, Conc, Det M, Modified..... Foot

City of Mt. Pleasant

SPECIAL PROVISION
FOR
DETECTABLE WARNING SURFACE, MODIFIED

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work shall be done in accordance with the requirements of Standard Plan R-28 series and Section 803 of the 2012 Standard Specifications for Construction except that the detectable warning plate shall be an asphalt dipped Cast Iron warning plate.

B) Materials

The detectable warning plate shall be an asphalt dipped Cast Iron warning plate meeting the requirements of section 803 of the 2012 Standard Specifications for Construction.

C) Construction

This work shall be done in accordance with the requirements of Standard Plan R-28 series and Section 803 of the 2012 Standard Specifications for Construction except that the detectable warning plate shall be an asphalt dipped Cast Iron warning plate.

D) Measurement and Payment

The complete work as measured for Detectable Warning Surface, Modified will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item.

Contract Item (Pay Item)	Pay Unit
Detectable Warning Surface, Modified	Foot

City of Mt. Pleasant

SPECIAL PROVISION
FOR
DR STRUCTURE COVER, ____, MODIFIED

City of MtPleasant

1 of 1

January 29, 2013

A) Description

Dr Structure Cover, ____, Modified, hereinafter referred to as Cover, shall consist of materials and work as described in Section 403 of the Michigan Department of Transportation 2012 Standard Specifications for Construction except as modified herein.

B) Materials

Covers shall include geotextile fabric, frame, grate or cover and shall be of the type indicated on the plans.

1) Dr Structure Cover, CB, Modified

Catch basin cover types shall depend on their location on the plans.

- i)** Catch basins covers located in Det M openings shall be model 5100Z with type M1 grate as manufactured by East Jordon Iron Works, or approved equal.
- ii)** All other catch basins covers located in the curb shall be model 7205 with type M1 grate as manufactured by East Jordon Iron Works, or approved equal.
- iii)** Unless otherwise indicated on the plans, catch basins covers outside of the curb shall be model 1040 with type M1 grates as manufactured by East Jordon Iron Works, or approved equal.

2) Dr Structure Cover, STM, Modified

- i)** Storm drainage structure covers shall be model 1040 with type B cover as manufactured by East Jordon Iron Works, or approved equal.

3) Dr Structure Cover, SAN, Modified

- i)** Sanitary drainage structure covers shall be model 1040 with type A cover as manufactured by East Jordon Iron Works, or approved equal. The preferred cover shall be stamped with the City of Mt. Pleasant logo.

C) Construction

Construct drainage structure covers according to the details on the plans and section 403 of the Standard Specifications. Drainage structure shall be wrapped with geotextile fabric as shown on the plans.

D) Measurement and Payment

This work will be measured and paid as specified in section 403 & 802 of the Standard Specifications using the following contract items (pay items).

Contract Item (Pay Item)	Pay Unit
Dr Structure Cover, CB, Modified	Each
Dr Structure Cover, STM, Modified.....	Each

City of Mt. Pleasant
SPECIAL PROVISION
FOR
GAS/WATER SHUTOFF COVER ADJ, CASE 1

City of MtPleasant

1 of 1

April 12

A) Description

Adjust gas and water shutoff covers according to this Special Provision and as shown on the plans.

B) Materials

The materials used for this work shall meet the requirements of the utility owning the shutoff.

C) Construction

Adjust gas and water shutoff covers in accordance with the requirements of Section 403.03 C of the 2012 Standard Specifications for Construction for drainage structures.

D) Measurement and Payment

The complete work as measured for Gas/Water Shutoff Cover, Adj, Case 1 will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item

Contract Item (Pay Item)	Pay Unit
Gas/Water Shutoff Cover, Adj, Case 1.....	Each

City of Mt. Pleasant
SPECIAL PROVISION
FOR
AGGREGATE BASE, ____ INCH, MODIFIED

City of MtPleasant

1 of 1

January 29, 2013

A) Description. Construct an aggregate base course on a surface approved by the Engineer.

B) Materials. Provide materials in accordance with the following:

The materials used for this work shall be made from the reclaimed millings of the existing HMA surface and meet the gradation requirements for 22 A Dense-Graded Aggregates of Section 902.05 of the 2012 Standard Specifications for Construction as close as possible. The method to achieve the gradation needs to be approved by the Engineer before milling starts.

C) Construction

Construct Aggregate Base, ____ inch, Modified in accordance with the requirements of Section 302 of the 2012 Standard Specifications for Construction.

D) Measurement and Payment

The complete work as measured for Aggregate Base, ____ inch, Modified will be paid for at the contract unit price for the following contract pay items and includes all equipment and labor to place this item.

Contract Item (Pay Item)	Pay Unit
Aggregate Base, ____ inch, Modified.....	Square Yard

City of Mt. Pleasant
SPECIAL PROVISION
FOR
HMA APPLICATION ESTIMATE – PARKING LOT

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work shall be done in accordance with the requirements of section 501 of the 2012 Standard Specifications for Construction and applicable supplemental specifications and special provisions, and as specified herein. The HMA Approach bid item shall include paving of HMA Driveways and cross streets. Cross streets shall be constructed in two passes at the same cross-section as the mainline pavement, follow the procedures outlined in MDOT 501.03F4.

B) Materials

The HMA base course shall be HMA, 3C and the top course shall be HMA, 4C.

The leveling course shall have a yield of 220 pounds per square yard and the binder shall be PG 64-28

The top course shall have a yield of 220 pounds per square yard, an AWI of 260, minimum, and the binder shall be PG 64-28.

The HMA Bond Coat material shall be per Section 501.03. The uniform rate of application shall be 0.05 - 0.15 gallons per square yard.

C) Construction

Construct HMA per section 501.03 of the 2012 Standard Specifications for Construction.

D) Measurement and Payment

This work will be measured and paid as specified in section 501 of the Standard Specifications using the following contract items (pay items).

Contract Item (Pay Item)	Pay Unit
HMA, 3C, Leveling Course	Ton
HMA, 4C, Top Course	Ton

City of Mt. Pleasant
SPECIAL PROVISION
FOR
CAR CHARGING STATION

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work shall be done in accordance with the plans and this special provision.

B) Materials

The car charging station shall be a Coulomb Technologies CT2001 bollard type. Input/output power - 7.2 kW; input voltage – 208/240 VAC; output voltage – 240 VAC; input/output current – 30 A; input power connections – Line 1, Line 2, Earth; output charging connector – SAE J1772 EV Connector on 18’ cable; required service panel breaker – 40 A double pole breaker (non-GFCI type) on dedicated circuit; with ISO 15693, 14443 card reader (CT2021-GPRS-SIM1-LOCK-CCR), or approved equal.

C) Construction

This work shall be done in accordance the manufacturers recommendations.

A 1” conduit shall be placed between the control panel and the charging station for installation of a communication line to be installed by others.

D) Measurement and Payment

The complete work as measured for Car Charging Station will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item, including breaker at panel and wiring and conduit to the car charging station from the panel.

Contract Item (Pay Item)

Pay Unit

Car Charging Station.....Each

City of Mt. Pleasant
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC

City of MtPleasant

1 of 1

January 29, 2013

A) Description

Traffic shall be maintained throughout the project according to sections 104.11 and 812 of the Michigan Department of Transportation 2012 Standard Specifications and as specified herein. The Contractor shall for the safety and protection of through and local traffic, furnish, erect, and maintain traffic control devices as shown on the plans and as directed by the Engineer. The Contractor shall remove the traffic control devices in a prompt, safe, and orderly manner upon completion of the work or when directed by the Engineer.

The Contractor shall maintain access to business and residential driveways at all times as described herein.

The Contractor shall notify the Engineer a minimum of 72 business hours prior to the implementation of any detours, street closures, or lane closures.

Traffic control elements, traffic control devices, barricade lighting, barricade spacing, taper lengths, etc., shall conform to the requirements of the 2005 edition of the Michigan Manual of Uniform Traffic Control Devices as amended, unless otherwise specified herein. This includes advance warning signs, barricades and channeling devices at intersecting streets, on which traffic is to be maintained.

The Contractor is required to contact all local and state police, fire, emergency services that have jurisdiction within the construction influence area a minimum of five (5) calendar days prior to the implementation of any lane closure or detours.

Changes and/or adjustments to the maintaining traffic plans and standards may be applied as determined by the Engineer.

1) Construction Influence Area (CIA)

The CIA shall include the right-of-way of the street where work is to take place from the beginning to the end of the construction signing and inclusive of all the construction signing on the intersecting streets & detours.

B) Materials

All traffic control devices and their usage shall conform to the 2005 edition of the Michigan Manual of Uniform Traffic Control Devices as amended, and as specified as herein.

Construction signing shall be required as shown in the Maintaining Traffic plan sheets.

Signs, barricades, and plastic drums shall be cleaned over the entire surface as required by the Engineer.

1) Temporary Signs

All signs must be approved by the Engineer prior to use.

All diamond-shaped warning signs shall be 48" x 48" mounted at a 7' minimum bottom height. Distances shown between construction warning, regulatory, and guide signs shown on the plans and typical are approximate and may require field adjustment, as directed by the Engineer.

All temporary signs shall be constructed with legends and symbols flush to the sign's face and not extending beyond the sign borders or edges. Temporary warning, regulatory, and guide signs not required for a particular work Operation shall be removed, completely covered, or laid down with the legs off, as directed by the Engineer.

