SPECIFICATIONS

FOR

COOLIDGE RESTRIPING - 11 MILE RD. TO 12 MILE RD.

BERKLEY DOWNTOWN DEVELOPMENT AUTHORITY CITY OF BERKLEY OAKLAND COUNTY, MICHIGAN

JANUARY 2019

HRC JOB NO. 20180716



555 Hulet Drive • P.O. Box 824 Bloomfield Hills, Michigan 48303-0824

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ADVERTISEMENT FOR BIDS COOLIDGE RESTRIPING – 11 MILE ROAD TO 12 MILE ROAD BERKLEY DOWNTOWN DEVELOPMENT AUTHORITY CITY OF BERKLEY OAKLAND COUNTY, MICHIGAN

Sealed proposals for the construction of the Coolidge restriping will be received by the City Clerk for the Berkley Downtown Development Authority (DDA), until 3:00 p.m., Local Time on Thursday, January 31, 2019, at which time and place all bids will be publicly opened and read.

Bidders shall review and comply with the Instructions to Bidders, which are incorporated by reference, and carefully review all Contract Documents, as defined in the Instructions to Bidders. Bids submitted after the exact time specified for, receipt will not be considered.

The Contracts will consist of the following principal items of work and appurtenances as specified herein and shown on the Contract Drawings.

Description of Work

The project includes the removal and installation of permanent pavement markings and supplemental signs on Coolidge Highway between 11 Mile Road and 12 Mile Road.

Plans and Specifications will only be available online at the Michigan Inter-governmental Trade Network (MITN) Purchasing Group site, http://www.mitn.info beginning Friday, January 11, 2019. Hard copies of Plans and Specifications will not be available for purchase. The Bidder is advised that in order to submit a bid on this project, the Bidder must download and complete the Proposal Form (Section 00300) and include the required bid deposit with their bid submission.

Proposals submitted by Bidders who have been debarred, suspended, or made ineligible by any Federal Agency will be rejected.

Each bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

Each bid proposal shall be submitted on the proposal forms provided and shall be accompanied by a certified check, cashier's check or bid bond, executed by the bidder and Surety Company, payable to the Berkley Downtown Development Authority in the amount of Five Percent (5%) of the accompanying bid. Proposal Guarantee shall provide assurance that the bidder will, upon acceptance of the bid, execute the necessary Contract with the City of Berkley. No bid may be withdrawn after scheduled closing time for receiving bids for at least sixty (60) days.

The successful bidder will be required to furnish satisfactory Performance, Labor and Material, and Maintenance and Guarantee Bonds.

The Berkley DDA reserves the right to reject all bids and to waive irregularities in bidding.

No Proposal will be received unless made on blanks furnished and delivered to the City Clerk on or before 3:00 p.m., Local time, Thursday, January 31, 2019.

Addressed to:
Berkley DDA
3338 Coolidge Hwy.
Berkley, MI 48072

<u>Labeled as:</u>
Proposal for:
Coolidge Restripin

Coolidge Restriping, 11 Mile to 12 Mile

Berkley DDA

Oakland County, Michigan

HRC Job 20180716

BERKLEY DDA

This Ad can be found on the Michigan Inter-governmental Trade Network (MITN) Purchasing Group site, http://www.mitn.info.

SECTION 00120

INSTRUCTIONS TO BIDDERS

SCOPE OF WORK

The work under this Contract shall consist of the furnishing of all labor, material, equipment, services, and all incidental items necessary to complete the project in accordance with the Contract Documents.

OBSERVATION OF SITE

Before submitting a Proposal, each bidder shall personally inspect the site of the proposed work to arrive at a clear understanding of the conditions under which the work is to be done.

He shall be held to have compared the premises with the Drawings and Specifications and to have satisfied himself as to the conditions of the premises, existing constructions, and any other conditions affecting the carrying out of the work, before delivery of his Proposal.

No allowance or extra consideration on behalf of the Bidder will subsequently be allowed by reason of error or oversight on the part of the Bidder or on account of interferences by the Owner's or by other Bidder's activities.

ADVERTISEMENT

The published Advertisement for the proposed work contains information necessary to bidders. A copy of the Advertisement shall be considered a part of the Instructions to Bidders as fully as if repeated herein.

PROPOSALS

Proposals will be received in accordance with the Advertisement for Bids, and shall be submitted only on forms provided by the Engineer.

Proposals shall be enclosed in sealed envelopes marked with the name of the project and bidder and shall be delivered to the designated location on or before the bid time as specified in the Advertisement for Bids.

Proposals shall be made in full conformity with all the conditions set forth in the drawings and in these specifications. Bids are firm and cannot be withdrawn for a period of 60 days after opening of the bids, unless otherwise specified in the Advertisement for Bids.

NAME AND STATUS OF BIDDER

The name and legal status of the bidder, either as a corporation, partnership, or individual, shall be stated in the Proposal.

Anyone signing a Proposal as an agent of another or others, must submit with the Proposal, legal evidence of his authority to do so.

The place of residence of each bidder, or the office address and telephone number in the case of a firm or company, with County and State, must be given after his signature.

BIDDER'S QUALIFICATIONS

It is the intention of the Owner to award this Contract to a Bidder fully capable, both financially and with regard to experience to perform and complete the work in a satisfactory manner. If required by the Owner, each bidder under consideration may be required to furnish the Owner, within 48 hours at the Owner's request, the following information sworn to under oath by him:

- 1. Performance record.
- 2. The address and description of the bidder's plant and place of business.
- 3. Itemized list of equipment available for use on the project.
- 4. A description of any similar project which the bidder has constructed in a satisfactory manner.
- 5. A certified or authenticated financial statement dated within sixty days prior to the opening of bids. The Owner may require that any items of such statements be further verified.
- 6. A list of contracts on which the bidder is currently engaged.
- 7. Such additional information as will satisfy the Owner that the bidder is adequately prepared, in technical experience and otherwise, to fulfill the Contract.

BID DEPOSIT

Each Proposal must be accompanied by a bid deposit in the form described in the Advertisement for Bids, Specification Section 00030, as a guarantee on the part of the bidder that he will, if called upon to do so, enter into contract in the attached form, to do the work covered by such proposal and at the price stated therein and to furnish acceptable surety for its faithful and entire fulfillment. Such certified check or bidder's bond shall be made out to the Owner and shall be subject to the conditions specified in the Proposal.

The bid deposits of all except the three lowest bidders will be returned within three days after the opening of bids. The bid deposits of the three lowest bidders will be returned within 48 hours after the Contract is awarded to the successful bidder and the signed agreement has been delivered and the required bonds have been finally approved by the Owner, or after rejection of all bids.

Surety companies providing and executing Bid Bonds shall appear on the United States Treasury Department's most current list (Circular 570) as holding certificates of authority as acceptable sureties on federal bonds. The penal sum of such bonds shall not exceed a company's underwriting limitation as stated therein. A surety company shall be licensed in the State in which it provides a bond and in the State where the Contract work is to be performed.

Failure to provide a bid bond from a qualified company shall be a basis for rejection of a bid as non-responsive and non-responsible.

EXPLANATION TO BIDDERS BY ADDENDUMS

Neither the Owner nor the Engineer will give verbal answers to inquiries, regarding the meaning of the Drawings or Specifications, or give verbal instructions, previous to the award of the Contract. Any verbal statements regarding same by any persons, previous to the award, shall be unauthoritative.

Explanations desired by bidders shall be requested of the Engineer in writing and, if explanations are necessary, a reply will be made in the form of an addendum, a copy of which will be posted on MITN and must be acknowledged in the proposal and on the Addendum form.

Addendums issued to bidders prior to date of receipt of proposals shall become a part of the Specifications, and all proposals shall include the work described in the addendums.

No inquiry received within 4 days of the date fixed for the opening of bids will be given consideration.

Failure of the Engineer to send, or of the bidder to receive, any such interpretations shall not relieve the bidder from obligation under his bid as submitted.

RIGHT TO ACCEPT, TO REJECT, AND TO WAIVE DEFECTS

The Owner reserves the right to accept any Proposal, to reject any or all Proposals, and to waive any defects or irregularity in the Proposal if it appears advantageous to the Owner to do so.

Each bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

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d o c s \ s p e c s \ 0 0 1 2 0

TIME OF COMPLETION

The Owner and the individual citizens of the municipality affected by this project are vitally concerned with the prompt completion of the construction together with the cleanup and restoration of roads and lawns within the time allowed in the Proposal.

The Bidder shall use sufficient labor and equipment to complete and place in service all of the work being constructed within this Contract within the time specified in the Proposal. The surface cleanup shall follow closely behind construction with earth spoil removed from lawns and roads and any trenches neatly finished by the end of each work day. Failure of the Bidder to comply with this type of workmanlike job will result in the suspension of construction operations until the cleanup is effected.

If the Bidder shall be unavoidably delayed in beginning or fulfilling this Contract by reason of excessive storms or floods, or by Acts of Providence, or by strikes, or by court injunction, or by stopping of the work by the Owner because of any emergency or public necessity, or by reason of alterations ordered by the Owner, the Bidder shall have no valid claim for damages on account of any cause or delay; but he shall in such case be entitled to such an extension of the above time limit herein, as the Engineer shall adjudge to be just and reasonable; provided, however, that formal claim for such extension shall be made in writing by the Bidder within a week after the date upon which such alleged cause or delay shall have occurred.

FAIR EMPLOYMENT PRACTICES

Section 4 of the Fair Employment Practices Act PA 1955, No. 251, provides:

Section 4. Every Contract to which the State or any of its political or civil subdivisions is a party shall contain a provision requiring the Bidder and his subcontractors not to discriminate against any employee or applicant for employment, to be employed in the performance of said contract, with respect to his hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of his race, color, religion, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the Contract.

Section 4A of the Act provides:

Section 4A. Every contract which the State or any of its political or civil subdivisions is a party shall contain a provision requiring the Bidder and his subcontractors not to discriminate against any employee or applicant for employment to be employed in the performance of such contract with respect to his hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment because of his age or sex, except where based on a bona fide occupational qualification.

ADDITIONAL BIDDER REGULATIONS AS PER THE CITY OF BERKLEY

- 1. **COMPLIANCE WITH REGULATIONS** -- The contractor shall comply with the Regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation, Title 49, code of Federal Regulations, Part 21 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- 2. **NON-DISCRIMINATION** -- The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulation,

including employment practices when the contractor covers a program set forth in Appendix B of the Regulations.

- 3. SOLICITATIONS FOR SUBCONTRACTS, INCLUDING PROCUREMENTS OF MATERIALS AND EQUIPMENT -- In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, or national origin.
- 4. **INFORMATION AND REPORTS** -- The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the City of Berkley to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the City of Berkley as appropriate, and shall set forth what efforts it has made to obtain the information.
- 5. **SANCTIONS FOR NON-COMPLIANCE**-- In the event of the contractor's non-compliance with the non-discrimination provisions of this contract, the City of Berkley shall impose such contract sanctions as it may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b. Cancellation, termination or suspension of the contract, in whole or in part.
- 6. **INCORPORATION OF PROVISIONS** -- The contractor shall include the provisions of paragraphs (24) through (29) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the City of Berkley may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the City of Berkley to enter into such litigation to protect the interests of the City, and, in addition, the contractor may request the State highway department to enter into such litigation to protect the interests of the State and/or the United States to enter into such litigation to protect the interests of the United States.

END OF SECTION

PROPOSAL FOR COOLIDGE RESTRIPING – 11 MILE ROAD TO 12 MILE ROAD BERKLEY DOWNTOWN DEVELOPMENT AUTHORITY CITY OF BERKLEY OAKLAND COUNTY, MICHIGAN

Berkley Downtown Development Authority
3338 Coolidge Highway
Berkley, Michigan 48072
Bids Due: **Thursday, January 31st, 2019**On or Before <u>3:00 pm, Local Time</u>
HRC Job No. 20180716

To Prospective Bidders:		
Name of Bidder:		
Address:		
Date:	Telephone:	Fax:

The above, as Bidder, hereby declares this bid is made in good faith without fraud or collusion with any persons bidding, and that the Drawings, Specifications, and all other information referenced in the Instructions to Bidders have been examined. Further, the Bidder is familiar with the location of the work described herein and is fully informed as to the nature of the work and the conditions relating to the performance of the Contract.