C) Construction

The contractor shall limit street excavation activities to 300 feet at a time. The contractor's backfill and aggregate base placement shall follow closely behind, such that no more than 300 feet of road shall be without existing pavement or a minimum of four (4) inches of compacted gravel on the sub-base.

1) Business Access

Pedestrian access to the north side of the businesses shall be maintained at all times. During the one week period of removing and replacing the sidewalks adjacent to the buildings, signage must be placed to redirect pedestrian traffic to the front of the businesses on Broadway Street. This will be done for each phase of work.

D) Measurement and Payment

This work will be measured and paid as specified in section 403 & 802 of the Standard Specifications using the following contract items (pay items).

Contract Item (Pay Item)	Pay Unit
Minor Traf Devices	Lump Sum

City of Mt. Pleasant
SPECIAL PROVISION
FOR
PRECONSTRUCTION AUDIO VIDEO RECORDING

City of MtPleasant

1 of 4

April 12

A) Description

The work covered under this special provision consists of furnishing all labor, materials and equipment to provide High Definition color video recording along the entire length of the project to serve as a record of "original" conditions.

B) Equipment

All audio-video taping equipment shall be supplied and operated by a professional firm actively engaged in pre-construction audio-video recording.

C) Inspection

1) Requirements

Prior to commencing any other work, a continuous color audio-video recording shall be made of the project.

i) Coverage Area

Shall include all above ground features located within the zone of construction influence. Of particular concern are any existing faults, fractures, defects or other imperfections exhibited by any above ground features.

2) Qualifications

The audio-video and photography shall be performed by a professional, qualified, established audio-video recording firm knowledgeable in construction practices which have a minimum of one year of experience in the implementation of established inspection procedures.

3) Acceptance of Recording

The City reserves the right to reject the audio-video recording because of poor quality, unintelligible audio, or uncontrolled pan or zoom. Any recording rejected by the City shall be re-recorded at no cost to the City. Under no circumstances shall construction begin until the City has received and accepted the audio-video recording.

4) Equipment

When conventional wheeled vehicles are used for recording, the distance from the camera lens to the ground shall not be less than twelve (12) feet to insure proper perspective. In some instances, audio-video coverage will be required in areas not accessible on conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Engineer.

i) Audio-Video Recording Media

The audio-video recording provided shall be a color cassette utilizing the VHS format and shall be compatible with the City's tape player or in a DVD format.

ii) Camera(s)

A color video camera shall be used that shall have High Definition recording capability. The camera shall be a professional quality camera acceptable to the Engineer.

5) Execution

i) Audio

Each tape shall begin with the current date, project name, project number and municipality, and be followed by the general location; i.e. name of the street or location of "cross country" line, viewing side and direction of progress.

ii) Video

To preclude the possibility of tampering or editing in any manner, all video recordings shall, by electronic means, display continuously and simultaneously generated transparent digital information to include the date and time of recording, as well as the corresponding engineering stationing numbers. The date information will contain the month, day and year. For example, 3/16/01, and shall be placed directly below the time information. The time information shall consist of hours, minutes, and seconds, separated by colons. For example, 11:25:14. This transparent information shall appear on the extreme upper left-hand third of the screen.

(1) Engineering Station Numbers

Station numbers shall be continuous, accurate, correspond to the project stationing and include the standard engineering symbols (for example, 16+50). This information shall appear in the lower half of the viewing screen.

(2) Additional Information

Below the engineering stationing, periodic transparent alphanumeric information, consisting of the name of the project, name of the area covered, direction of travel, viewing side, etc., shall appear.

iii) Audio-Video Tracks

The audio-video recording shall consist of one (1) video and two (2) audio tracks, all of which shall be recorded simultaneously. All tracks shall consist of original, live recordings and, thus, shall not be copies of other audio or video recordings. Audio track 1 shall contain the narrative commentary of the camera operator, recorded simultaneously with his fixed elevation video record of the zone of influence of construction. Audio Track 2 shall contain the narrative commentary and evaluations of the ground level remote technician whose function shall be to provide a complete circumspection of any features not adequately visible to the camera operator and to describe in detail the extent of any damage encountered. In order to maintain viewer orientation, transition from fixed camera overview to remote camera picture shall be by means of an electronic dissolve.

iv) Lighting Requirements

All taping shall be done during times of good visibility. Auxiliary lighting may be required to fill in shadow areas and/or when recording inside a building. The lighting shall be sufficient to illuminate all details in the area. Lighting shall be required upon the request of the Engineer.

v) Recording Coverage

Recording coverage shall include all surface features located within the zone of influence of construction specified on the plans and supported by appropriate audio description. Audio description shall be made simultaneously with video coverage.

(1) Coverage

Video coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, ditches, streets (including condition of paving for full width), landscaping, trees, culverts, catch basins, manholes, headwalls, retaining walls, fences, visible utilities, and all buildings located within the zone of influence. Of particular concern are any existing faults, fractures, defects, or other imperfections exhibited by the above-mentioned surface features.

(2) Houses and Buildings

Structures shall be identified visually by house or building number, when possible, in such a manner that the progress of the tape and the proposed construction may be located by reference to the houses and buildings.

(3) General

Taping shall not be done during periods of visible precipitation or when more than 10% of the ground area is covered with snow, leaves, floodwaters or debris, unless otherwise authorized by the Engineer.

(4) Rate of Speed

The rate of speed in the general direction of travel of conveyance used during taping shall not exceed 48 feet per minute. Panning rates and zoom-in, zoom-out rates shall be controlled sufficiently such that the rates will produce clarity of the object viewed during playback of the tapes.

(5) Coverage Area

The Engineer shall have the authority to designate areas that may be omitted or added for audio-video coverage.

(6) Identification

(a) Tape Cassettes and Tape Cases

Cassettes and cases shall be properly identified by tape number, location and project name and municipality in a manner acceptable to the Engineer.

(b) Records

A record of the contents of each tape shall be supplied by a sheet identifying each segment of the tape by location; i.e. roll number, street or road viewing, tape counter number, viewing side, point starting from, traveling direction and ending destination point.

D)

Measurement and Payment

The complete work as measured for Preconstruction Audio Video Taping will be paid for at the contract unit price for the following contract pay item and includes all material, equipment, and labor to complete the item.

Contract Item (Pay Item)

Pay Unit

Preconstruction Audio Video Recording..... Lump Sum

City of Mt. Pleasant
SPECIAL PROVISION
FOR
RESTORATION, MODIFIED

City of MtPleasant

1 of 3

January 29, 2013

A) Description

- i) This work shall include all labor, materials and equipment to clean up and restore public and private ground to a condition equal to or better than that which existed prior to construction. This includes removal and legal disposal of all construction debris, litter, and materials.

B) Materials

- 1) Topsoil
Black dirt or natural surface soil, high in organic material, free from stones, brush, debris, objectionable weeds, or other litter, and approved by the City Engineer prior to spreading. The engineer may perform a soil test prior to approval. Peat material is not acceptable.
- 2) Fertilizer
Fertilizer shall be commercial seed starting 20-10-10 grade supplied in the manufacturer's packaging with composition clearly marked. Bulk fertilizer may be used when certified delivery slips are furnished by the Contractor, meeting section 816 of the 2012 MDOT specifications.
- 3) Seed
Seed material and application shall meet section 816 of the 2012 MDOT specifications, using TUF seed mixture.
- 4) Mulch and Adhesive
Mulch and adhesives shall meet section 816 of the 2012 MDOT specifications, for wood fiber mulch. Paper mulch or straw are not acceptable.

C) Construction

- 1) Preparation of Seed Bed
 - i) Grading
Grades on areas to be seeded shall be maintained in a true and even condition. Where the grades are not defined, they shall be established by the Contractor to blend with existing adjacent grades without irregularities and shall provide for proper drainage.
 - ii) Placing Topsoil
Topsoil shall be evenly spread by blade graders, or other approved methods, to a minimum depth of four inches (4"). Any irregularities in the surface resulting from

topsoiling or other operations shall be corrected in order to prevent the formation of depressions where water will stand. Topsoil shall not be placed until the subgrade has been smoothly graded and compacted, and the engineer or inspector approves the subgrade in writing.

iii) Application of Fertilizer

Fertilizer shall meet the requirements of section 812 of the 2012 MDOT specifications for Class A fertilizer.

iv) Cleanup

After completion of the above operations, the surface shall be cleared of stones, roots, brush, wire, grade stakes, and other objects that might be a hindrance to maintenance operations.

2) Seeding

TUF seed mixture meeting requirements of section 816 of the 2012 MDOT specifications shall be used on all lawn areas and adjacent backslopes. No seeding shall be done until the Engineer has inspected the seed container and has given written approval of the topsoil. Seeding for erosion control measures shall be cereal rye seed.

3) Mulching

i) Straw and Hay Mulch

As part of the seeding and fertilizing operations, wood fiber mulch shall be spread over the surface as required in section 816 of the 2012 MDOT specifications. Paper mulch is not acceptable.

ii) Mulch Adhesive

Mulch shall be held in place by a spray coating of mulch adhesive. The Contractor shall protect all traffic, signs, structures, and other objects from being marked or disfigured by the adhesive material. Fire hydrants shall be covered prior to the placement of all sprayed materials. Adhesive material shall be applied uniformly at a rate of 400 gallons per acre, sprayed simultaneously with the mulch, or a surface application of adhesive sprayed immediately following mulching.