The Bidder acknowledges that no representations or warranties of any nature whatsoever have been received, or are relied upon from the Berkley DDA, its agents or employees, as to any conditions to be encountered in accomplishing the work and that the bid is based solely upon the Bidder's own independent judgment.

The above, as Bidder, hereby certifies that the Drawings, Specifications, and other data provided by the Owner for bidding purposes have been examined. Further, the undersigned certifies that the proposed construction methods have been reviewed and found acceptable for the conditions which can be anticipated from the information provided for bidding.

The Bidder hereby affirms that the site of work has been inspected and further declares that no charges in addition to the Individual Unit Prices shall be made on account of any job circumstances or field conditions which were present and/or ascertainable prior to the bidding. In addition, The Contractor, as such and as Bidder, shall make the determination as to existing soil conditions and shall also complete the work under whatever conditions created by the Contractor/Bidder's sequence of construction, construction methods, or other conditions the Contractor/Bidder may create, at no additional cost to the Owner.

The above, as Bidder, confirms knowledge of the location of the proposed Coolidge Restriping Project and appurtenant construction in the City of Berkley, Oakland County, Michigan, and the conditions under which it must be constructed; and also declares to have carefully examined the Drawings, Specifications, and Contract Documents which the Bidder understands and accepts as sufficient for the purpose of constructing said Coolidge Restriping Project, and appurtenant work, and agrees to contract with the Berkley Downtown Development Authority to furnish all labor, materials, tools, equipment, facilities and supervision necessary to do all the work specified and prescribed for the Berkley Downtown Development Authority, in strict accordance with the

Owner's General Conditions, and with the full intent of the Drawings and Specifications, prepared by Hubbell, Roth & Clark, Consulting Engineers, and will accept in full payment therefore the sum of:

The project includes the removal and installation of permanent pavement markings on Coolidge Highway between 11 Mile Road and 12 Mile Road.

BASE BID

	<u>Item</u>	Q	<u>uantity</u>		Unit Price	Total Cost
1.	Mobilization, Max	1	LSUM	@	\$	= \$
2.	Pavt Mrkg, Sprayable Thermopl, 4 inch, White	1,400	Ft	@	\$	= \$
3.	Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	14,250	Ft	@	\$	= \$
4.	Pavt Mrkg, Sprayable Thermopl, 6 inch, White	16,570	Ft	@	\$	= \$
	Pavt Mrkg, Sprayable Thermopl, 12 inch, Yellow	200	Ft	<u>@</u>	\$	= \$
6.	Pavt Mrkg, Waterborne, for Rest Areas, Parks, & Lots, 6 inch, Blue	16	Ft	<u>@</u>	\$	= \$
7.	Pavt Mrkg, Thermopl, 12 inch, Cross Hatching, White	900	Ft	@	\$	= \$
8.	Pavt Mrkg, Methyl Methacrylate (MMA), Green	1,100	Sft	@	\$	= \$
9.	Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	2	Ea	@	\$	= \$
10.	Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	6	Ea	@	\$	= \$
11.	Pavt Mrkg, Ovly Cold Plastic, Only	1	Ea	@	\$	= \$
12.	Pavt Mrkg, Cold Plastic, 12 inch, Crosswalk Line	1,600	Ft	@	\$	= \$
13.	Pavt Mrkg, Ovly Cold Plastic, Bike, Small Symbol	26	Ea	@	\$	= \$
14.	Pavt Mrkg, Ovly Cold Plastic, Directional Arrow Sym, Bike	26	Ea	@	\$	= \$
15.	Pavt Mrkg, Ovly Cold Plastic, Sharrow Symbol	pol 3	Ea	@	\$	= \$

16. Sign, Type III, Rem	10	Ea	<u>@</u>	\$ =	\$
17. Sign, Type IIIB	165	Sft	@	\$ =	\$
18. Post, Steel, 3 lb	255	Ft	<u>@</u>	\$ =	\$
19. Rem Spec Mrkg	1,800	Sft	<u>@</u>	\$ =	\$
20. Pavt Mrkg, Longit, 6 inch or Less Width, Rem	17,000	Ft	@	\$ =	\$
21. Flag Control	1	LSUM	<u>@</u>	\$ =	\$
22. Channelizing Device, 42 inch, Furn	100	Ea	<u>@</u>	\$ =	\$
23. Channelizing Device, 42 inch, Oper	100	Ea	<u>@</u>	\$ =	\$
24. Lighted Arrow, Type C, Furn	2	Ea	<u>@</u>	\$ =	\$
25. Lighted Arrow, Type C, Oper	2	Ea	<u>@</u>	\$ =	\$
26. Sign, Type B, Temp, Prismatic, Furn	250	Sft	<u>@</u>	\$ =	\$
27. Sign, Type B, Temp, Prismatic, Oper	250	Sft	<u>@</u>	\$ =	\$
28. Traffic Regulator Control	1	LSUM	<u>@</u>	\$ =	\$
29. Minor Traf Devices	1	LSUM	<u>@</u>	\$ =	\$
30. Sign, Portable, Changeable Message, Furn	1	Ea	<u>@</u>	\$ =	\$
31. Sign, Portable, Changeable Message, Oper	1	Ea	<u>@</u>	\$ =	\$
32. Color Audio Video Route Survey	1	LSUM	<u>@</u>	\$ =	\$
33. Observation Crew Days	10	Day	<u>@</u>	\$ =	\$
Total Amount of Bid					\$

ALTERNATES

Voluntary Alternates proposed by the Bidder will not be considered. The Bidder shall submit a bid based on the information shown on the Drawings and Specifications. Alternates listed below are for the Owner's convenience and shall be priced as indicated by the work description. All alternates shall be clearly marked whether they represent an add or deduct to the Base Bid Price quoted herein. All Alternates which are quoted shall be complete and the price shall include all Bidder mark-ups. Each Alternate shall be clearly marked if it represents an Add or a Deduct from the Base Bid Price.

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The Owner, at its sole discretion, reserves the right to award to the Bidder who, in the sole determination of the Owner, will best serve the interest of the Owner. The Owner reserves the right to accept any bid, to reject any or all bids, to waive any and all informalities involving price, time, or changes in the work, and to negotiate contract terms with the successful Bidder, and the right to disregard all nonconforming, nonresponsive, unbalanced or conditional bids. However, it is the intention of the Owner to award to the low total bid to one bidder. Also, the Owner reserves the right to reject the bid of any Bidder if the Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the bid is not responsive or the Bidder is unqualified, of doubtful financial ability, or fails to meet any other pertinent standard or criteria established by the Owner.

Each bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

Each Proposal must be accompanied by a bid deposit in the form of a certified check, cashier's check or bid bond, executed by the bidder and Surety Company, payable to the Berkley Downtown Development Authority in the amount of Five Percent (5%) of the amount of the Proposal. See Instructions to Bidders – Bid Deposit for more information.

TAXES

The Bidder affirms that all applicable Federal, State and Local taxes of whatever character and description are included in all prices stated in this Form of Proposal.

ADDENDA

The Bidder acknowledges the following Addenda, covering revisions to the drawings or specifications and the cost, if any, of such revision has been included in the quoted proposal:

Addendum No	Dated
Addendum No	Dated
Addendum No	Dated
Addendum No.	Dated

FEES

The Bidder shall refer to the General Conditions for allowable Fees for additional work performed, upon Owner's written authorization, by Bidder's own forces and/or for additional work, upon Owner's written authorization, by Bidder's subcontractors.

TIME OF COMPLETION

If awarded the Contract for the Coolidge Restriping Project, we agree to have all work substantially completed by May 1, 2019. Substantial Completion is defined that the facility is ready to use for its intended purpose with all utility systems fully functional.

The Bidder hereby agrees to furnish the required Bonds, Insurance Certificates, and Policies within ten (10) days after acceptance of this Proposal.

Final Completion with all clean-up and punch-list items shall be complete by June 1, 2019.

The execution of all work and specific constraints as described in the contract drawings and specifications must be strictly adhered to.

LIQUIDATED DAMAGES

Time is of the essence for completion of this project in order to have the Project ready for the Berkley DDA. The Bidder guarantees that the work will be completed within the time limit stated herein before or within the time as extended as provided elsewhere in the Specifications. Inasmuch as the damage and loss to the Owner which will result from the failure of the Bidder to complete the work within the stipulated time, will be most difficult or impossible to accurately determine, it is mutually agreed that the damages to the Owner for such delay and failure on the part of the Bidder shall be liquidated in the amount of ten-thousand Dollars (\$10,000.00), for each and every calendar day by which the Bidder shall fail to complete the work or any part thereof within the provisions hereof, and such liquidated damages shall not be considered as a penalty.

The Owner will deduct and retain out of any money due or to become due hereunder the amount of the liquidated damages, and in case those amounts are less than the amount of actual liquidated damages, the Bidder shall pay the difference upon demand of the Owner.

We understand that liquidated damages may be assessed should we fail to meet the stipulated completion dates. Specifically, liquidated damages will be assessed daily beginning November 1, 2019 until such a time that Substantial Completion is achieved and further if all work is not completed by the Final Completion Date.

BIDS TO REMAIN FIRM

The price stated in this Proposal shall be guaranteed for a period of not less than [XX] days from the bid due date and if authorized to proceed within that period, the bidder agrees to complete the work covered by the Proposal at said price.

If this Proposal is accepted by the Owner and the undersigned shall fail to contract as aforesaid and to furnish the required surety bonds within fifteen (15) days after being notified of the acceptance of their bid, then the undersigned shall be considered to have abandoned the contract, and the Certified Check, Cashier's Check or Bid Bond accompanying this Proposal shall be forfeited to the Berkley DDA.

If the undersigned enters into the contract in accordance with their proposal, or if their proposal is not accepted, then the accompanying bid guarantee shall be returned to the undersigned.

Company Name:	
	Title:
Address:	
County:	State:
Telephone No.:	Fax No.:
Email Address:	

LEGAL STATUS OF BIDDERThis Bid is submittal in the name of:

(Print))			
	ndersigne l or maile	ed hereby designates below the business addres ed:	s to which all notices, directions or oth	er communications may be
Street				
City_				
State_			Zip Code	
The u	ndersigne	ed hereby declares the legal status checked belo INDIVIDUAL	ow:	
	()	INDIVIDUAL DOING BUSINESS UND	ER AN ASSUMED NAME	
	()	CO-PARTNERSHIP The Assumed Name of the Co-Partnership	is registered in the County of	, Michigan
	()	CORPORATION INCORPORATED UNI	DER THE LAWS OF THE STATE O	F
			The Corporation is	
	()	LICENSED TO DO BUSINESS IN MICH	IIGAN	
	()	NOT NOW LICENSED TO DO BUSINE	SS IN MICHIGAN	
The na	ame, title	es, and home addresses of all persons who are o	officers or partners in the organization a	are as follows:
A corp	poration (duly organized and doing business under the la	ws of the State of	
NAM	E AND T	TITLE	HOME ADDRESS	
		ealed this	day of	20
			By (Signature)	
			Printed Name of Signer	
			Title	

	BID BOND	
We, the undersigned,		
As Principal, hereinafter called the Principal	pal, and	
A corporation duly organized under the la	nws of the State of	_
As surety, hereinafter called the SURETY	, are held and firmly bound unto:	
The Owner:		
in the sum of	Dollars (\$	
WHEREAS the Principal has submitted a	a hid tor	
the OWNER in accordance with the terms CONTRACT DOCUMENTS with good a prompt payment of labor and material fur enter such contract and give such bond or	all accept the bid of the Principal and the Princips of such bid, and give such bond or bonds as mand sufficient surety for the faithful performance inished in the prosecution thereof, or in the even bonds, if the Principal shall pay to the OWNER	pal shall enter into a contra ay be specified in the e of such contract and for t t of the failure of the Princ the difference not to exce
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CONTRACT

ARTICLES OF AGREEMENT, Mac	de and entered into this
day of	
	(A Michigan Municipal Corporation),
	Owner, and
in the	, County of
and State of Michigan, Party of the se	econd part, hereinafter called the Contractor, to wit:
Item 1) That all proposals, specifications, pl are made a part of this agreement and contract	ans, bonds, etc., hereto attached or herein referred to, shall be and et.
Item 2) That the Contractor, under penalty onecessary, and do all the work as set forth in	of bond attached, shall furnish all labor, materials, and appliances the proposal.
Coolidge Restriping -	
Located in the Cities of Berkley, Hun	ntington Woods, and Oak Park Oakland County, Michigan
HRC Job No. 20180716	
according to the specifications, plans, etc., w place, all and singular, as herein set forth.	hich have been made a part of this contract in a manner, time, and
IN CONSIDERATION WHEREOF, agrees to pay to said Party of the Second Part	said Party of the First Part, for it and its successors, promises and t, the sum of:
as provided in the attached proposal, all in th	e time and manner indicated in the specifications.
	l and singular of the stipulations, terms and conditions of this hemselves, their successors, heirs, executors, administrators and

assigns.

WITNESS:	BERKLEY DOWNTOWN DEVELOPMENT AUTHORITY
	(A Michigan Municipal Corporation)
	Party of the First Part
	By:
	·
WITNESS:	
	(A Michigan Corporation) Party of the Second Part
	Fairty of the Second Fair
	By:

BERKLEY DOWNTOWN DEVELOPMENT AUTHROITY 3338 COOLIDGE HWY., BERKLEY, MI 48072

SAMPLE - NOTICE TO PROCEED

Date:
Reference: Coolidge Restriping - 11 Mile Road to 12 Mile Road
Gentlemen:
The Contract Books, Bond and Insurance Forms for the above project have been reviewed by our office and are found to be in order. Local funds to finance the project have been received.
Accordingly, you are herewith authorized to proceed with the construction of the work as of this date,, 20
You are reminded that work shall start within ten (10) days of this date and completion of the entire project shall be within calendar days.
A Pre-Construction Meeting has been scheduled for
Signed Contract Documents will be forwarded under separate cover.
Very truly yours,
Berkley Downtown Development Authority

Hubbell, Roth & Clark, Inc. Job 20180716

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned
as Principal,
and
of as Sureties,
are hereby held and firmly bound unto the "Owner"
Berkley Downtown Development Authority (A Michigan Municipal Corporation)
3338 Coolidge Hwy., Berkley, Michigan 48072
City of Berkley, Oakland County, Michigan
in the full and just sum of Dollars
(\$) for the payment of which well and truly to be made, we hereby jointly and severally
bind ourselves, our heirs, executors, administrators, successors and assigns.
Signed and sealed this day of 20
The condition of the above obligation is such that if said
shall well and faithfully do and perform the things agreed by <u>It</u> to be done and performed by the annexed contract, according to the terms thereof, then this obligation shall be void; otherwise, the same shall remain in full force and effect.

It is mutually understood and agreed that in cases where changes are required, either by order of the Engineer, or Owner, or by mutual agreement, such changes or changes shall not modify, discharge or release this bond.

	(A Michigan Corporation)	
		(Seal)
	Principal	(Seal)
		(Seal)
	Surety	(Seal)
Signed, Sealed and Delivered in the Presence of:		

LABOR AND MATERIAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we		
		_
of		
and		
nereinafter called the Surety, are held and firmly bound unto		
Berkley Downtown Development Authority, 3338 Coolidge Highwa		
n the sum of		
	Dollars (\$)
successors and assigns, jointly and severally, firmly by these present	elves, our heirs, executors, ts.	administrati
successors and assigns, jointly and severally, firmly by these present	ts.	
successors and assigns, jointly and severally, firmly by these present Sealed with our seals and dated this	ts.	day of
successors and assigns, jointly and severally, firmly by these present		day of A.D., 20
Sealed with our seals and dated this	ntract with	day of A.D., 20
Sealed with our seals and dated this	ntract with	day of A.D., 20
Sealed with our seals and dated this	ntract with wherein said Principal has	day of A.D., 20
WHEREAS, The above named Principal has entered into a co Berkley Downtown Development Authority dated theday of, A.D., 20, agreed as follows, to-wit:	ntract with	day of A.D., 20 covenanted
WHEREAS, The above named Principal has entered into a co Berkley Downtown Development Authority dated the	ntract with	day of A.D., 20 covenanted
Sealed with our seals and dated this	ntract with	day of A.D., 20

of the Public Acts of Michigan, for the year 1963, and as may be amended by other Public Acts of Michigan.

Hubbell, Roth & Clark, Inc. Job 20180716 NOW, THEREFORE, The condition of this obligation is such that if payment shall be made by the Principal to any Subcontractor or by him or any Subcontractor as the same may become due and payable of all indebtedness which may arise from him to a Subcontractor or party performing labor or furnishing materials or supplies or any Subcontractor to any person, firm or corporation on account of any labor performed or materials or supplies furnished in the performance of said contract, then this obligation shall be void; otherwise, the same shall be in full force and effect.

AND PROVIDED, That any alterations which may be made in the terms of said contract, or in the work to be done under it, or the giving by the party of the first part to said contract, of any extension of time for the performance of said contract, or any other forbearance on the part of either party to the other, shall not in any way release the Principal and the Surety, or either of them, their heirs, executors, administrators, successors or assigns from any liability hereunder, notice to the Surety of any alteration, extension, or forbearance being hereby waived.

	(A Michigan Corporation)
	Ву:
	Principal
	Surety
Signed, Sealed and Delivered in the Presence of:	

MAINTENANCE AND GUARANTEE BOND

KNOW ALL MEN BY THESE PRESENTS, That we
as Principal, and
are held and firmly bound unto Berkley Downtown Development Authority and City of Berkley, Oakland
County, Michigan 48072 in the sum ofDollars (\$)
good and lawful money of the United States of America, to be paid to the
SEALED WITH OUR SEALS AND DATED THIS DAY OF A.D., 20
WHEREAS, the above named principal has entered into a certain written contract with the
lated thisday ofA.D., 20, where in the said principal covenanted and agreed as follows, to wit:
For the: Construction of the Coolidge Restriping – 11 Mile Road to 12 Mile Road
Located in the Cities of Berkley, Huntington Woods, and Oak Park Oakland County, Michigan
HRC Job No. 20180716
NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that by and under such contract the above named principal has agreed with the that for a period of (
vear(s) from the date of approval of the Final Estimate, to keep in good order and repair any defect in all the work done under said contract, either by the principal, his subcontractors, or his material suppliers, that may develop during said period due to improper materials, defective equipment, workmanship or arrangements, and may other work affected in making good such imperfections, all to be made good without expense to the Owner excepting only such part or parts of said work as may have been disturbed without the consent or approval of the principal after the final acceptance of the work), and whenever directed so to do by the Owner, by notice served in writing, either personally or by mail, on the principal at
or, its legal representatives, or successors, or on
he surety at

and equipment as may be necessary for the purpose, and to undertake, do and make such repairs, and charge the expense thereof to, and be fully reimbursed for same from said principal or surety. If any repair is necessary to be made at once to protect life and property, the <u>Owner</u> may take immediate steps to repair or barricade such defects without notice to the contractor. In such case the <u>Owner</u> shall not be held to obtain the lowest figures for the doing of the work, or any part thereof, but all sums actually paid therefor shall be charged to the principal or surety. In this connection the judgment of the <u>Owner</u> is final and conclusive.

If the principal for a period of one (1) year from the date of approval of a Final Estimate, shall keep the work so constructed under the contract in good order and repair, excepting only such parts of said work which have been disturbed without the consent or approval of the principal after the final acceptance of same, and whenever notice is given as hereinbefore specified, at once proceed to make the repair as the notice directs, or reimburse the Owner for any expenses incurred by it in making such repairs should the principal or surety fail to do so, then the above obligation shall be void; otherwise, it will remain in full force and effect.

IN WITNESS WHEREOF, the parties her authorized officers this day of		ecuted by their respective
Signed, Sealed and Delivered in the Presence of:	"Principal"	
in the Presence of:	Principai	(L.S.)
Witness		(L.S.)
Witness	"Surety"	(L.3.)
Witness		(L.S.)

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GENERAL CONDITIONS

1. CONTRACT DOCUMENTS

The original and three copies of the Contract shall be signed by the Owner and the Contractor, unless otherwise required.

The work under this Contract shall consist of the items listed in the proposal, including all incidentals necessary to fully complete the project in accordance with the contract Documents. The Contract documents shall consist of the Advertisement, Instructions to Bidders, Proposal, Specifications, General Conditions, General Supplementary Conditions, Contract, Bonds and Contract Drawings.

2. CONTRACT DRAWINGS AND SPECIFICATIONS

The work to be done is shown on the accompanying set of original drawings prepared by Hubbell, Roth & Clark, Inc., Consulting Engineers, Bloomfield Hills, Michigan, and are hereby made a part of this Contract, it being mutually understood and agreed that when taken together, the drawings and contract documents, including the specifications and the general conditions, are complementary, and what is called for by any one shall be binding as if called for by all. The intent of the Contract documents is to include in the contract price the cost of all labor and materials, water, fuel, tools, plant, equipment, light, transportation, and all other expenses as may be necessary for the proper execution and completion of the work.

These original drawings may be supplemented by other drawings furnished by the contractor and approved by the Engineer or supplied to the Contractor by the Engineer during the progress of the work as he may deem to be necessary or expedient. All such supplementary contract drawings or instructions are intended to be consistent with the Contract Documents, true developments thereof and reasonably inferable therefrom. Therefore, no extra charge will be allowed on a claim that particular supplemental contract drawings or instructions differed from the Contract Documents, incurring extra work, unless the Contractor has first brought the matter, in writing, to the Engineer's attention for proper adjustment before starting on the work covered by such and has received from the Engineer an order in writing to so proceed.

These original and supplementary drawings constitute the drawings according to which the work is to be done. The Contractor shall keep at the site of the work an approved or conformed copy of all drawings and specifications and shall at all times give the Engineer or Owner access thereto.

In case any inconsistency, omission or conflict shall be discovered in either specifications or drawings, or if in any place, the meaning of either or both shall be obscure, or uncertain, or in dispute, the Engineer shall decide as to the true intent and his decision shall be final and binding.

3. ENGINEER'S STATUS

The Engineer shall furnish consultation and advice to the Owner during construction. He may advise the Owner to stop the work whenever such stoppage may be necessary to insure that the finished work will be in accordance with the plans and specifications. He may advise the Owner to reject all work and material which do not conform to the drawings and specifications. The engineer may stop work only under the written direction of the owner.

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4. CONSTRUCTION OBSERVER STATUS

The Owner may appoint on the job construction observer(s) who shall be under the direction of the Engineer. The construction observer on the work will inform the Engineer as to the progress of the work, the manner in which it is being done, and the quality of the materials being used. The construction observer will call to the attention of the Contractor any failure to follow the drawings and specifications that he may observe. The construction observer shall advise the Engineer to reject materials suspend the work until any questions on the performance of the work can be referred to and decided by the Owner. The construction observer shall have no authority to determine the means and methods used to complete the work, direct the Contractor's work or workmen, to supervise the Contractor's operations, to stop work on the project or to change the Contract Drawings or Specifications.

In no instance shall any action or omission on the part of the construction observer release the Contractor of the responsibility of completing the work in accordance with the drawings, specifications and/or, municipal ordinances or established prior practices of the owner, in the municipality in which the project resides.

5. CONTRACTOR'S RESPONSIBILITY

The Contractor shall assume full responsibility for the work, specifically including jobsite safety, and take all precautions for preventing injuries to persons and property on or about the work; shall bear all losses resulting to him on account of the amount or character of the work or because the conditions under which the work is done are different, or because the nature of the ground in which the work is done is different from what was estimated or expected, or on account of the weather, floods, elements or other causes, and he shall assume the defense and save harmless the Owner, the Engineer and their individual officers and agents from all claims relating to labor provided and materials furnished for the work; to inventions, patents, and patent rights used in doing the work; to injuries to any persons or property received or sustained by or from the Contractor, his agents or employees in doing the work or arising out of the work performed or to be performed; and to any act, or neglect of the Contractor, his agents or employees.

The mention of any specific duty or liability of the contractor in this or in any part of the Contract documents shall not be construed as a limitation or restriction upon any general liability or duty imposed on the contractor by the Contract Documents.

6. PERMITS AND REGULATIONS

The Contractor shall secure, at no cost to the Owner, all permits and licenses necessary for the prosecution of the work. The Contractor shall keep himself fully informed of all laws, ordinances, and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.

He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with all existing and future laws, ordinances, regulations, orders, and decrees. Provided that if the drawings and specifications are at variance therewith, the Contractor shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided in the Contract Documents.