4) Establishment of Seeded Areas

The Contractor shall be responsible for the proper care of the seeded area during the period when the grass is becoming established, and shall be responsible for a total grass cover. The acceptance of the work will not be given until grass cover is established.

i) Watering

Seeded areas shall be watered whenever excessive drying is evident during the period set for establishment of the seeded area. The Contractor shall be responsible for the proper care of the seeded areas and for the establishment of a uniform stand of grass until final acceptance of the entire work covered by the Contract.

The City has established a program to encourage residents to water the newly seeded areas, to help establish the lawn. Residents will be given a credit on their water bill for watering the newly seeded areas.

ii) Weeds

After the grass has become established, if it appears to have more than ten percent (10%) weeds, the Contractor shall spray with an approved herbicide (weed killer).

D) Measurement and Payment

Restoration, Modified shall be paid for by the square station as measured along the project centerline and will include all work necessary to restore both sides of the street. The price paid shall be payment in full for all Restoration, Modified work.

Contract Item (Pay Item)	Pay Unit
Restoration, Modified	Square Yard

City of Mt. Pleasant
SPECIAL PROVISION
FOR
DUMPSTER ENCLOSURE

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work consists of constructing and installing underdrains.

B) Materials

1) CMUs: ASTM C 90

- i) Products: Subject to compliance with requirements, providing the following:
- ii) Density Classification: Normal weight.
- iii) Size (Width) Nominal 8"x8"x16"
- iv) Pattern and Texture:
 - (1) Standard Pattern
 - (2) Standard Pattern, split-face finish
- v) Colors: Standard Concrete Color. No special color.
- vi) Flashing: Mortar Net USA Inc.: Blok-Flash
- vii) Mortar: Masonry Cement Mortar
 - (1) ASTM C 270, Type N
 - (2) Masonry Cement: 1 part
 - (3) Mortar Sand: 2½ parts min./3 parts max.

2) Steel Framing for Dumpster Corral and Gates:

- i) Steel Plates, Shapes, and Bars: ASTM a 36/A 36M
- ii) Steel Tubing: ASTM A 500, cold formed steel tubing.
- iii) Steel Panels: Zinc-coated (galvanized) steel sheet complying with ASTM A 653/A 653M
- iv) Size: As noted on plans.
- v) Bolts Galvanized
 - (1) ASTM A 325, ½-inch diameter minimum unless indicated otherwise on the drawings.
- vi) Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- vii) Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM a 123/A 123M.
- viii) Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

3) CMU Painting System:

- i) Block Filler, Latex, Interior/Exterior
- ii) Latex, Exterior Flat
 - (1) Color to be selected by Owner

4) Concrete Footings: Per Section 706 of the 2012 Standard Specifications for Construction.

- i) Concrete: Grade S2 per Section 701 of the 2012 Standard Specifications for Construction.
- ii) Steel Reinforcement per Section 905 of the 2012 Standard Specifications for Construction.

5) Hollow Metal Door and Frames:

- i) Doors: Extra Heavy Duty
 - (1) Thickness: 1 3/4"
 - (2) Face: Metallic-coated steel sheet, minimum thickness of 0.053 inch with minimum A40 coating.
 - (3) Edge Construction: Model 2, Seamless
 - (4) Core: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core at manufacturer's discretion.
- ii) Frames: with masonry frame anchors
 - (1) Materials: Metallic-coated steel sheet, minimum thickness of 0.053 inch with minimum A40 coating.
- iii) Exposed Finish: Factory Prime, 2 coats of Alkyd, Exterior, Semi-gloss (MPI #94).
 - (1) Color to be selected by owner.

C) Construction

Construct Dumpster Enclosure, Special in accordance with the following:

1) CMU

- i) Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- ii) Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in bond pattern indicated on Drawings; do not use units with less than nominal 8-inch horizontal face dimensions at corners or jambs.
- iii) Fill cores in hollow CMUs with grout at posts, and similar items unless otherwise indicated.
- iv) Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- v) Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
- vi) Install single-wythe CMU flashing system in bed joints of CMU walls where indicated to comply with manufacturer's written instructions. Install CMU cell pans with upturned edges located below face shells and webs of CMUs above and with weep spouts aligned with face of wall. Install CMU web covers so that they cover upturned edges of CMU cell pans at CMU webs and extend from face shell to face shell.
- vii) Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.

2) Steel Framing for Dumpster Corrals and Gates:

- i) Fabrication: Conform to applicable portions of AISC:
 - (1) Specification for the Design, Fabrication, and Erection of Structural Steel for Building.

- (2) Code of Standard Practice (excluding Code of Standard Practice - Section 4.2.1).
- ii) Install items square and level, accurately fitted and free from distortion and defects.
- iii) Provide all shoring, bracing and accessories required for complete erection.
- iv) Bolts shall be tightened snug-tight as defined by AISC, unless otherwise noted on the Drawings.

3) Painting:

- i) Paint CMU with one coat of block filler and two finish coats.

4) Structural Concrete:

- i) Construct per Section 706 of the 2012 Standard Specifications for Construction.

5) Hollow Metal Doors and Frames

- i) Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.
- ii) Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- iii) Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware
- iv) Install hollow-metal work plumb, rigid, properly aligned, and securely fastened in place. Comply with Drawings and manufacturer's written instructions
- v) Remove temporary braces necessary for installation only after frames have been properly set and secured
- vi) Field apply bituminous coating to backs of frames that will be filled with grout containing antifreezing agents
- vii) Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with grout
- viii) Fit hollow-metal doors accurately in frames, within clearances specified below. Shim as necessary
 - (1) Between Door and Frame Jambs and Head: 1/8 inch plus or minus 1/32 inch.
 - (2) At Bottom of Door: 3/4 inch plus or minus 1/32 inch.
 - (3) Between Door Face and Stop: 1/16 inch to 1/8 inch plus or minus 1/32 inch.

D) Measurement and Payment

The complete work as measured for Dumpster Enclosure, Special will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item.

Contract Item (Pay Item)	Pay Unit
Dumpster Enclosure, Special	Lump Sum

City of Mt. Pleasant

SPECIAL PROVISION
FOR
UNDERDRAIN, SUBGRADE, OPEN-GRADED, 4 INCH, MODIFIED

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work consists of constructing and installing underdrains.

B) Materials

MDOT 34G aggregate
4-inch geotextile-wrapped perforated plastic pipe

C) Construction

This work shall be done in accordance with the requirements of section 404.03 of the MDOT 2012 Standard Specifications for Construction with the following exceptions:

- 1) Backfill from trench bottom to 2 inches above shall be MDOT 34G
- 2) The remaining trench shall be backfilled with class II sand, compacted by means of a vibratory compactor, to at least 95% of its maximum density.
- 3) Underdrain pipe will be geotextile-wrapped: 34-G backfill will not be wrapped.
- 4) Unless otherwise specified on the plans, underdrain pipe shall be placed at an elevation such that the bottom of the pipe is at an elevation 4 feet below the top of curb elevation.

D) Measurement and Payment

This work will be measured and paid as specified in section 404.04 of the MDOT 2012 Standard Specifications with the following exception. The unit price for Underdrain, Subgrade, Open-Graded, 4 inch, Modified shall include the following:

- 1) The cost of providing the pipe and fittings with a geotextile wrap.
- 2) Not the cost of providing and lining the trench with geotextile.
- 3) The cost of connecting the downstream end of the underdrain pipe to either a drainage structure or an existing underdrain pipe.

Contract Item (Pay Item)

Pay Unit

Underdrain, Subgrade, Open-Graded, 4 inch, Modified.....Foot

City of Mt. Pleasant
SPECIAL PROVISION
FOR
WATER SYSTEM MATERIALS AND CONSTRUCTION

City of MtPleasant

1 of 1

January 29, 2013

A) Description

The Contractor shall furnish all labor, equipment, and materials to completely construct, test, and place in operation, the water system as shown on the drawings and specified herein.

B) Materials

1) Water Services

Allowable sizes are one inch, two inch, four inch (1", 1½", 2", 4"), or as specified for mains. Service saddles are required at each service connection on water main.

- i) Type K annealed seamless copper tubing conforming to ASTM B-88.
- ii) One and one half inch (1½") shall be copper tube size, polyethylene (PE) water service pipe meeting AWWA C901 specifications. Markings on the pipe shall be AWWA C901, PE 3406, ASTM D-2737, dimension ratio SDR-9 brand name, date of manufacture, nominal size, sizing type (i.e., copper tube Size (CTS)), pressure rating 160 PSI at 73 1/2oF temperature, seal or (mark) of accuracy.

2) Service Fittings

- i) Unions will not be allowed between corporation stop and the curb stop. New services and the repair of existing services shall be made so that there will be a continuous, unbroken pipe between the corporation stop and the curb stop.
- ii) Service Saddles - Double-strap bronze or brass parts, AWWA CC threads. For PVC C900 pipe, use Ford S90 or approved equivalent.
- iii) Brass Corporation Stops [With CC (AWWA) threads
 - (1) Ford - one and one half inch (1½") F600 for copper pipe or FB 1000-G for CTS PE pipe; Mueller – one and one half inch (1½") H15000 for copper pipe or H-15008 for CTS PE pipe or approved equivalent.
- iv) Brass Curb Stops – two inch (2") Minneapolis pattern required.
 - (1) Ford Z22-333M, Z22-444M, Z44-666M, Mueller P25155 or approved equivalent. Polyethylene pipe will require a Ford C 06-44 adapter or equal.
- v) Curb Stop Boxes – six feet (6') burial – two inch (2") Minneapolis tapped base with 1-1/4 inch upper section riser with pentagon brass nut in cap. Mueller H10300, Ford type PL or approved equivalent.

- vi) Meter Box – Yokebox to be poured into slab
(1) Ford Long Yokebox for 1” Meter: Model LYLBB144-444 or approved equal.
- vii) Yard Hydrant –
(1) Woodford Model R34 Freezeless Yard Hydrant – 2 foot bury depth or approved equal.

C) Construction

1) Water Service Connection

- i) Water service connections shall not be made prior to the water main passing the bacteriological tests.
- ii) Water service materials must meet City specifications and be one inch (1") in size, unless specified otherwise.
- iii) Each service will consist of a saddle, corporation, piping, curb stop, and curb box.
- iv) Depth shall be a minimum of six feet (6') and a maximum of seven feet (7') of cover to the finished grade of the project or development.
- v) Curb boxes shall be adjusted to finished grade.
- vi) Curb boxes shall be fully screwed onto the curb stop valve.
- vii) Pipe must be beveled and lubricated with an approved lubricant for use on potable water systems.
- viii) Curb stops are to be installed so that the key top is parallel to curb, or proposed curb, when in the off position. (i.e. Flow is to be perpendicular to curb.) Curb boxes installed in concrete or bituminous areas shall be separated from the concrete or bituminous by the use of a length of four inches (4") PVC pipe.
- ix) The Contractor will check to see if existing curb stop is in the on or off position and leave new curb stop in same position. No curb stop valve will be turned on unless there is someone in the building to ensure there are no leaks.
- x) Water services, if extended past the curb stop, shall be extended straight for a minimum of six feet (6') or past the right-of-way line perpendicular to the curb or proposed curblines.
- xi) Services are to be flushed prior to backfilling.
- xii) Taps are to be on the service side of the main.
- xiii) Taps shall be horizontal to five degrees above horizontal.
- xiv) Cookies must be given to the inspector at the time of tap.

2) Live Taps

All service taps shall be made live taps, including chlorination and testing taps.

D) Measurement and Payment

1) Water Service, ____inch

i) Description

The work of Water Service, ____inch, shall consist of excavation, furnishing and placement of sand backfill, removal of surplus excavated material, tapping the main, furnishing and installation of service clamp or saddle, corporation stops, curb stops, curb boxes, service pipe, and fittings to connect to existing service pipe, in accordance with the Specifications. The water service pipe shall be directionally drilled.

ii) Method of Measurement and Basis of Payment

Water Service, ____inch, shall be paid for by the unit each, and shall include tapping the main, furnishing and installation of service clamp or saddle, corporation stops, curb stops, curb boxes, service pipe, and fittings to connect to existing service pipe, in accordance with the Specifications.

1) Meter Box and Yard Hydrant

i) The work of Meter Box and Yard Hydrant includes all labor, material and equipment required to install the meter box and yard hydrant and associated piping.

Contract Item (Pay Item)

Pay Unit

Water Service, ____inch	Each
Meter Box and Yard Hydrant	Lump Sum

City of Mt. Pleasant
SPECIAL PROVISION
FOR
PARKING ACCESSORIES

City of MtPleasant

1 of 1

January 29, 2013

A) Description. Furnish and install parking accessories according to this Special Provision.

B) Materials. Provide materials in accordance with the following:

- 1) Bench:
 - i) Manufacturer: Victor Stanley
 - ii) Model: CR-10 (with back); CR-5 (without back)
 - iii) Color: Black

- 2) Trash Receptacle:
 - i) Manufacturer: Victor Stanley
 - ii) Model: DYN-SD-36
 - iii) Color: Black

- 3) Plant Hanger Brackets
 - i) Manufacturer: Bloommaster
 - ii) Model: Lamp Post Bracket 101
 - iii) Color: Blue to match light poles

- 4) Hanging Planter Baskets:
 - i) Manufacturer: Eckart's Greenhouse
 - ii) Model: 16" Weekender
 - iii) Color: Black

- 5) Bike Tree:
 - i) Manufacturer: Bike Petal, LLC
 - ii) Model: 8 place (free standing)
 - iii) Color: Selected by Owner

- 6) Round Planters:
 - i) Manufacturer: Wausau Tile
 - ii) Model: TF4230
 - iii) Color: B1 (Weatherstone Grey)

- 7) Concrete Pad for Precast Planters
 - i) Type P1 Concrete per Section 601 of the Michigan 2012 Standard Specifications for Construction.
 - ii) Expansion Joint per subsection 914.03 of the Michigan 2012 Standard Specifications for Construction.
 - iii) Backrod per subsection 914.04.B of the Michigan 2012 Standard Specifications for Construction.
 - iv) Sealant: Sikaflex 2C SL or approved equal.

C) Construction

Install Parking Accessories as shown on the plans in accordance with the manufacturers' recommendations and requirements of this Special Provision.

D) Measurement and Payment

The complete work as measured for Parking accessories will be paid for at the contract unit price for the following contract pay items and includes all equipment and labor to furnish and place these items.

Payment for the Planter and Planter Pad includes the concrete pad, expansion joint, backrod, sealant, and the planter.

Contract Item (Pay Item)	Pay Unit
Bench with Back.....	Each
Bench without Back.....	Each
Trash Receptacle	Each
Plant Hanger Bracket and Basket.....	Each
Bike Tree.....	Each
Planter and Planter Pad	Each

City of Mt. Pleasant
SPECIAL PROVISION
FOR
CONCRETE PAVT, REM, SPECIAL

City of MtPleasant

1 of 1

January 29, 2013

A) Description

Remove Concrete Pavt, Rem, Special according to Section 204 of the 2012 Standard Specifications for Construction and this special provision.

B) Materials

Not used.

C) Construction

Remove concrete pavement in its entirety in accordance with the requirements of subsection 204.03.A.1 and Section 204.03 of the Michigan 2012 Standard Specifications for Construction.

D) Measurement and Payment

The complete work as measured for Concrete Pavt, Rem, Special will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item. The pay unit will be based upon field measured quantities in place, prior to breaking of concrete.

Contract Item (Pay Item)	Pay Unit
Concrete Pavt, Rem, Special	CYD

City of Mt. Pleasant
SPECIAL PROVISION
FOR
MODIFY RAILING, SPECIAL

City of MtPleasant

1 of 1

January 29, 2013

A) Description

Modify the existing handrails and fencing according to this special provision.

B) Materials

Utilize existing material.

C) Construction

Remove and replace railing as indicated on the plans. Modification of railing at the ramp and stairs of Isabella Bank will be completed by others.

D) Measurement and Payment

The complete work for Modify Railing, Special will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete this item.

Contract Item (Pay Item)

Pay Unit

Modify Railing, SpecialLump Sum

City of Mt. Pleasant
SPECIAL PROVISION
FOR
IRRIGATION SYSTEM

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work consists of constructing and installing the irrigation system.

B) Materials

1) Pipe:

- i) PE Pipe with Controlled ID: ASTM F 771, PE 3408 compound; SIDR 11.5.
 - (1) Insert Fittings for PE Pipe: ASTM D 2609, nylon or propylene plastic with barbed ends. Include bands or other fasteners.

2) Valves:

- i) Ball Valves, Bronze
 - (1) Standard: MSS SP-110
 - (2) SWP Rating: 150 psig
 - (3) CWP Rating: 600 psig
 - (4) Body Design: Two piece
 - (5) Body Material: Bronze
 - (6) Ends Threaded or solder joint if indicated.
 - (7) Seats: PTFE or TFE
 - (8) Stem: Bronze.
 - (9) Ball: Chrome-plated brass
 - (10) Port: Full
- ii) Gate Valves, Bronze
 - (1) Standard: MSS SP-80, Type 2
 - (2) Class: 125
 - (3) CWP Rating: 200 psig
 - (4) Body Material ASTM B 62 bronze with integral seat and screw-in bonnet.
 - (5) Ends: Threaded or solder joint
 - (6) Stem: Bronze, nonrising
 - (7) Disc: Solid wedge; bronze
 - (8) Packing: Asbestos free
 - (9) Handwheel: Malleable iron, bronze, or aluminum.
- iii) Pressure Reducing Valves
 - (1) Standard: ASSE 1003
 - (2) Body Material: Bronze
 - (3) Pressure Rating: Initial pressure of 150 psig
 - (4) End Connections: Threaded.

- iv) Water Control Valves
 - (1) Main Valve Body: Cast- or Ductile-iron body with AWWA C550 or FDA-approved, interior epoxy coating; or stainless-steel body.
 - (2) Pattern: Globe-valve design.
 - (3) Trim: Stainless Steel.
 - (4) Pressure Rating: Initial pressure of 150 psig.
 - (5) End Connections: Threaded.
- v) Automatic Control Valves; Bronze
 - (1) Cast-bronze body, normally closed, diaphragm type with manual-flow adjustment, and operated by 24-V ac solenoid.
- vi) Automatic Drain Valves
 - (1) Spring-loaded-ball type of corrosion-resistant construction and designed to open for drainage if line pressure drops below 2.5 to 3 psig.

3) Transition Fittings

- i) Transition Coupling
 - (1) AWWA C219, metal sleeve-type coupling for underground pressure piping.
- ii) Plastic-to-Metal Transition Fittings
 - (1) PVC one-piece fitting with manufacturer's Schedule 80 equivalent dimensions; one end with threaded brass insert, and one solvent-cement-socket end.