7. SUBCONTRACTS

The Contractor shall not sublet, assign, or transfer this Contract or any portion thereof or any payments due him thereunder, without the written consent of the Owner.

Assignment or subletting the whole or any portion of this contract shall not operate to release the contractor or his bondsmen hereunder from any of the contract obligations.

The Contractor shall, as soon as practicable after the signing of the Contract, notify the Owner in writing of the names of subcontractors proposed for the work and shall not employ any that the Owner may object to as incompetent or unfit.

If the Contractor shall cause any part of the work under this Contract to be performed by a subcontractor, the provisions of this Contract shall apply to such subcontractor and his officers and employees in all respects as if he and they were employees of the Contractor, and the Contractor shall not be in any manner thereby relieved from his obligation and liabilities; and the work and materials furnished by the subcontractor shall be subject to the same provisions as if furnished by the Contractor.

8. INFORMATION BY THE CONTRACTOR

The Contractor shall submit to the Engineer full information as to the materials, equipment, and arrangements which the Contractor proposes to furnish. This information shall be complete to the extent that the Engineer may intelligently judge if the proposed materials, equipment, and arrangements will meet the contract requirements.

Prior to the approval of materials, equipment, and arrangements by the Engineer based on the information submitted by the Contractor, any work done by the Contractor shall be at his own risk.

The approval of information covering materials, equipment, and arrangements by the Engineer shall in no way release the Contractor from his responsibility for the proper design, installation, and performance of any material, equipment, or arrangement, or from his liability to replace same should it prove defective.

9. GENERAL REQUIREMENTS FOR MATERIALS & WORKMANSHIP

In the specifications where a particular material or piece of equipment is specified by reference to some particular make or type, or equal, it is not the intent to limit competition but to set up by such reference a standard of quality most easily understood and defined. If materials or equipment of other make or type than that specified by name are offered by the Contractor, they will be given full consideration by the Engineer and the Engineer's decision will be final as to whether the materials or equipment offered are equal to those specified.

Unless otherwise stipulated in the specifications, all equipment, materials, and articles incorporated in the work covered by this Contract are to be new and of the best grade of their respective kinds for the purpose. The Contractor shall, if required, furnish such evidence as to kinds and quality of materials as the Engineer may require.

The Contractor shall furnish suitable tools and building appliances and employ competent labor to perform the work to be done, and any labor or tools or appliances that shall not, in the judgment of the Engineer, be suitable or competent to produce this result may be ordered from the work by the Owner,

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at the advice of the Engineer, and such labor or tools or appliances shall be substituted therefor by the Contractor as will meet with the approval of the Engineer/Owner.

If not otherwise provided, material or work called for in this contract shall be furnished and performed in accordance with well known established practice and standards recognized by architects, engineers and the trade.

10. TESTING AND SAMPLING

Where called for in the specifications, samples of materials in the quantity named shall be submitted to the Engineer for approval. Where tests are required they shall be made at the expense of the Contractor, except as otherwise called for in the specifications. For materials covered by ASTM or Federal Specifications, unless otherwise stipulated, the required tests are to be made by the manufacturer and his certificate therefor submitted to the Engineer.

11. LINES AND GRADES

Principal reference lines or points and bench marks shall be given by the Engineer at such time as he may deem necessary; or if the Contractor shall be in need of such reference lines or bench marks, he shall notify the Engineer forty-eight (48) hours in advance, excluding Saturdays, Sundays and holidays. The Engineer will set suitable stakes and marks showing the locations and elevations of new underground utilities as part of the work and will furnish the Contractor with "cut sheets" referred to the reference points. No work shall be undertaken until such stakes and marks shall have been set by the Engineer. The Contractor shall take due and proper precautions for the preservation of these stakes and marks, and shall see to it that the work at all times proceeds in accordance therewith and shall provide all labor and material to set control and locate the work accurately with reference to the above points. All lines and grades for new above grade structures and appurtenances shall be established by the Contractor. Establishment of principal reference lines, transfer of line and grade into facilities, location of all piping and equipment shall be the responsibility of the Contractor.

12. PROTECTION OF WORK AND PROPERTY

The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect all public property and private abutting property from injury or loss arising in connection with this Contract. He shall, without delay, make good any such damage, injury or loss, and shall defend and save the Owner and Engineer harmless from all such damages or injuries occurring because of his work. He shall furnish and maintain all passageways, barricades, guard fences, lights and danger signals, provide watchmen and other facilities for protection required by public authority or by local conditions, all at no additional cost to the Owner.

In an emergency affecting the safety of life or of the work or of adjoining property, the Contractor, without special instruction or authorization from the Owner, shall take such action as may be necessary to prevent such threatened damage, injury or loss.

The Contractor shall assume full responsibility of loss or damage to the work during the entire construction period resulting from caving earth and from storms, floods, frosts, and other adverse weather conditions, and from all other causes whatsoever, not directly due to the acts or neglect of the Owner, including fire, vandalism and malicious mischief, and shall turn the finished work over to the Owner in good condition and repair, at the time of the final estimate.

13. RESPONSIBILITY FOR ADJOINING STRUCTURES & TREES

The Contractor shall assume full responsibilities for the protection of all pavements, curbs, bridges, railroads, poles and any other surface structures and all water mains, sewers, telephone, gas mains, and other underground services and structures along the near the work which maybe affected by his operations, and shall indemnify, defend and save harmless the Owner against all damages or alleged damages to any such structure arising out of his work. The Contractor shall bear the cost of repair or replacement of any such structure damaged as a result of his operations.

No trees or shrubbery of any kind shall be removed or destroyed by the Contractor without the written permission of the Owner, and the Contractor will be held fully responsible for any damages caused by his work to adjoining trees and shrubs. Ample precautions shall be taken by the Contractor to protect such trees and shrubs as are to remain in place by surrounding them with fences or other protection before construction work begins. Shrubbery that has to be removed shall be preserved and replaced in a manner acceptable to the Owner.

14. MAINTENANCE OF SERVICE

Drainage through existing sewers and drains shall be maintained at all times during construction and all nearby gutters shall be kept open for drainage. Where existing sewers are encountered in the line of the work which interfere with the construction, the flow in the sewers, including both dry weather flow and storm flow, shall be maintained.

All detours shown on the drawings or required because of the Contractors operations shall be built and maintained at the Contractor's expense.

Safety precautions shall be followed at all street openings, substantial barricades shall be erected as deemed necessary to prevent accidents to vehicular or pedestrian traffic and red flags by day and yellow lights by night shall be diligently posted by the Contractor at all points of possible danger. In case detours or other traffic instructions are necessary, suitable warning or direction signs shall be erected and maintained by the Contractor. Contractor shall be responsible for insuring that all barricades, flags, lights, etc. are in place and functional at the end of each day.

During the progress of the work, the Contractor shall accommodate both vehicular and foot traffic and shall provide free access to fire hydrants, water and gas valves. Except as otherwise specified herein or as noted on the drawings, street intersections may be blocked but one-half at a time, and the contractor shall lay and maintain temporary driveways, bridges and crossings, such as in the opinion of the Owner are necessary to reasonably accommodate the public.

In the event of the Contractor's failure to comply with these provisions, the Owner may with or without notice, cause the same to be done; and will deduct the cost of such work from any money due or to become due the Contractor under this Contract, but the performance of such work by the Owner or at his instance, shall serve in no way to release the Contractor from his general or particular liability for the safety of the public or the work.

15. STORAGE OF MATERIALS

Materials and equipment distributed, stored and placed upon or near the site of the work shall at all times be so disposed as not to interfere with work being prosecuted by other contractors in the employ of the

Owner, or with street drainage, or with fire hydrants or with access thereto, and not to hinder, any more than may be necessary, the ordinary traffic of the street.

16. RELATION TO OTHER CONTRACTORS

The Contractor shall so conduct his operations as not to interfere with or injure the work of other contractors or workmen employed on adjoining or related work and he shall promptly make good any injury or damage which may be done to such work by him or his employees or his agent. Should a contract for adjoining work be awarded to another contractor, and should the work of one of these contracts interfere with that of the other, the Owner shall decide which contractor shall cease work for the time being and which shall continue or whether the work in both contracts shall continue at the same time and in what manner.

17. CONTRACTOR'S SUPERVISION AND ORIGINATION

The work under this Contract shall be under the direct charge and direction of the Contractor. The Contractor shall give efficient superintendence to the work, using his best skill and attention. The Contractor shall at all times keep on the site of the work, during its progress, a competent superintendent and any and all necessary foremen and assistants. The superintendent shall represent and have full authority to act for the Contractor in the latter's absence, and all directions given to him shall be as binding as if given to the Contractor. On written request in each case, all such directions will be confirmed in writing to the Contractor.

The Contractor shall employ only competent, efficient workmen and shall not use on the work any unfit person or one not skilled in the work assigned to him, and he shall at all times enforce strict discipline and good order among his employees. Whenever the Owner shall notify the Contractor, in writing, that any man on the work is, in the opinion of the Owner, careless, incompetent, disorderly, or otherwise unsatisfactory, such man shall be discharged from work and shall not again be employed on it except with the written consent of the Owner.

The Contractor shall establish and maintain an office on the site of the work or at some convenient point adjacent thereto, during the continuance of this Contract and shall have at all times during working hours, a representative authorized to receive an execute any and all orders, when given by the Engineer; and such order, when given out and received by said representative shall be deemed to have been given to and received by the Contractor. Copies of the drawings and specifications shall at all times be kept on file by the Contractor at readily accessible points near the work.

18. FACILITIES FOR INSPECTION

The Owner, the Engineer, and their employees shall at all times have the right to enter upon the premises upon which work is being done, or upon which material is stored for the work under this Contract, and to inspect the work under this Contract, and to inspect the work and materials, and to ascertain whether or not the construction is carried out in accordance with this Contract, and the Contractor shall furnish all reasonable facilities, and give ample time for such inspection. All materials shall be subject to mill and shop inspection, as provided in the specifications.

The Contractor shall promptly remove from the premises all materials rejected by the Engineer as failing to meet contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contractor and without expense

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to the Owner and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such rejected work and materials promptly, after written notice, the Owner may remove them and store the material at the expense of the Contractor.

The Engineer has the right to have removed by the Contractor such portion of the work as he may deem necessary for the discovery of improper work or material, and the Contractor must restore such work at his own expense if improperly done and at the expense of the party of the first part if found to be in proper condition. Any work which, during its progress and before its final acceptance, may become damaged from any cause, shall be removed and replaced by good, satisfactory work at the Contractor's expense.

19. SHOP DRAWINGS

Where called for in the specifications, the Contractor shall submit to the Engineer for review copies of details, specifications, cuts, and drawings of such equipment and structural work as may be required. The Contractor shall make any changes or alterations required by the Engineer and re-submit same without delay. The review of the Engineer shall not relieve the Contractor of responsibility for errors in the drawings, as the Engineer's checking is intended to cover compliance with the drawings and specifications and not to enter into every detail of the shop work. No work shall be undertaken until the Engineer has reviewed the shop drawings.

20. ERRORS AND CORRECTIONS IN DRAWINGS AND SPECIFICATIONS

The Contractor shall examine and check all drawings and specifications furnished by the Owner for dimensions, quantities, and coordination with other parts of the work on this or related contracts and shall notify, in writing, the Engineer of any and all errors, omissions, or discrepancies he may discover by examining and checking of same. The Contractor shall not be allowed to take advantage of any such error, omission, or discrepancy, as full instructions will be furnished by the Engineer, and the Contractor shall carry out such instructions as if originally specified. In no case shall be Contractor proceed with the work in uncertainty, and any work done by the Contractor after the discovery of any error, omission, or discrepancy, until authorized, will be at the Contractor's risk and responsibility. The work is to be made complete and to the satisfaction of the Engineer, notwithstanding any minor omissions in the specifications or drawings.

21. CHANGES IN THE WORK

The Owner shall have the right to require, by written order, changes in, additions to, or deductions from the work required by the contractor documents; provided that if changes, additions, or deductions are made, the general character of the work as a whole is not changed thereby. Adjustments in the contract price, if any, because of any change, addition, or deduction in the work shall be determined as hereinafter provided, and any claim for extension of time for completion shall be adjusted at the time of ordering the change, addition, or deduction. No claim for change, addition, or deduction, or adjustment of price, or extension of time for completion thereof, shall be made or allowed unless done in pursuance of a written order from the Owner specifically authorizing such change, addition, or deduction. Drawings without a written order shall not be considered such authority. Written notice of such claims shall be made to the Engineer before the commencement of work. Where the written order diminished the

quantity of work to be done, this shall not constitute a basis for a claim for damages or anticipated profits on the work that may be deleted.

Under circumstances which, in the judgment of the Engineer, so necessitate, the Engineer shall have authority to require, by written order, changes in, additions to, or deductions from the work. Such written order by the Engineer shall be subject to later confirmation by the Owner when the extent and cost have been established.

It is understood and agreed that in case any change in, addition to, or deduction from the work is required, said change shall in no way invalidate the Contract and shall not affect or discharge the bonds furnished by the Contractor.

The Contractor, without extra charge, shall make such slight alternations as may be necessary to make adjustable parts fit to fixed parts, leaving all complete and in proper shape when done.

22. BASIS FOR DETERMINING COST OF CHANGES IN THE WORK

Adjustments, if any, in the contract price by reason of change in the work shall be limited to the amount specified in the written order authorizing the change in the work. Adjustments shall be determined by one or more of the following methods, the Owner reserving the right to select the method or methods at the time the written order is issued:

- A. An acceptable lump sum proposal: To facilitate checking and acceptance, the proposal shall be itemized with quantities and prices given for the various items.
- B. Unit Prices: The unit prices may be the "Unit Price" set in the Agreement, or fixed by subsequent agreement between the Owner and the Contractor.
- C. On a cost-plus-limited basis not to exceed a specified maximum limit of cost:
- D. "COST" as herein used shall be the actual and necessary cost incurred by the Contractor by reasons of the change in the work for:
 - 1. Labor
 - 2. Materials
 - 3. Equipment Rental
 - 4. Insurance Premium
 - 5. Labor costs shall be the amount shown on the Contractor's payroll with payroll taxes added when such taxes can be shown to have been incurred. In no case shall be rates charged for labor exceed the rates paid by the Contractor for the same class of labor employed by him to perform work under the regular items of the Contract.
 - 6. Material costs shall be the net price paid for material delivered to the site of the work. If any material previously required is omitted by the written order of the Owner after it has been delivered to or partially worked on by the Contractor and consequently will not retain its full value for other uses, the Contractor shall be allowed the actual cost of the omitted material less a fair market value of the material as determined by the Owner.

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- 7. Equipment Rental shall be the actual additional costs incurred for necessary equipment. Costs shall not be allowed in excess of usual rental charged in the area for similar equipment of like size and condition, including the cost of necessary supplies and repairs for operating the equipment. No costs, however, shall be allowed for the use of equipment on the site in connection with other work unless its use incurs actual and additional costs to the Contractor. If equipment not on the site is required for the change in the work only, the cost of transporting such equipment to and from the site shall be allowed.
- 8. Insurance Premium shall be limited to those based on labor payroll and to the types of insurance required by the Contract. The amount allowed shall be limited to the net costs incurred as determined from the labor payroll covering the work. The Contractor shall, upon request of the Owner, submit verification of the applicable insurance rates and premium computations.

"PLUS" as herein is defined as a percentage to be added to the items of "Cost" to cover superintendence, use of ordinary tools, bonds, overhead expense and profit. The percentage shall not exceed 15 percent on work done entirely by the Contractor and shall not exceed an aggregate total of 20 percent on work done by a subcontractor.

"SPECIFIED MAXIMUM LIMIT OF COST" is the amount stated in the written order of the Owner authorizing the change in the work. The amount to be allowed the Contractor shall be the "cost" and "plus" the percentage or the specified maximum, whichever is the lesser amount.

The Contractor shall keep complete, accurate, daily record of the net actual cost of changes in the work, and shall present such information in such form and at such times as the Owner may request.

23. PATENTS

The Contractor shall pay all royalties and license fees and shall hold and save the Owner and his agent harmless from all liability of any nature or kind, including cost and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the owner, unless otherwise specifically stipulated in the Contract Documents. In this respect, the Contractor shall defend all suits or claims for infringement of any patent or license right.

In the event that any claim, suit, or action at law or in equity of any kind, whatsoever, is brought against the Owner, involving any such patents or license rights, then the Owner shall have the right to, and may, retain from any money due or to become due to the Contractor, such sufficient sum as is considered necessary to protect said Owner, against loss, and such sum maybe retained by the Owner until such claim or suit shall have been settled and satisfactory evidence to that effect shall have been furnished the Owner.

24. "OR EQUAL" CLAUSE

Whenever, in any of the Contract Documents, material, or equipment is defined by describing a proprietary product, or by using the name of a manufacturer or vendor, the term "or equal," if not inserted, shall be implied. The specific article, material, or equipment mentioned shall be understood as indicating the type, function, minimum standard of design, efficiency, and quality desired and shall not be construed in such a manner as to exclude manufacturers' products of comparable quality, design

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and efficiency. The Contractor shall comply with the requirements of the Contract Documents relative to the Owner's approval of materials and equipment before they are incorporated in the work.

25. CLEANING UP

The Contractor shall remove at his own expense from the Owner's property and from all public and private property, all temporary structures, rubbish and waste materials resulting from his operations. This requirement shall not apply to property used for permanent disposal of rubbish or waste materials in accordance with permission of such disposal granted to the Contractor by the Owner thereof.

26. USE OF COMPLETE PORTIONS OF THE WORK

The Owner may, at any time during progress of the work, after written notice to the Contractor, take over and place in service any completed portions of the work which are ready for service, although the entire work of the Contract is not fully completed, and notwithstanding the time for completion of the entire work or such portion may not have expired. In such event, the Contractor will be relieved of further work on or maintenance of said portion, except as covered by his guarantee of same.

27. PAYMENT WITHHELD

The Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate for progress payment to such extent as may be necessary to protect itself from loss on account of:

- A. Defective work not remedied.
- B. Claims filled or reasonable evidence indicating probable filing of claims.
- C. Failure of the contractor to make payments properly to subcontractors or for material or labor.
- D. A reasonable doubt that the Contract can be completed for the balance then unpaid.
- E. Damage to another contractor.

When the above grounds are removed, payment shall be made for amounts withheld because of them.

28. CONTRACTOR'S RIGHT TO STOP WORK

If the work should be stopped under an order of any court, or other public authority for a period of three months, through no act or fault of the contractor or of anyone employed by him, or if the Owner should fail to pay to the Contractor within sixty days of its maturity and presentation any sum certified by the Engineer, provided no appeal is taken, the contractor may, upon seven days written notice to the Owner and the Engineer, stop work or terminate this Contract,, and shall receive from the Owner payment in full for all work executed, as determined from the prices contained in the approved detailed estimate as computed by the Engineer, but no claim for extra compensation or damages shall be made or allowed because of such termination of the Contract.

29. FAIR EMPLOYMENT PRACTICES ACT

The Contractor agrees that neither he nor his subcontractor will discriminate against any employee or applicant for employment, to be employed in the performance of this Contract, with respect to his hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of his race, color, religion, national origin or ancestry. Breach of this covenant may be regarded as a material breach of this Contract.

30. AUTHORITY

No agent of the Owner shall have power to revoke, alter, enlarge, or relax the stipulation or requirements of these specifications, except insofar as such authority may be specifically conferred by the specifications themselves, without the formal authorization to do so, conferred by the Contract of which the specifications are a part, or by ordinance, resolution, or other usual official action by the Owner.

31. STARTING WORK

Material shall be ordered and work shall begin on the ground within thirty (30) days after the Contract is signed, unless otherwise stated.

32. SANITARY REGULATIONS

Necessary sanitary conveniences for the use of laborers on the work, properly secluded from public observation, shall be constructed and maintained in sanitary condition by the Contractor, and their use shall be strictly enforced.

33. SUNDAY AND NIGHT WORK

The Contractor is required to prosecute work done under this Contract during the hours of daylight, and work will be permitted at night or on Sundays if it is in the best interest of the owner to accommodate traffic, service disruptions, and to keep the project on schedule. Contractor is required to get owner approval at least 48 hours prior to requesting night work. Also this provision is superseded if work is required to save property or life or as specifically authorized or directed by the Owner.

34. PROGRESS OF WORK

The work shall be prosecuted regularly and uninterruptedly, unless the Owner shall otherwise specifically direct, with such force and at such points as to insure its full completion within the time herein stated.

If, in the opinion of the Owner, it is necessary or advisable that certain portions of the work be done immediately, the Contractor, upon written order, shall proceed with such work without delay. Should he fail to so proceed, the Owner may do or cause to be done, such work, and the cost of the same will be deducted from any money due or to become due the Contractor under this Contract.

35. TIME OF COMPLETION

The time allowed for completion of the work contemplated in this Contract shall be as stated in the proposal or specifications.

36. EXTENSION OF TIME

All days in which work is suspended by order of the Owner, or in accordance with these specifications, shall automatically extend the time for completion an equal number of days.

37. TIME IS ESSENCE OF CONTRACT

It is distinctly understood and agreed to by the parties hereto that the time specified for the completion of the work is the essence of this Contract, and the Contractor shall not be entitled to claim performance of this agreement unless the work is satisfactorily completed, in every respect, within the time herein specified.

38. ESTIMATED QUANTITIES

The quantities of the various classes of work to be done and materials to be furnished under this Contract which have been estimated as stated elsewhere herein, are approximate and only for the purpose of comparing, on a uniform basis, the bids offered for the work under this Contract; and neither the Owner nor his agents is to be held responsible should any of the said estimated quantities be found incorrect during the construction of the work; and the Contractor shall make no claim for anticipated profit, nor for loss of profit, because of a difference between the quantities of the various classes of work actually done or materials actually delivered and the estimated quantities as herein stated.

39. FORFEITURE OF CONTRACT

If the work to be done under the Contract shall be abandoned by the Contractor, or if any time in the judgment of the Owner, the contractor shall fail to prosecute the work at a reasonable rate of progress, or to comply with all or any of the terms and requirements herein set forth, then the Owner shall have the right to take possession of the work, including Contractor's plant, supplies, and materials, at any time after having notified the Contractor in writing to discontinue the work under this Contract for said cause or causes, and such action shall not affect the right of the Owner to recover damages resulting from such failure. Upon receiving such notice, the Contractor shall and will, upon demand, immediately give the Owner to recover damages resulting from such failure. Upon receiving such notice, the Contractor shall and will, upon demand, immediately give the Owner safe and peaceable possession of the work, including the plant, and shall then cease to have control over any portion thereof or the men employed thereon.

The Owner may then proceed to complete the work herein specified, by contract or otherwise; and the entire cost of the same shall be charged to the Contractor and deducted from any sum or sums due or to become due under the contract; the excess cost, if any, to be paid by the Contractor or his sureties, to said Owner.

40. NO WAIVER OF CONTRACT

Neither the acceptance of the whole or any part of the work by the Owner or his Engineer, or any of its agents, nor any order, measurements, or certificate by the Engineer, nor any order by the Owner for the payment of money, nor any payment for the whole or any part of the work by the Owner, nor any extension of time, nor any possession taken by the Owner or its agents, shall operate as a waiver for any portion of the Contact or any power therein provided; nor shall any waiver of any breach of the Contract by held to be a waiver of any other or subsequent breach.

41. PAYMENT NOT TO BE STOPPED

The Owner shall not, nor shall any officer thereof, be precluded or stopped by any return or certificate made or given by the Engineer, or other officer, agent or appointee, under the provisions of this agreement, at any time (either before or after the final completion and acceptance of the work and

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payment made therefor pursuant to any such return or certificates showing the true and correct amount of money due therefor, notwithstanding any such return or certificate, or any payment made in accordance therewith) from demanding and receiving from the Contractor or his sureties, separately or collectively, such sums as may have been improperly paid said Contractor by reason of any such return or certificate which has been untruly or incorrectly compiled.

42. GUARANTEE

The Contractor, as a condition precedent to final payment, shall execute a guarantee to the Owner warranting for a period of one year from the date of final payment to keep in good order and repair any defect in all the work done under the contract, either by the Contractor or his subcontractors, or the material suppliers, that may develop during said period due to improper materials, defective equipment,, workmanship, or arrangements, and any other work affected in making good such imperfections shall also be made good, all without expense to the Owner, and the Contractor shall execute, in favor of the Owner, the attached Maintenance and Guarantee Bond.

When the specifications call for a guarantee period greater than one year, the Contractor shall provided such longer guarantee period.