4) Miscellaneous Piping Specialties

- i) Water Hammer Arresters: ASSE 1010 or PDI WH 201, with bellows or piston-type pressurized cushioning chamber and in sizes complying with PDI WH 201, sizes A to F.
- ii) Pressure Gages: ASME B40.1. Include 4.5 inch diameter dial, dial range of two times system operating pressure, and bottom outlet.

5) Sprinklers

- i) Designed for uniform coverage over entire spray area indicated at available pressure.
- ii) Plastic, Pop-up, Spray Sprinklers:
 - (1) Body Material: ABS
 - (2) Nozzle: Brass
 - (3) Retraction Spring: Stainless steel
 - (4) Internal Parts: Corrosion resistant.
 - (5) Pattern: Fixed, with flow adjustment.
- iii) Plastic Shrub Sprinklers:
 - (1) Body Material: ABS or other plastic.
 - (2) Pattern: Fixed, with flow control.

6) Drip Irrigation Specialties

- i) Freestanding Emitters: Device to deliver water at approximately 20 psig
 - (1) Body Material: PE or vinyl, with flow control.
 - (2) Riser to Emitter: PE or PVC Flexible tubing.
 - (3) Flow: As required.
 - (4) Tubing: PE or PVC.
 - (5) Mounting Location: in planters and at baskets on light poles.

- ii) Manifold Emitter Systems: Manifold with tubing and emitters.
 - (1) Manifold: With multiple outlets to deliver water to emitters.
 - (2) Body Material: Plastic
 - (3) Outlet Caps: Plastic, for outlets without install tubing.
 - (4) Tubing: PE or PVC; 1/8" minimum ID.
 - (5) Emitter: Device to deliver water at approximately 20 psig.

- iii) Multiple-Outlet Emitter Systems: Emitter with tubing and button-type outlets.
 - (1) Emitter: With multiple outlets to deliver water to remote outlets.
 - (2) Body Material: Plastic with flow control.
 - (3) Outlet Caps: Plastic, for outlets with installed tubing.
 - (4) Operation: Automatic pressure compensating.
 - (5) Emitters: Devices to deliver water at approximately 20 psig.
 - (6) Tubing: PE or PVC; 1/8" minimum ID.

- iv) Filter Units: Brass or plastic housing, with corrosion-resistant internal parts; of size and capacity required for devices downstream from unit.

- v) Air Relief Valves: Brass or plastic housing, with corrosion-resistant internal parts.

- vi) Vacuum Relief Valves: Brass or plastic housing, with corrosion-resistant internal parts.

7) Controllers

- i) Baseline Irrigation Solutions; BaseStation 1000. No substitutions.

C) Construction

Install Irrigation System in accordance with the manufacturers' recommendations to distribute water as shown on the Landscape Plan. The design of the system shall be submitted to the Engineer for approval prior to installation.

D) Measurement and Payment

The complete work as measured for Irrigation System will be paid for at the contract unit price for the following contract pay items and includes all material, equipment, and labor to complete an operable system.

Contract Item (Pay Item)	Pay Unit
Irrigation System	Lump Sum

City of Mt. Pleasant

SPECIAL PROVISION
FOR
ELECTRICAL AND LIGHTING

City of MtPleasant

1 of 1

January 29, 2013

A) Description

This work consists of installing Owner provided lighting units and Contractor furnished and installed electrical items. Complete this work in accordance with Section 819 of the Michigan 2012 Standard Specifications for Construction and to the requirements of the NEC, the National Electric Code, and the Michigan Department of Labor and Economic Growth for those items not identified in the contract.

B) Materials

1) Electrical Items

- i) All conduit, electrical wire and cable, grounding conductor and system, handholes and light pole bases are to be furnished and installed per the electrical specifications on the plans.
- ii) The owner will provide the light poles with outlets, and the luminaires that are shown on the plans. The Contractor will provide any related items required to furnish an operable lighting system.

C) Construction

Construct all work in accordance to the NEC and the specifications on the plans.

C) Measurement and Payment

The complete work for Electrical Lighting will be paid for at the contract unit prices for the following contract pay items and includes all material, equipment, and labor to complete this item.

All work associated with installation of the Owner provided light pole and luminaires will be paid as Light Standard Shaft and Luminaire, ____ foot. This also includes any and all related items to furnish and operable lighting system.

The item of Light Std Fdn, Tall and Light Std Fdn, Short include all work associated with installation of the light pole foundations, including concrete, reinforcing, grounding, conduit, and Owner supplied anchor bolts.

All other electrical work will be paid as Electrical Distribution, Lighting Panel, and Wiring, including existing light removal, temporary furnishing of power to light in Phase II, ground level receptacles, lighting panel, conduit, wiring and cable required to furnish a complete electrical system. This items does not include the items covered under the Car Charging Station Special Provision.

The base bid shall include ground level receptacles as specified on the plans. Provide an alternate to use the following specification for the ground level receptacles:

1. Receptacle pedestal shall be PEDOC Power Solutions model 142-C-HT, standard color.

Contract Item (Pay Item)	Pay Unit
Light Standard Shaft and Luminaire, ____ foot.....	Each
Light Std Fdn, Short	Each
Light Std Fdn, Tall	Each
Electrical Distribution, Lighting Panel, and Wiring.....	Lump Sum

NOTES:

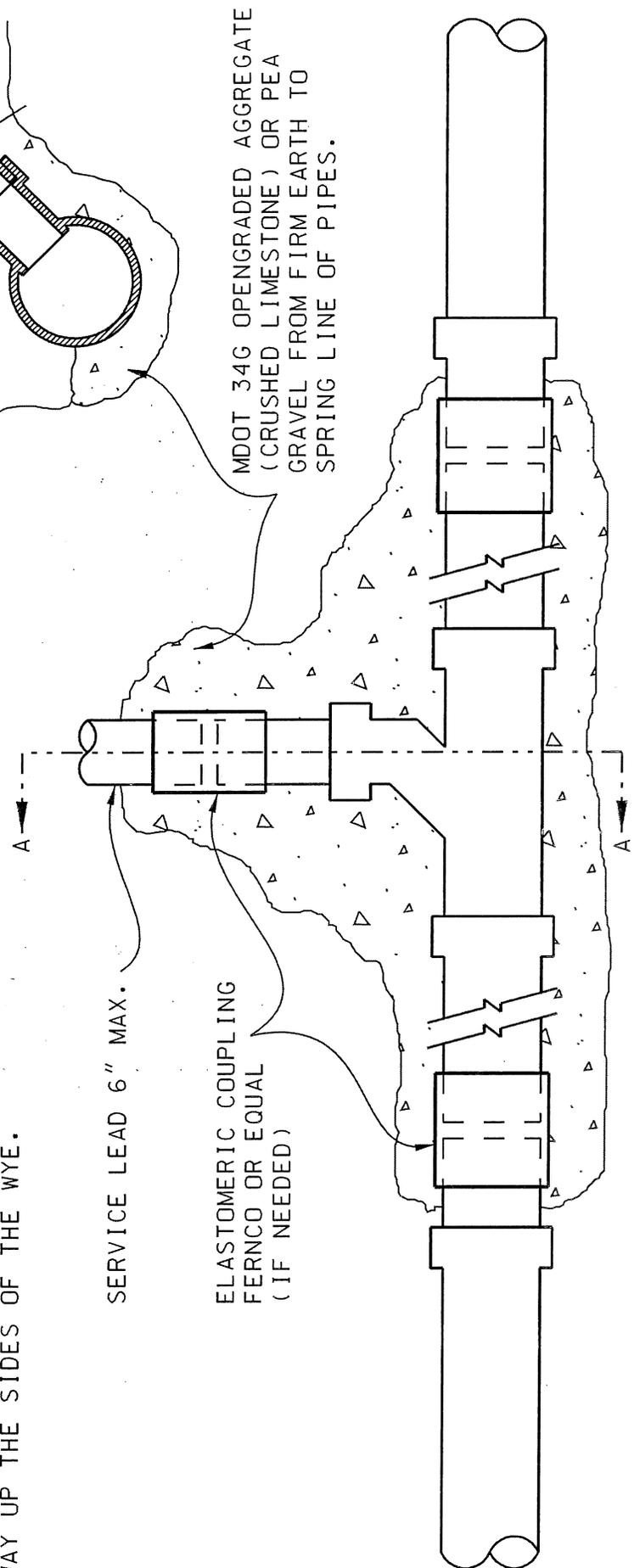
RUBBER COUPLINGS SHALL BE AN ELASTOMERIC COUPLING COMPLETE W/ 300 SERIES STAINLESS STEEL TENSION BANDS ALL MEETING THE REQUIREMENTS OF ASTM C425.

SEWER SECTIONS, WYES, AND SERVICE LATERALS SHALL BE OF THE SAME MATERIALS AS THE ADJACENT SEWER MATERIAL WHERE POSSIBLE.

NEW WYE CONNECTIONS SHALL BE SUPPORTED BY CRUSHED LIMESTONE (MDOT 34G) @ ALL VOIDS BENEATH AND TO A POINT 1/2 WAY UP THE SIDES OF THE WYE.

NO SCALE

SECTION A - A



MDOT 34G OPENGRADED AGGREGATE (CRUSHED LIMESTONE) OR PEA GRAVEL FROM FIRM EARTH TO SPRING LINE OF PIPES.