43. ESTIMATES AND PAYMENTS

The Owner shall pay and the Contractor receive the prices bid in the proposal, or agreed upon, less any deduction for any uncompleted portion, based upon measurements made by the Engineer or as otherwise herein stipulated, and such measurements shall be final and conclusive.

As aid to the Owner in preparing estimates for progress payments, the Contractor may be required to submit to the Owner for approval a breakdown of some or all contract unit prices into their essential component parts. The sum of the component parts shall not exceed the total contract price per unit and the breakdown shall not overrule the contract price per unit.

The Contractor shall submit to the Owner a written request for each payment and a Contractor's Declaration declaring that he has not performed any work, furnished any material, sustained any loss, damage or delay, for any reasons, including soil conditions encountered or created, or otherwise done anything for which he will ask, demand, sue for, or claim compensation from the Owner other than, as indicated on the Contractor's Declaration. When requested by the Owner, the Contractor shall submit receipts or other vouchers showing his payments for materials and labor, including payments to subcontractors.

Payments based on progress estimates will be made on a monthly basis for work completed during the preceding month or since the date of the last preceding progress payment. Payments will be in accordance with the provision of Act 524 of the Michigan Public Acts of 1980 and in accordance with the terms of this Contract. No allowance will be made for materials furnished which are not incorporated in the finished work, unless otherwise stated.

Partial Payment for materials and/or equipment stored on the jobsite may be allowed on the basis of 90% of the invoice cost of the material providing materials are properly stored. Partial Payment will be allowed on the basis of 90% of the invoice cost less the cost of delivery for materials and/or equipment stored off the jobsite providing the following conditions are met:

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Materials can be inspected by the OWNER and are clearly identifiable for the project. Items are properly stored in the opinion of the OWNER. Evidence of clear title transfer to the OWNER upon such partial payment can be provided. Insurance coverage against loss or damage is provided including certificates guaranteeing same.

Pursuant to Act 524, Michigan Public Acts of 1980, the Owner shall designate a person representing it to whom written requests for payments shall be submitted. The Contractor shall designate a person who shall submit written requests for payment to the Owner.

In the event a dispute arises over an avoidable or unacceptable delay in the performance of the work as described in Section 4(3) of Act 524 of Michigan Public Acts of 1980 [MCLA125.1564(3)], the dispute may, at the option of the Owner, be submitted for resolution in accordance with the provisions of Section 4 of Act 524 of the Michigan Public Acts of 1980 to an agent designated pursuant to Section 4(2) of the Act. The dispute resolution process described above shall be used only for the purpose of determining the rights of the parties to retained funds and interest earned on retained funds.

The Owner may withhold the payment of any estimate or portion of estimate until the Contractor shall have furnished satisfactory evidence that he has paid all claims of every nature.

No payment shall be considered as acceptance of the work or any portion thereof prior to the final completion of the work, and the payment of the final estimate.

Within thirty (30) days after the completion of the work under this Contract to the satisfaction of the Owner and the Engineer, in accordance with all and singular terms and stipulations herein contained, the Owner shall make final payment, from a final estimate made by the Engineer. Before final payment is made, the Contractor shall, as directed by the Owner,, furnish a Contractor's Affidavit that he has paid or satisfactorily secured all claims of every nature. Also, the Contractor shall furnish a release from the surety or sureties and permit agencies as applicable, approving payment of final estimate by the Owner. The final payment, when made, shall be considered as final approval and acceptance of the completed work herein specified.

The acceptance by the Contractor of the final payment aforesaid shall operate as, and shall be, a release to the Owner and his agents, from all claim and liability to the Contractor for anything done or furnished for, relating to the work, or for any act or neglect of the Owner or of any person relating to or affecting the work.

CONTRACTOR'S DECLARATION

I hereby declare that I have not, during the period	
to A.D., 20, performed any work, furnished any material, sustained any loss, damag	ge or
delay for any reason, including soil conditions encountered or created, or otherwise done anything for whi	
shall ask, demand, due for, or claim compensation from	
the Owner, or his agents, in addition to the regular items set forth in the contract numbered and dated	
A.D., 20, for	
executed between myself and the Owner, and in the Change Orders for work issued by the Owner in writin	ıg as
provided thereunder, except as I hereby make claim for additional compensation and/or extension of time a	s set
forth on the itemized statement attached hereto.	
There (is) (is not) an itemized statement attached.	
Date:	
Company:	
By:	
Position:	

D

CONTRACTOR'S AFFIDAVIT STATE OF MICHIGAN) County of The undersigned _____ hereby represents that on _____ he (it) was awarded a contract by _____ hereinafter called the Owner, to , in accordance with the terms and conditions of Contract No. ____; and the undersigned further represent that the subject work has now been accomplished and the said contract has now been completed. The undersigned hereby warrants and certifies that all of his (its) indebtedness arising by reason of the said contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the said contract, have been fully paid or satisfactorily settled. The undersigned further agrees that if any such claim should hereafter arise, he (it) shall assume responsibility for the same immediately upon request to do so by the Owner. The undersigned, for a valuable consideration, the receipt of which is hereby acknowledged, does further hereby waive, release and relinquish any and all claims or right of lien which the undersigned now has or may hereafter acquire upon the subject premises for labor and material sued in accomplishing said project owned by the Owner. This affidavit is freely and voluntarily given with full knowledge of the facts, on this day of , 20 . Company: By: Title: Subscribed and sworn to before me, a Notary Public in and for _____ County, Michigan, on this ___ day of_______, 20 . Notary Public My Commission Expires

Act No. 524

Public Acts of 1980

Approved by Governor

January 29, 1981

STATE OF MICHIGAN 80th LEGISLATURE REGULAR SEASON OF 1980

Introduced by Rep. Ryan

ENROLLED HOUSE BILL NO. 5541

AN ACT to provide for the terms of certain construction contracts with certain public agencies; to regulate the payment and retainage of payments on construction contracts with certain public agencies; and to provide for the resolution of certain disputes.

The People of the State of Michigan enact:

Sec. 1. As used in this act:

- (a) "Agent' means the person or persons agreed to or selected by the contractor and the public agency pursuant to section 4(2).
- (b) "Architect or professional engineer" means an architect or professional engineer licensed under Act No. 299 of the Public Acts of 1980, being sections 339.101 to 339.2601 of the Michigan Compiled Laws, and designated by a public agency in a construction contract to recommend progress payments.
- (c) "Construction contract" or "contract" means a written agreement between a contractor and a public agency for the construction, alteration, demolition, or repair of a facility, other than a contract having a dollar value less than \$30,000.00 or a contract that provides for 3 or fewer payments.
- (d) "Contract documents" means the construction contract; instructions to bidders; proposal; conditions of the contract; performance bond; labor and material bond; drawings; specifications; all addenda issued before execution of the construction contract and all modifications issued subsequently.
- (e) "Contractor" means an individual, sole proprietorship, partnership, corporation, or joint venture, that is a party to a construction contract with a public agency.
- (f) "Facility" means a building, utility, road, street, boulevard, parkway, bridge, ditch, drain, levee, dike, sewer, park, playground, or other structure or work that is paid for with public funds or a special assessment.
- (g) "Progress payment" means a payment by a public agency to a contractor for work in place under the terms of a construction contract.
- (h) "Public agency" means this state, or a county, city township, village, assessment district, or other political subdivision, corporation, commission, agency, or authority created by law. However, public agency does not include the state transportation department, a school district, junior or community college, the Michigan state housing development authority created in Act No. 346 of the Public Acts of 1966, as amended, being sections 125.1401 to 125.1496 of the Michigan Compiled Laws, and a municipal electric utility or agency.

- "Assessment district" means the real property within a district area upon which special assessments are levied or imposed or the construction, reconstruction, betterment, replacement, or repair of a facility to be paid for by funds derived from those special assessments imposed or levied on the benefited real property.
- (i) "Retainage" or "retained funds" means the amount withheld from a progress payment to a contractor pursuant to Section 3.
- Sec. 2. (1) The construction contract shall designate a person representing the contractor who will submit written requests for progress payments, and a person representing the public agency to whom requests for progress payments are to be submitted. The written requests for progress payments shall be submitted to the designated person in a manner and at such time as provided in the construction contract.
- (2) The processing of progress payments by the public agency may be deferred by the public agency until work having a prior sequence, as provided in the contract documents, is in place and is approved.
- (3) Each progress payment requested, including reasonable interest if requested under subsection (4), shall be paid within 1 of the following time periods, whichever is later:
- (a) Thirty days after the architect or professional engineer has certified to the public agency that work is in place in the portion of the facility covered by the applicable request for payment in accordance with the contract documents.
- (b) Fifteen days after the public agency has received the funds with which to make the progress payment from a department or agency of the federal or state government, if any funds are to come from either of those sources.
- (4) Upon failure of a public agency to make a timely progress payment pursuant to this section, the person designated to submit requests for progress payments may include reasonable interest on amounts past due in the next request for payment.
- Sec. 3. (1) To assure proper performance of a construction contract by the contractor, a public agency may retain a portion of each progress payment otherwise due as provided in this section.
 - (2) The retainage shall be limited to the following:
 - (a) Not more than 10% of the dollar value of all work in place until work is 50% in place.
- (b) After the work is 50% in place, additional retainage shall not be withheld unless the public agency determines that the contractor is not making satisfactory progress, or for other specific cause relating to the contractor's performance under the contract. If the public agency so determines, the public agency may retain not more than 10% of the dollar value of work more than 50% in place.
- (3) The retained funds shall not exceed the pro rata share of the public agency's matching requirement under the construction contract and shall not be commingled with other funds of the public agency and shall be deposited in an interest bearing account in a regulated financial institution in this state wherein all such retained funds are kept by the public agency which shall account for both retainage and interest on each construction contract separately. A public agency is not required to deposit retained funds in an interest bearing account if the retained funds are to be provided under a state or federal grant and the retained funds have not been paid to the public agency.
- (4) Except as provided in Section 4(7) and (8), retainage and interest earned on retainage shall be released to a contractor together with the final progress payment.
- (5) At any time after 94% of work under the contract is in place and at the request of the original contractor, the public agency shall release the retainage plus interest to the original contractor only if the original contractor provides to the public agency an irrevocable letter of credit in the amount of the retainage plus interest, issued by a bank authorized to do business in this state, containing terms mutually acceptable to the contractor and the public agency.
- Sec 4. (1) The construction contract shall contain an agreement to submit those matters described in subsection (3) to the decision of an agent at the option of the public agency.

- (2) If a dispute regarding a matter described in subsection (3) arises, the contractor and the public agency shall designate an agent who has background, training, and experience in the construction of facilities similar to that which is the subject of the contract, as follows:
 - (a) In an agreement reached within 10 days after a dispute arises.
- (b) If an agreement cannot be reached within 10 days after a dispute arises, the public agency shall designate an agent who has background, training, and experience in the construction of facilities similar to that which is the subject of the contract and who is not an employee of the agency.
 - (3) The public agency may request dispute resolution by the agent regarding the following:
- (a) At any time during the term of the contract, to determine whether there has been a delay for reasons that were within the control of the contractor, and the period of time that delay has been caused, continued, or aggravated by actions of the contractor.
- (b) At any time after 94% of work under the contract is in place, whether there has been an unacceptable delay by the contractor in performance of the remaining 6% of work under the contract. The agent shall consider the terms of the contract and the procedures normally followed in the industry and shall determine whether the delay was for failure to follow reasonable and prudent practices in the industry for completion of the project.
- (4) This dispute resolution process shall be used only for the purpose of determining the rights of the parties to retained funds and interest earned on retained funds and is not intended to alter, abrogate, or limit any rights with respect to remedies that are available to enforce or compel performance of the terms of the contract by either party.
- (5) The agent may request and shall receive all pertinent information from the parties and shall provide an opportunity for an informal meeting to receive comments, documents, and other relevant information in order to resolve the dispute. The agent shall determine the time, place, and procedure for the informal meeting. A written decision and reasons for the decision shall be given to the parties within 14 days after the meeting.
- (6) The decision of the agent shall be final and binding upon all parties. Upon application of either party, the decision of the agent may be vacated by order of the circuit court only upon a finding by the court that the decision was procured by fraud, or other illegal means.
 - (7) If the dispute resolution results in a decision:
- (a) That there has been a delay as described in subsection (3)(a), all interest earned on retained funds during the period of delay shall become the property of the public agency.
- (b) That there has been unacceptable delay as described in subsection (3)(b), the public agency may contract with a subsequent contractor to complete the remaining 6% of work under the contract, and interest earned on retained funds shall become the property of the public agency. A subsequent contractor under this subdivision shall be paid by the public agency from the following sources until each source is depleted, in the order listed below:
- (i) The dollar value of the original contract, less the dollar value of funds already paid to the original contractor and the dollar value of work in place for which the original contractor has not received payment.
- (ii) Retainage from the original contractor, or funds made available under a letter of credit provided under section 3(5).
- (iii) Interest earned on retainage from the original contractor, or funds made available under a letter of credit provided under section 3(5).
- (8) If the public agency contracts with a subsequent contractor as provided in subsection (7)(b), the final progress payment shall be payable to the original contractor the time period specified in section 2(3). The amount of the final progress payment to the original contractor shall not include interest earned on retained funds. The public agency may deduct from the final progress payment all expenses of contracting with the subsequent contractor. This act shall not impair the right of the public agency to bring an action or to otherwise enforce a performance bond to complete work under a construction contract.
- Sec. 5. (1) Except as provided in subsection (2), this act shall apply only to a construction contract entered into after the effective date of this act.

- (2) For a construction contract entered into before the effective date of this date, the provisions of this act may be implemented by a public agency, through a contract amendment, upon the written request of the contractor, with such consideration as the public agency considers adequate.
 - Sec. 6. This act shall take effect January 1, 1983.

PUBLIC ACT 57 STATE OF MICHIGAN 89th LEGISLATURE REGULAR SESSION OF 1998

Introduced by Reps. Middaugh, Alley, Brackenridge, Olshove, Dobronski, Griffin, Gernaat, Walberg, Rhead, Richner, Kukuk, Callahan, Murphy, Thomas, Leland, Profit, Palamara, Wetters, McNutt, Varga, Gagliardi, Gustafson, Kilpatrick, Sikkema, Schermesser, Birkholz, Bodem, Dobb, Raczkowski and Perricone

ENROLLED HOUSE BILL NO. 5607

AN ACT to require contractors to provide certain notices to governmental entities concerning improvements on real property; to allow for the modification of contracts for improvement to real property; to provide for remedies; and to repeal acts and parts of acts.

The People of the State of Michigan enact:

Sec. 1. As used in this act:

- (a) "Contractor" means a person who contracts with a governmental entity to improve real property or perform or manage construction services. Contractor does not include a person licensed under Article 20 of the Occupational Code, 1980 PA 299, MCL 339.2001 to 339.2014.
- (b) "Governmental Entity" means the state, a county, city, township, village, public educational institution, or any political subdivision thereof.
- (c) "Improve" means to build, alter, repair, or demolish an improvement upon, connected with, or beneath the surface of any real property, to excavate, clear, grade, fill, or landscape any real property, to construct driveways and roadways, or to perform labor upon improvements.
- (d) "Improvement" includes, but is not limited to, all or any part of any building, structure, erection, alteration, demolition, excavation, clearing, grading, filling, landscaping, trees, shrubbery, driveways, and roadways on real property.
- (e) "Person" means an individual, corporation, partnership, association, governmental entity, or any other legal entity.
- (f) "Real Property" means the real estate that is improved, including, but not limited to, lands, leaseholds, tenements, hereditaments, and improvements placed on the real property.
- Sec. 2. A contract between a contractor and a governmental entity for an improvement that exceeds \$75,000.00 shall contain all of the following provisions:
- (a) That if a contractor discovers 1 or both of the following physical conditions of the surface or subsurface at the improvement site, before disturbing the physical condition, the contractor shall promptly notify the governmental entity of the physical condition in writing.
 - (i) A subsurface or latent physical condition at the site is differing materially from those indicated in the improvement contract.

- (ii) An unknown physical condition at the site is of an unusual nature differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the improvement contract.
- (b) That if the governmental entity receives a notice under subdivision (a), the governmental entity shall promptly investigate the physical condition.
- (c) That if the governmental entity determines that the physical conditions do materially differ and will cause an increase or decrease in costs or additional time needed to perform the contract, the governmental entity's determination shall be made in writing and an equitable adjustment shall be made and the contract modified in writing accordingly.
- (d) That the contractor cannot make a claim for additional costs or time because of a physical condition unless the contractor has complied with the notice requirements of subdivision (a). The governmental entity may extend the time required for notice under subdivision (a).
- (e) That the contractor cannot make a claim for an adjustment under the contract after the contractor has received the final payment under the contract.
- Sec. 3. (1) If the contractor does not agree with the governmental entity's determination, with the governmental entity's consent the contractor may complete performance on the contract.
- (2) At the option of the governmental entity, the contractor and the governmental entity shall arbitrate the contractor's entitlement to recover the actual increase in contract time and costs incurred because of the physical condition of the improvement site. The arbitration shall be conducted in accordance with the rules of the American Arbitration Association and judgment rendered may be entered in any court having jurisdiction.
- Sec. 4 If an improvement contract does not contain the provisions required under Section 2, the provisions shall be incorporated into and considered part of the improvement contract.
- Sec. 5 This Act does not limit the rights or remedies otherwise available to a contractor or the governmental entity under any other law or statute.
 - Sec. 6 This Act is repealed effective December 31, 2001.

Enacting Section 1. This Act takes effect 180 days after the date this Act is enacted.

This Act is ordered to take immediate effect.

(Signed by John Engler, Governor of Michigan, at 3:00 p.m. on April 8, 1998)

Act No. 517
Public Acts of 2012
Approved by the Governor
December 28, 2012
Filed with the Secretary of State
December 28, 2012
EFFECTIVE DATE: April 1, 2013

STATE OF MICHIGAN 96TH LEGISLATURE REGULAR SESSION OF 2012

Introduced by Senators Kahn, Marleau, Brandenburg, Anderson, Green and Booher

ENROLLED SENATE BILL No. 1024

AN ACT to prohibit persons who have certain economic relationships with Iran from submitting bids on requests for proposals with this state, political subdivisions of this state, and other public entities; to require bidders for certain public contracts to submit certification of eligibility with the bid; to require reports; and to provide for sanctions for false certification.

The People of the State of Michigan enact:

Sec. 1. This act shall be known and may be cited as the "Iran economic sanctions act".

Sec. 2. As used in this act:

- (a) "Energy sector of Iran" means activities to develop petroleum or natural gas resources or nuclear power in Iran.
- (b) "Investment" means 1 or more of the following:
- (i) A commitment or contribution of funds or property.
- (ii) A loan or other extension of credit.
- (iii) The entry into or renewal of a contract for goods or services.
- (c) "Investment activity" means 1 or more of the following:
- (i) A person who has an investment of \$20,000,000.00 or more in the energy sector of Iran.
- (ii) A financial institution that extends \$20,000,000.00 or more in credit to another person, for 45 days or more, if that person will use the credit for investment in the energy sector of Iran.
 - (d) "Iran" means any agency or instrumentality of Iran.
 - (e) "Iran linked business" means either of the following:
- (i) A person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.
- (ii) A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.
 - (f) "Person" means any of the following:
- (i) An individual, corporation, company, limited liability company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group.
- (ii) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in section 1701(c)(3) of the international financial institutional act, 22 USC 262r(c)(3).

(275)

- (iii) Any successor, subunit, parent company, or subsidiary of, or company under common ownership or control with, any entity described in subparagraph (i) or (ii).
- (g) "Public entity" means this state or an agency or authority of this state, school district, community college district, intermediate school district, city, village, township, county, public authority, or public airport authority.
- Sec. 3. (1) Beginning April 1, 2013, an Iran linked business is not eligible to submit a bid on a request for proposal with a public entity.
- (2) Beginning April 1, 2013, a public entity shall require a person that submits a bid on a request for proposal with the public entity to certify that it is not an Iran linked business.
- Sec. 4. If a public entity determines, using credible information available to the public, that a person has submitted a false certification under section 3(2), the public entity shall provide the person with written notice of its determination and of the intent not to enter into or renew a contract with the person. The notice shall include information on how to contest the determination and specify that the person may become eligible for a future contract with the public entity if the person ceases the activities that cause it to be an Iran linked business. The person shall have 90 days following receipt of the notice to respond in writing and to demonstrate that the determination of false certification was made in error. If a person does not make that demonstration within 90 days after receipt of the notice, the public entity may terminate any existing contract and shall report the name of the person to the attorney general together with information supporting the determination.
- Sec. 5. The attorney general may bring a civil action against any person reported under section 4. If a civil action results in a finding that the person submitted a false certification, the person is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the public entity's investigation, and reasonable attorney fees, in addition to the fine. A person who submitted a false certification shall be ineligible to bid on a request for proposal for 3 years from the date the public entity determines that the person has submitted the false certification.
- Sec. 6. The provisions of this act are effective only if Iran is a state sponsor of terror as defined under section 2 of the divestment from terror act, 2008 PA 234, MCL 129.292.

Enacting section 1. This act takes effect April 1, 2013.

This act is ordered to take immediate effect.

	Carol Morey Viventi
	Secretary of the Senate
	Clerk of the House of Representatives
Approved	

Governor

Statewide Prohibition Against Iran-Linked Businesses

The Michigan State legislature passed legislation to prohibit entities that have certain economic relationships with Iran from submitting a bid on a request for proposals (RFP) from state public entities, to require bidders for certain public contracts to submit certification of eligibility with a bid, and to respond to and report a false certification.

The "Iran Economic Sanctions Act" (P.A. 517 of 2012) makes an Iran-linked business ineligible to submit a bid on a RFP with a public entity. School districts, community college districts, and intermediate school districts must require each entity submitting a bid on an RFP to certify it is not an Iran-linked business. This requirement applies to all RFPs and not just to construction projects. Applicants for MDE grants will be required to assure compliance with this condition.

The Iran Economic Sanctions Act defines Iran-linked business as either of the following:

- -- A person engaging in investment activities in the energy sector of Iran, including a person who provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.
- A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.

There are additional requirements to respond to and report an entity that has submitted a false certification. These requirements are described in the Iran Economic Sanction Act at: http://www.legislature.mi.gov/documents/2011-2012/publicact/pdf/2012-PA-0517.pdf

Provisions of the Iran Economic Sanction Act remain in effect as long as Iran is defined by the U.S. Secretary of State as a state sponsor of terror, a country determined to have repeatedly provided support for acts of international terrorism. Information about federal sanctions is available at: http://www.state.gov/j/ct/list/c14151.htm

Questions regarding the requirements of the Iran Economic Sanction Act may be directed to the Attorney General's office.

Vendor

Authorized Agent:

Witness Signature:

Printed Name of Witness:

VENDOR CERTIFICATION THAT IT IS <u>NOT</u> AN "IRAN LINKED BUSINESS"

Pursuant to Michigan law, (the Iran Economic Sanctions Act, 2012 PA 517, MCL 129.311 et seq.), before accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must first certify that it is not an "IRAN LINKED BUSINESS, as defined by law.

Legal Name					
Street Address					
City					
State, Zip					
Corporate I.D. Number / State					
Taxpayer I.D. #					
The undersigned, with: 1) full knowledge of all of Vendors business activities, 2) full knowledge of the requirements and possible penalties under the law MCL 129.311 et seq. and 3) the full and complete authority to make this certification on behalf of the Vendor, by his/her signature below, certifies that: the Vendor is NOT an "IRAN LINKED BUSINESS" as required by MCL 129.311 et seq., and as such that Vendor is legally eligible to submit a bid and be considered for a possible contract to supply goods and/or services to the Owner.					
Signature of Vendor's Authorized Agent:					
Printed Name of Vendor's					

SECTION 00800

GENERAL SUPPLEMENTARY CONDITIONS

PART 1 INSURANCE

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- 1.1 Insurance Required of the Contractor
 - A. Prior to commencement of the work, the Contractor shall purchase and maintain during the term of the project such insurance as will protect him, the Owner, and the Engineer from claims arising out of the work described in this contract and performed by the Contractor, Subcontractor(s) or Sub-Subcontractor(s) consisting of the below listed policies.
- 1.2 Worker's Compensation Insurance
 - A. Worker's Compensation insurance including Employer's Liability to cover employee injuries or disease compensable under the Workers' Compensation Statutes of the states in which work is conducted under this contract; disability benefit laws, if any; or Federal compensation acts such as U. S. Longshoremen or harbor Workers', maritime Employment, or Railroad Compensation Act(s), if applicable.
 - B. Self-insurance plans approved by the regulatory authorities in the state in which work on this project is performed are acceptable.
- 1.3 Comprehensive General Liability
 - A. A Comprehensive General Liability policy to cover bodily injury to persons other than employees and for damage to tangible property, including loss of use thereof, including the following exposures:
 - 1. All premises and operations
 - 2. Explosion, collapse and underground damage
 - 3. Contractor's Protective coverage for independent contractors or subcontractors employed by him.
 - 4. Contractual Liability for the obligation assumed in the Indemnification or Hold Harmless agreement found hereinafter.
 - 5. The usual Personal Injury Liability endorsement with no exclusions pertaining to employment.
 - 6. Products and Completed Operations coverage. This coverage shall extend through the contract guarantee period.
 - B. Additional Insured Requirements:
 - 1. Coverage shall be Primary and Non-contributory and Waiver of Subrogation applies.
 - 2. The policy shall include an endorsement which includes the following as additional insured's:
 - a. The Owner, their council, members, Board members, public officials, consultants, agents, and employees
 - b. The "Engineer"
 Hubbell, Roth & Clark, Inc.