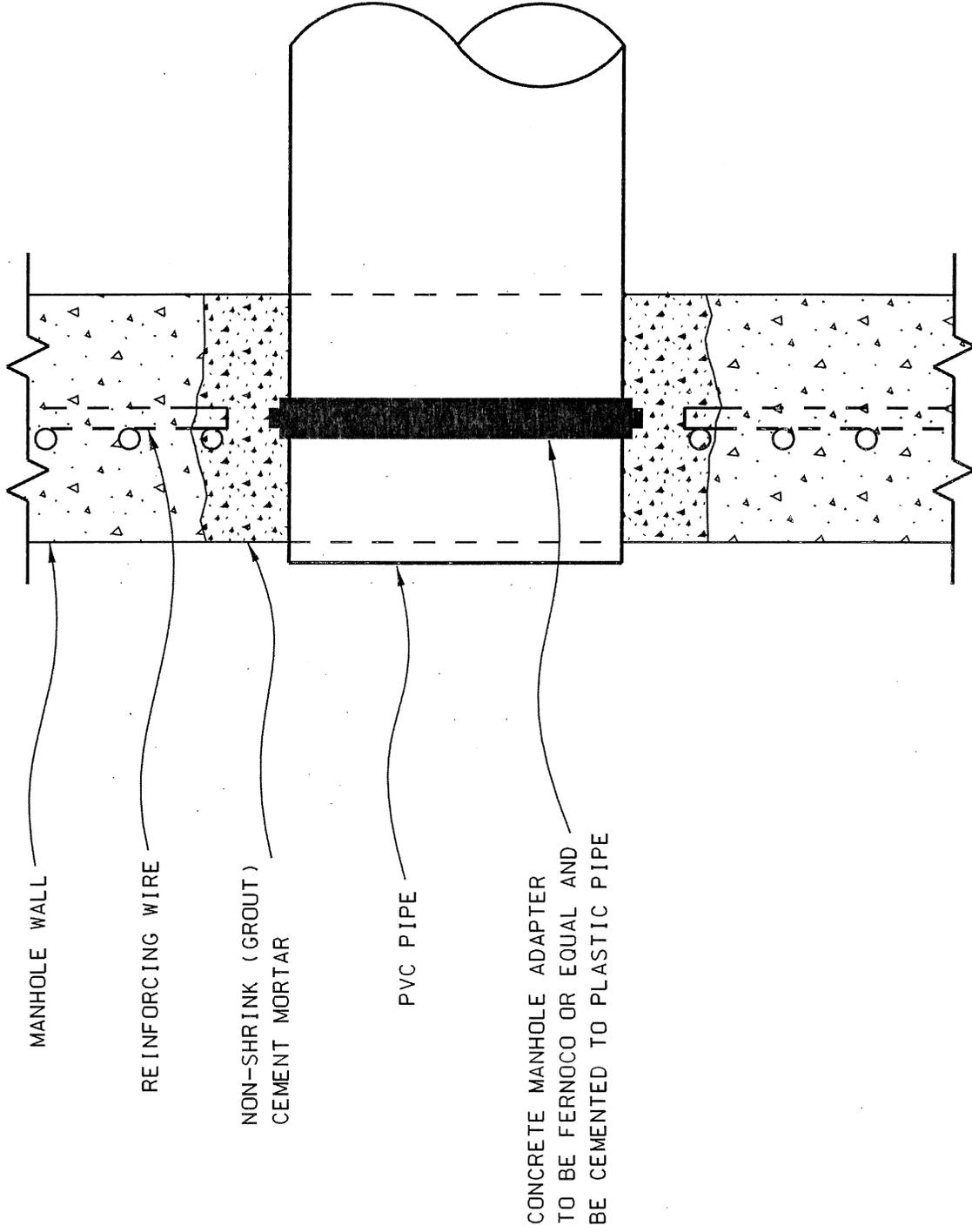
ELASTOMERIC COUPLING FERNCO OR EQUAL (IF NEEDED)

SERVICE LEAD 6" MAX.

DETAIL 5
CITY OF MT. PLEASANT - TYPICAL WYE INSERTION

S.L.B. 4/7/00

NO SCALE



MANHOLE WALL

REINFORCING WIRE

NON-SHRINK (GROUT)
CEMENT MORTAR

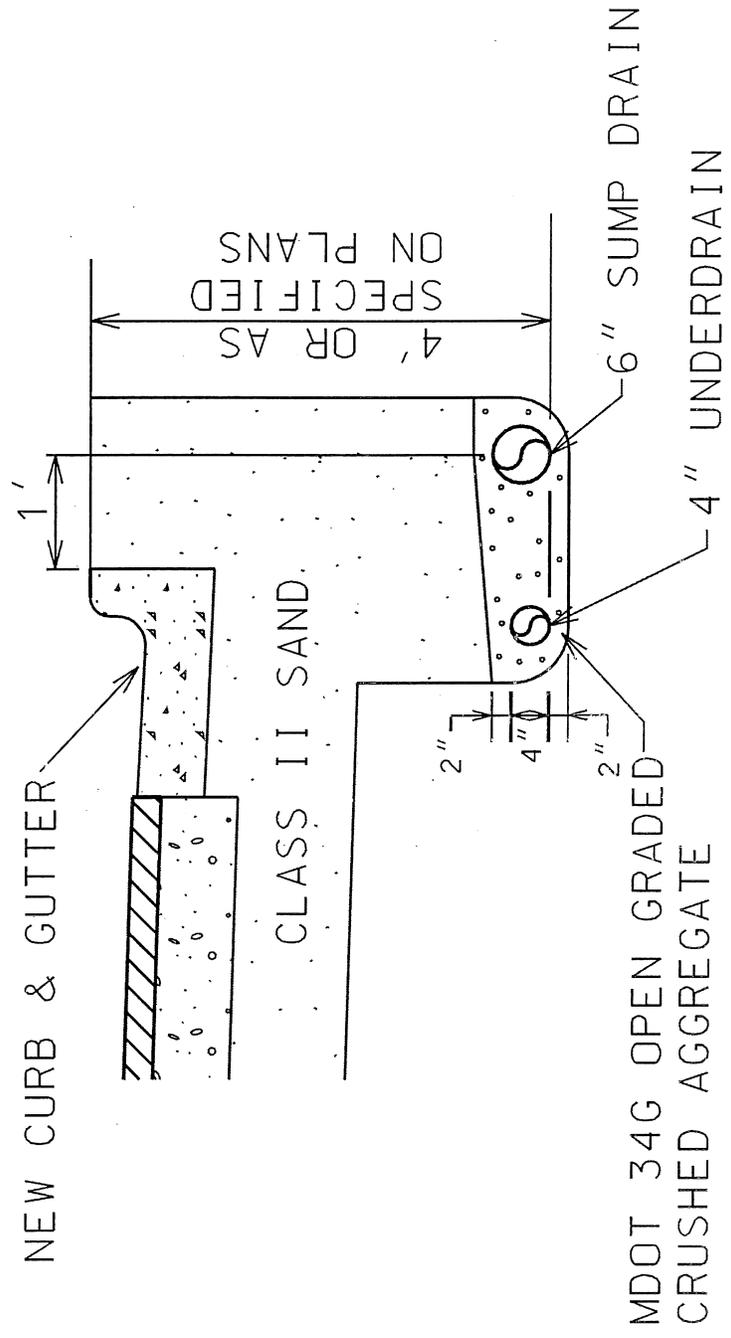
PVC PIPE

CONCRETE MANHOLE ADAPTER
TO BE FERNOCO OR EQUAL AND
BE CEMENTED TO PLASTIC PIPE

DETAIL 10

CITY OF MT. PLEASANT - TYPICAL PVC PIPE CONNECTION TO EXISTING MANHOLE

NO SCALE



DETAIL 22

CITY OF MT. PLEASANT - TYPICAL SUMP AND UNDER DRAIN DETAIL FOR NEW CURB & GUTTER



PROJECT SITE



20

● Mt Pleasant

DRAWING IS NOT TO SCALE



psi Information
To Build On
Engineering • Consulting • Testing

SITE LOCATION DIAGRAM

PROPOSED PAVEMENT RECONSTRUCTION PROJECT
JOCKEY ALLEY AND LOT NO. 2
MT. PLEASANT, ISABELLA COUNTY, MICHIGAN

FIGURE NO. 1

PSI PROJECT NO. 0408-610
DRAWN BY: ESR
DATE: 01/31/2013

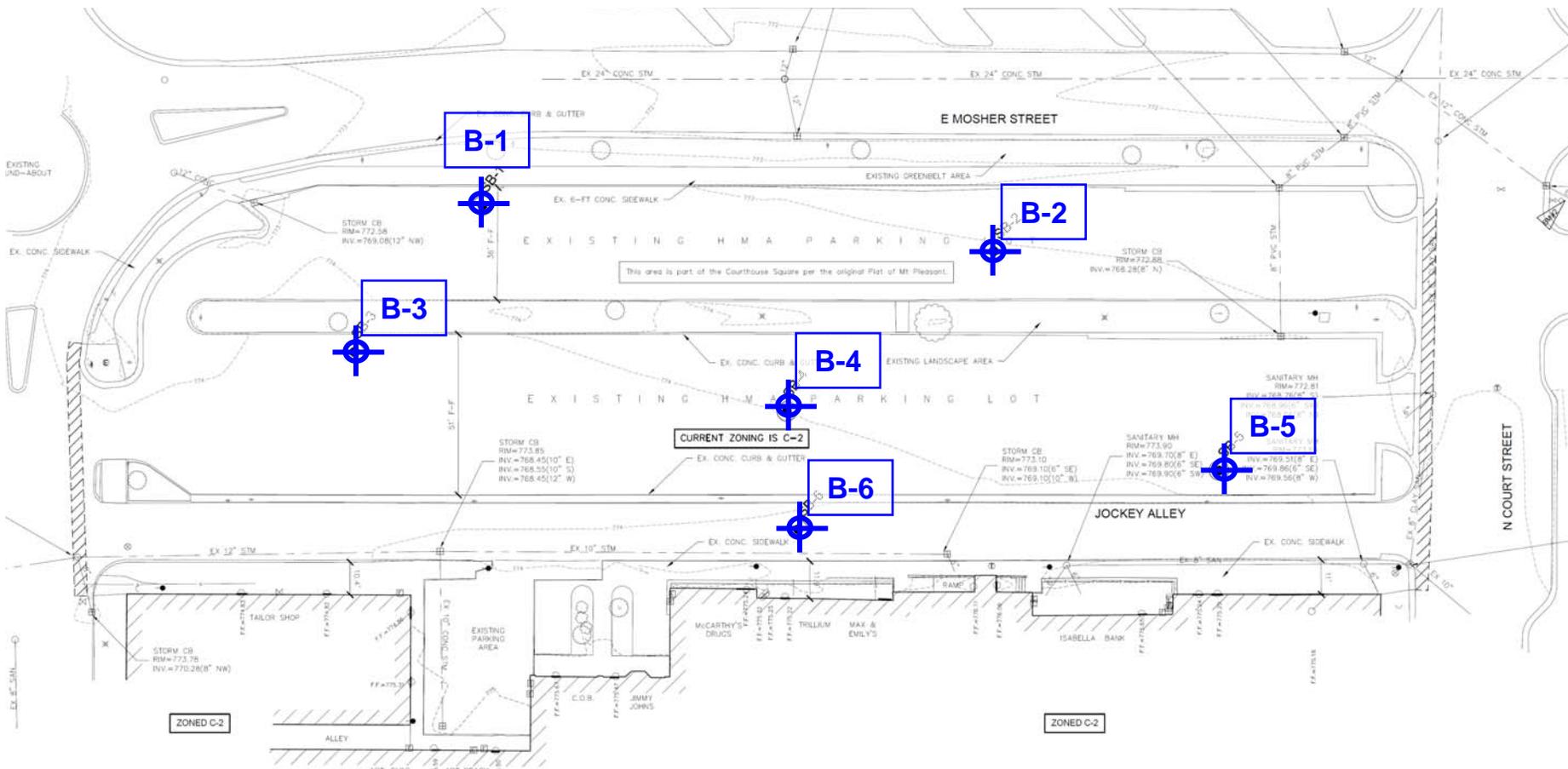
LEGEND



 APPROXIMATE BORING LOCATION

DRAWING IS NOT TO SCALE

DRAWING OBTAINED FROM FLEIS & VANDENBRINK ENGINEERING, INC.



BORING LOCATION DIAGRAM

PROPOSED PAVEMENT RECONSTRUCTION PROJECT
 JOCKEY ALLEY AND LOT NO. 2
 MT. PLEASANT, ISABELLA COUNTY, MICHIGAN

FIGURE NO. 2

PSI PROJECT NO. 0408-610
 DRAWN BY: ESR
 DATE: 01/31/2013

DATE STARTED: 1/24/13 **DRILL COMPANY:** PSI
DATE COMPLETED: 1/24/13 **DRILLER:** E. Motcheck **LOGGED BY:** E. Motcheck
COMPLETION DEPTH: 5.0 ft **DRILL RIG:** CME-55
BENCHMARK: N/A **DRILLING METHOD:** 3 1/4" HSA
ELEVATION: 773.5 ft **SAMPLING METHOD:** SS
LATITUDE: **HAMMER TYPE:** Automatic
LONGITUDE: **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** S. Rahe
REMARKS: None

BORING B-1

Water
 ∇ While Drilling N/A
 ▼ Upon Completion N/A
 ∇ Cave Depth N/A

BORING LOCATION:
 See Boring Location Diagram

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STRENGTH, tsf	Additional Remarks
0						6.5" ASPHALT					
				1	18	5.5" Brown fine SAND, trace Gravel, moist (FILL)	SP	14-4-4 N=8	6	X	⊙
						12" Brown fine to medium SAND, trace Gravel, trace buried topsoil, moist (FILL)	SP				
						Mixed brown and black fine SAND and buried topsoil, moist (FILL)	SP				
770				2	18	Tan fine to medium SAND, trace Gravel, occasional Clay seams, moist, loose (SP)	SP	2-3-5 N=8	5	X	⊙
5						Boring terminated 5 feet below existing ground surface.					

STANDARD PENETRATION TEST DATA
 N in blows/ft ⊙
 X Moisture □ PL
 + LL
 0 25 50
STRENGTH, tsf
 ▲ Qu * Qp
 0 2.0 4.0



Professional Service Industries, Inc.
 3120 Sovereign Drive, Suite C
 Lansing, MI 48911
 Telephone: (517) 394-5700

PROJECT NO.: 0408610
PROJECT: Pavement Reconstruction
LOCATION: Jockey Alley and Lot No. 2
 Mt. Pleasant, Isabella County, MI

DATE STARTED: 1/24/13 **DRILL COMPANY:** PSI
DATE COMPLETED: 1/24/13 **DRILLER:** E. Motcheck **LOGGED BY:** E. Motcheck
COMPLETION DEPTH: 5.0 ft **DRILL RIG:** CME-55
BENCHMARK: N/A **DRILLING METHOD:** 3 1/4" HSA
ELEVATION: 773.0 ft **SAMPLING METHOD:** SS
LATITUDE: **HAMMER TYPE:** Automatic
LONGITUDE: **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** S. Rahe
REMARKS: None

BORING B-2

Water	▽	While Drilling	N/A
	▼	Upon Completion	N/A
	▽	Cave Depth	N/A

BORING LOCATION:
 See Boring Location Diagram

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STRENGTH, tsf	Additional Remarks
0		[Asphalt Symbol]				5.5" ASPHALT					
		[Soil Symbol]				12.5" Dark brown fine to medium SAND, trace buried topsoil, moist (FILL)	SP				
		[Soil Symbol]		1	18	Brown fine SAND, occasional Clay seams, moist, medium dense (SP)	SP	9-4-7 N=11	X	○	
770		[Soil Symbol]				Tan fine to coarse SAND, trace Gravel, moist, medium dense (SP)	SP				
		[Soil Symbol]		2	18		SP	7-7-11 N=18	X	○	
5						Boring terminated 5 feet below existing ground surface.					

STANDARD PENETRATION TEST DATA

N in blows/ft ⊙

X	Moisture	■	PL
+	LL	*	Qp

STRENGTH, tsf

▲	Qu	*	Qp
---	----	---	----



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PROJECT NO.: 0408610
PROJECT: Pavement Reconstruction
LOCATION: Jockey Alley and Lot No. 2
 Mt. Pleasant, Isabella County, MI

DATE STARTED: 1/24/13 **DRILL COMPANY:** PSI
DATE COMPLETED: 1/24/13 **DRILLER:** E. Motcheck **LOGGED BY:** E. Motcheck
COMPLETION DEPTH: 5.0 ft **DRILL RIG:** CME-55
BENCHMARK: N/A **DRILLING METHOD:** 3 1/4" HSA
ELEVATION: 774.0 ft **SAMPLING METHOD:** SS
LATITUDE: **HAMMER TYPE:** Automatic
LONGITUDE: **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** S. Rahe
REMARKS: None

BORING B-3

Water	▽	While Drilling	N/A
	▼	Upon Completion	N/A
	▽	Cave Depth	N/A

BORING LOCATION:
 See Boring Location Diagram

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ⊙ × Moisture ◻ PL + LL	STRENGTH, tsf ▲ Qu * Qp	Additional Remarks
0						9" ASPHALT						
						9" CONCRETE						
				1	0	Brown fine to medium SAND, trace Gravel, moist, loose (SP)	SP	50/0"				Drove stone; no recovery
770				2	18			3-3-4 N=7	4	×	⊙	
5						Boring terminated 5 feet below existing ground surface.						



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PROJECT: Pavement Reconstruction
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 Mt. Pleasant, Isabella County, MI

DATE STARTED: 1/24/13 **DRILL COMPANY:** PSI
DATE COMPLETED: 1/24/13 **DRILLER:** E. Motcheck **LOGGED BY:** E. Motcheck
COMPLETION DEPTH: 5.0 ft **DRILL RIG:** CME-55
BENCHMARK: N/A **DRILLING METHOD:** 3 1/4" HSA
ELEVATION: 774.0 ft **SAMPLING METHOD:** SS
LATITUDE: **HAMMER TYPE:** Automatic
LONGITUDE: **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** S. Rahe
REMARKS: None

BORING B-4

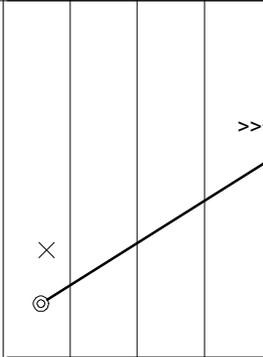
Water
 ▽ While Drilling N/A
 ▼ Upon Completion N/A
 ▽ Cave Depth N/A

BORING LOCATION:
 See Boring Location Diagram

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STRENGTH, tsf	Additional Remarks
0						9.5" ASPHALT					
				1	0	17.5" CONCRETE		50/0"			
						Brown fine to medium SAND, trace Gravel, occasional Clay seams, moist, loose (SP)	SP		8		
770				2	18			3-3-4 N=7			
5						Boring terminated 5 feet below existing ground surface.					

STANDARD PENETRATION TEST DATA
 N in blows/ft ⊙
 × Moisture ▣ PL
 + LL

STRENGTH, tsf
 ▲ Qu * Qp



Drove stone; no recovery



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DATE STARTED: 1/24/13 **DRILL COMPANY:** PSI
DATE COMPLETED: 1/24/13 **DRILLER:** E. Motcheck **LOGGED BY:** E. Motcheck
COMPLETION DEPTH: 5.0 ft **DRILL RIG:** CME-55
BENCHMARK: N/A **DRILLING METHOD:** 3 1/4" HSA
ELEVATION: 774.0 ft **SAMPLING METHOD:** SS
LATITUDE: **HAMMER TYPE:** Automatic
LONGITUDE: **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** S. Rahe
REMARKS: None

BORING B-6

Water	▽	While Drilling	N/A
	▼	Upon Completion	N/A
	▽	Cave Depth	N/A

BORING LOCATION:
 See Boring Location Diagram

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STRENGTH, tsf	Additional Remarks
0		3" ASPHALT 6" CONCRETE									
		Dark brown fine to medium SAND, trace Gravel, trace buried topsoil, moist (FILL)		1	18		SP	19-6-5 N=11	6	×	○
		Tan medium SAND, trace Gravel, moist, loose to medium dense (SP)		2	18		SP	3-4-4 N=8	4	×	○
770											
5						Boring terminated 5 feet below existing ground surface.					



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 Mt. Pleasant, Isabella County, MI

SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS			
			GRAPH	LETTER				
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES			
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES			
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES			
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES		
		SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES		
					SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES		
	MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES		
					SC	CLAYEY SANDS, SAND - CLAY MIXTURES		
			FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
							CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY						
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS		
					CH	INORGANIC CLAYS OF HIGH PLASTICITY		
					OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS			





GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System (USCS), AASHTO 1988 and ASTM designations D2487 and D-2488 are used to identify the encountered materials unless otherwise noted. Coarse-grained soils are defined as having more than 50% of their dry weight retained on a #200 sieve (0.075mm); they are described as: boulders, cobbles, gravel or sand. Fine-grained soils have less than 50% of their dry weight retained on a #200 sieve; they are defined as silts or clay depending on their Atterberg Limit attributes. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size.

DRILLING AND SAMPLING SYMBOLS

- SFA: Solid Flight Auger - typically 4" diameter flights, except where noted.
- HSA: Hollow Stem Auger - typically 3¼" or 4¼ I.D. openings, except where noted.
- M.R.: Mud Rotary - Uses a rotary head with Bentonite or Polymer Slurry
- R.C.: Diamond Bit Core Sampler
- H.A.: Hand Auger
- P.A.: Power Auger - Handheld motorized auger
- ☒ SS: Split-Spoon - 1 3/8" I.D., 2" O.D., except where noted.
- ST: Shelby Tube - 3" O.D., except where noted.
- ▮ RC: Rock Core
- ⬇ TC: Texas Cone
- ☞ BS: Bulk Sample
- ☒ PM: Pressuremeter
- CPT-U: Cone Penetrometer Testing with Pore-Pressure Readings

SOIL PROPERTY SYMBOLS

- N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2-inch O.D. Split-Spoon.
- N₆₀: A "N" penetration value corrected to an equivalent 60% hammer energy transfer efficiency (ETR)
- Q_u: Unconfined compressive strength, TSF
- Q_p: Pocket penetrometer value, unconfined compressive strength, TSF
- w%: Moisture/water content, %
- LL: Liquid Limit, %
- PL: Plastic Limit, %
- PI: Plasticity Index = (LL-PL),%
- DD: Dry unit weight, pcf
- ▼, ▽, ▾ Apparent groundwater level at time noted

RELATIVE DENSITY OF COARSE-GRAINED SOILS ANGULARITY OF COARSE-GRAINED PARTICLES

Relative Density	N - Blows/foot
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	50 - 80
Extremely Dense	80+

Description	Criteria
Angular:	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular:	Particles are similar to angular description, but have rounded edges
Subrounded:	Particles have nearly plane sides, but have well-rounded corners and edges
Rounded:	Particles have smoothly curved sides and no edges

GRAIN-SIZE TERMINOLOGY

Component	Size Range
Boulders:	Over 300 mm (>12 in.)
Cobbles:	75 mm to 300 mm (3 in. to 12 in.)
Coarse-Grained Gravel:	19 mm to 75 mm (¾ in. to 3 in.)
Fine-Grained Gravel:	4.75 mm to 19 mm (No.4 to ¾ in.)
Coarse-Grained Sand:	2 mm to 4.75 mm (No.10 to No.4)
Medium-Grained Sand:	0.42 mm to 2 mm (No.40 to No.10)
Fine-Grained Sand:	0.075 mm to 0.42 mm (No. 200 to No.40)
Silt:	0.005 mm to 0.075 mm
Clay:	<0.005 mm

PARTICLE SHAPE

Description	Criteria
Flat:	Particles with width/thickness ratio > 3
Elongated:	Particles with length/width ratio > 3
Flat & Elongated:	Particles meet criteria for both flat and elongated

RELATIVE PROPORTIONS OF FINES

Descriptive Term	% Dry Weight
Trace:	< 5%
With:	5% to 12%
Modifier:	>12%



GENERAL NOTES

(Continued)

CONSISTENCY OF FINE-GRAINED SOILS

<u>Q_u - TSF</u>	<u>N - Blows/foot</u>	<u>Consistency</u>
0 - 0.25	0 - 2	Very Soft
0.25 - 0.50	2 - 4	Soft
0.50 - 1.00	4 - 8	Firm (Medium Stiff)
1.00 - 2.00	8 - 15	Stiff
2.00 - 4.00	15 - 30	Very Stiff
4.00 - 8.00	30 - 50	Hard
8.00+	50+	Very Hard

MOISTURE CONDITION DESCRIPTION

<u>Description</u>	<u>Criteria</u>
Dry:	Absence of moisture, dusty, dry to the touch
Moist:	Damp but no visible water
Wet:	Visible free water, usually soil is below water table

RELATIVE PROPORTIONS OF SAND AND GRAVEL

<u>Descriptive Term</u>	<u>% Dry Weight</u>
Trace:	< 15%
With:	15% to 30%
Modifier:	>30%

STRUCTURE DESCRIPTION

<u>Description</u>	<u>Criteria</u>	<u>Description</u>	<u>Criteria</u>
Stratified:	Alternating layers of varying material or color with layers at least ¼-inch (6 mm) thick	Blocky:	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Laminated:	Alternating layers of varying material or color with layers less than ¼-inch (6 mm) thick	Lensed:	Inclusion of small pockets of different soils
Fissured:	Breaks along definite planes of fracture with little resistance to fracturing	Layer:	Inclusion greater than 3 inches thick (75 mm)
Slickensided:	Fracture planes appear polished or glossy, sometimes striated	Seam:	Inclusion 1/8-inch to 3 inches (3 to 75 mm) thick extending through the sample
		Parting:	Inclusion less than 1/8-inch (3 mm) thick

SCALE OF RELATIVE ROCK HARDNESS

<u>Q_u - TSF</u>	<u>Consistency</u>
2.5 - 10	Extremely Soft
10 - 50	Very Soft
50 - 250	Soft
250 - 525	Medium Hard
525 - 1,050	Moderately Hard
1,050 - 2,600	Hard
>2,600	Very Hard

ROCK BEDDING THICKNESSES

<u>Description</u>	<u>Criteria</u>
Very Thick Bedded	Greater than 3-foot (>1.0 m)
Thick Bedded	1-foot to 3-foot (0.3 m to 1.0 m)
Medium Bedded	4-inch to 1-foot (0.1 m to 0.3 m)
Thin Bedded	1¼-inch to 4-inch (30 mm to 100 mm)
Very Thin Bedded	½-inch to 1¼-inch (10 mm to 30 mm)
Thickly Laminated	1/8-inch to ½-inch (3 mm to 10 mm)
Thinly Laminated	1/8-inch or less "paper thin" (<3 mm)

ROCK VOIDS

<u>Voids</u>	<u>Void Diameter</u>
Pit	<6 mm (<0.25 in)
Vug	6 mm to 50 mm (0.25 in to 2 in)
Cavity	50 mm to 600 mm (2 in to 24 in)
Cave	>600 mm (>24 in)

GRAIN-SIZED TERMINOLOGY

(Typically Sedimentary Rock)

<u>Component</u>	<u>Size Range</u>
Very Coarse Grained	>4.76 mm
Coarse Grained	2.0 mm - 4.76 mm
Medium Grained	0.42 mm - 2.0 mm
Fine Grained	0.075 mm - 0.42 mm
Very Fine Grained	<0.075 mm

ROCK QUALITY DESCRIPTION

<u>Rock Mass Description</u>	<u>RQD Value</u>
Excellent	90 - 100
Good	75 - 90
Fair	50 - 75
Poor	25 - 50
Very Poor	Less than 25

DEGREE OF WEATHERING

Slightly Weathered:	Rock generally fresh, joints stained and discoloration extends into rock up to 25 mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered:	Rock mass is decomposed 50% or less, significant portions of the rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered:	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.