Bloomfield Hills, Michigan Their owners, directors, officers, consultants, agents, and employees

1.4 Comprehensive Automobile Liability

- A. A Comprehensive Automobile Liability policy to cover bodily injury and property damage arising out of the ownership, maintenance or use of any motor vehicle, including owned, non-owned and hired vehicles and including Michigan "No Fault" coverage.
- B. In light of standard policy provisions concerning (a) loading and unloading and (b) definitions pertaining to motor vehicles licensed for road use vs. unlicensed or self-propelled construction equipment, it is strongly recommended that the Comprehensive General Liability and the Comprehensive Auto Liability be written by the same insurance carrier, though not necessarily in one policy.
- C. Additional Insured Requirements:
 - 1. Coverage shall be Primary and Non-contributory
 - 2. The policy shall include an endorsement which includes the following as additional insured's:
 - a. The Owner, their council, members, Board members, public officials, consultants, agents, and employees
 - b. The "Engineer"

Hubbell, Roth & Clark, Inc.

Bloomfield Hills, Michigan

Their owners, directors, officers, consultants, agents, and employees

1.5 Owner's & Contractors Protective Liability Policy

- A. The Contractor shall purchase for the Owner, a separate Owner's Protective Liability policy to protect the Owner, the Engineer, their consultants, agents, employees and such public corporations in whose jurisdiction the work is located, for their contingent liability for work performed by the Contractor, the Subcontractor(s) or the Sub-Subcontractor(s) under this contract.
- B. Purchase the Owner's Protective Liability policy in the Owner's name.
- C. Additional Insured Requirements:
 - 1. The policy shall include an endorsement which includes the following as additional insured's:
 - a. The "Engineer"

Hubbell, Roth & Clark, Inc.

Bloomfield Hills, Michigan

Their owners, directors, officers, consultants, agents, and employees

1.6 Builder's Risk-Installation Floater

A. The Contractor shall purchase a Builder's Risk-Installation Floater in a form acceptable to the Owner covering property of the project for the full cost of replacement as of the time of any loss which shall include, as named insured, (a) the Contractor, (b) all Subcontractors, (c) all Sub-Subcontractors, (d) the Owner, and the Engineer, as their respective interests may prove

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to be at the time of loss, covering insurable property which is the subject of this contract, whether in place, stored at the job site, stored elsewhere, or in transit at the risk of the insured(s).

- B. Coverage shall be effected on an "All Risk" form including, but not limited to, the Perils of fire, wind, flood, vandalism, collapse, theft and earthquake, with exclusions normal to the cover.
- C. The Contractor may arrange for such deductibles as he deems to be within his ability to self-assume, but he will be held solely responsible for the amount of such deductible and for any coinsurance penalties.
- D. Any insured loss shall be adjusted with the Owner and the Contractor and paid to the Owner and Contractor as trustee for the other insured.
- E. Additional Insured Requirements:
 - 1. Coverage shall be Primary and Non-contributory
 - 2. The policy shall include an endorsement which includes the following as additional insured's:
 - a. The Owner, their council, members, Board members, public officials, consultants, agents, and employees
 - b. The "Engineer"

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1.7 Umbrella or Excess Liability

- A. The Contractor is granted the option of arranging coverage under a single policy for the full limit required or by a combination of underlying policies with the balance provided by an Excess or Umbrella Liability policy equal to the total limit(s) requested.
- B. Umbrella or Excess policy wording shall be at least as broad as the primary or underlying policy(ies) and shall apply both to the Contractor's general liability and to his automobile liability insurance.
- C. Additional Insured Requirements:
 - 1. Coverage shall be Primary and Non-contributory and Waiver of Subrogation applies.
 - 2. The policy shall include an endorsement which includes the following as additional insured's:
 - a. The Owner, their council, members, Board members, public officials, consultants, agents, and employees
 - b. The "Engineer"

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Their owners, directors, officers, consultants, agents, and employees

1.8 Railroad Protective Liability

- A. Where such an exposure exists, as determined by the Owner, the Contractor will provide coverage in the name of each railroad company having jurisdiction over rights-of-way across which work under the contract is to be performed.
- B. Additional Insured Requirements:
 - 1. Coverage shall be Primary and Non-contributory and Waiver of Subrogation applies.
 - 2. The policy shall include an endorsement which includes the following as additional insured's:
 - a. The Owner, their council, members, Board members, public officials, consultants, agents, and employees
 - b. The "Engineer"

Hubbell, Roth & Clark, Inc.

Bloomfield Hills, Michigan

Their owners, directors, officers, consultants, agents, and employees

1.9 Limits of Liability

A. The required limits of liability for insurance coverage shall be **not less than** the following:

1	E
1. Workers' Compensation	
Coverage A - CompensationStatutory	
Coverage B - Employer's Liability\$500,000	
2. Comprehensive General Liability	
Bodily Injury and Property Damage\$1,000,000	Each Occurrence
Combined Single Limit\$2,000,000	Per Job Aggregate
\$1,000,000	Completed Operations Aggregate
3. Comprehensive Automobile Liability	
Bodily Injury and Property Damage\$1,000,000	Each Accident
Combined Single Limit	
4. Owner's Protective	
Bodily Injury and Property Damage \$1,000,000	Per Occurrence
Combined Single Limit\$1,000,000	Aggregate
5. Builder's Risk & Installation Floater	Cost to replace at time of loss
6. Umbrella or Excess Liability \$2,000,000	Per Occurrence

7. Insurance - Other Requirements

\$2,000,000

a. Notice of Cancellation or Intent Not to Renew: Policies will be endorsed to provide that at least 30 days written notice shall be given to the Owner and to the Engineer, of cancellation of, material change, or intent not to renew (see sample endorsements which follow this Section).

Aggregate

1.10 Evidence of Coverage

- A. Prior to commencement of the work, the Contractor shall furnish to the Owner, Certificates of Insurance in force on the Owner's Form of Certificate provided.
- B. Other forms of Certificate are acceptable only if (1) they include all of the items prescribed in the Owner's Form of Certificate, including agreement to cancellation provisions outlined

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- herein, (2) the Engineer's Project Identification Number, and (3) they have written approval of the Owner and the Engineer.
- C. The Owner reserves the right to request complete copies of policies if deemed necessary to ascertain details of coverage not provided by certificates.
- D. Such policy copies shall be "Originally Signed Copies," and so designated.
 - 1. Insurance Required for the Contractor
 - a. Workers' Compensation and Employers' Liability
 - b. Comprehensive General Liability-including:
 - 1) All premises and operations.
 - 2) Explosion, collapse and underground damage.
 - 3) Contractor's Protective.
 - 4) Contractual Liability for obligations assumed in the Indemnification-Hold Harmless Agreement of this Contract.
 - 5) Personal Injury Liability.
 - 6) Products and Completed Operations
 - c. Comprehensive Automobile Liability including owned, non-owned and hired vehicles and Michigan "No Fault" coverage.
 - d. Umbrella or Excess Liability.
 - e. Builders Risk Installation Floater
 - f. Railroad Protective Liability
 - 2. Insurance Required for the Owner
 - a. Owners' and Contractor's Protective Liability Policy which names as additionally insured the Engineer, their consultants, agents, employees and such public corporations in whose jurisdiction the work is located.
 - b. Refer to sample endorsements which follow this Section.

1.11 Qualification of Insurers

- A. In order to determine financial strength and reputation of insurance carriers, all companies providing the coverages required shall be licensed or approved by the Insurance Bureau of the State of Michigan and shall have a financial rating no lower than XI and a policyholder's service rating no lower than A as listed in A. M. Best's Key Rating Guide, current edition.
- B. Companies with ratings lower than A;XI will be acceptable only upon written consent of the Owner.

1.12 Contract Security

- A. If the Owner is a public entity, the Contractor shall furnish a surety bond (form attached) in an amount at least equal to 100 percent of the contract price as security for the faithful performance of this contract. The Contractor shall furnish, also, a separate surety bond (form attached) in an amount at least equal to 100 percent of the contract price as security for the payment of all persons performing labor on the project under this contract, and furnishing materials in connection with this contract. The surety on each such bond shall be a duly authorized surety company satisfactory to the Owner.
- B. Regardless of whether the Owner is or is not a public entity, the Contractor shall furnish a Maintenance and Guarantee Bond (form attached) covering all work under this contract. The

- guarantee is to cover a period of one year subsequent to the date of the final estimate, unless otherwise specified.
- C. Surety Companies providing and executing Surety and Guarantee Bonds shall appear on the United States Treasury Departments most current list, Circular 570, as holding certificates of authority as acceptable sureties on federal bonds. The penal sum of such bonds shall not exceed the a company's limitation as stated therein. A surety company shall be licensed in the State in which it provides a bond and in the State where the contract work is to be performed.

1.13 Indemnification

- A. The contractor agrees to indemnify, defend, and save harmless the Owner and the Engineer, their consultants, agents, and employees, from and against all loss or expense (including costs and attorney's fees) by reason of liability imposed by law upon the Owner and the Engineer, their consultants, agents, and employees for damages because of bodily injury, including death at any time resulting there from, sustained by any person or persons or on account of damage to property, including loss of use thereof, arising out of or in consequence of the performance of this work, whether such injuries to persons or damage to property is due, or claimed to be due, to the negligence of the contractor, his subcontractors, the Owner, the Engineer, and their consultants, agents, and employees, **except** only such injury or damage as shall have been occasioned by the sole negligence of the Owner, the Engineer, or their agents, employees or consultants.
- B. The Contractor also agrees to indemnify, defend and save harmless the Owner and the Engineer, their owners, directors, Board members, officers, directors, officials, and council members, consultants, agents and employees, from and against any and all loss or expense (including costs and attorney's fees) for any and all claims or allegations of supervision, inspection or observation activities or services which may arise out of, or in consequence of, the performance of this work.

PART 2 PART 2 – NOT USED

PART 3 PART 3 – NOT USED

END OF SECTION

	10	Client#			ATE OF LIA	DII	ITV II	PAVC	3850 197	DATE (MI	M/DD/YYYY)
ACORD CERTIFICATE OF LIABILITY INSURANCE O4/02/2016 THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.											
th	e te	RTANT: If the certificate holder is rms and conditions of the policy, cate holder in lieu of such endors	certa	in p	olicies may require an en	dorsen	nent. A stater				
1ns 247 P.C	PRODUCER Insurance Agency 24724 Any Street (248) 666-6666 P.O. Box 2067 SomeCity, MI 48037-2067				CONTACT Insurance Agent name PHONE (AIC, No, Ext): 248 555-5555 E-MAIL ADDRESS: InsuranceAgent@InsuranceGroup.com PRODUCER CUSTOMER ID #:						
Company ABC 2654 Street Name AnyCity, MI 48183				INSURER(S) AFFORDING COVERAGE NAIC# INSURER A : Insurance Company 1 INSURER B : Insurance Company 2 INSURER C : INSURER D :							
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THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.											
INSR LTR		TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
A	X X GEI	CLAIMS-MADE X OCCUR	X	X	MPA00000042433S	6	O		EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMPIOP AGG	\$1,000 \$100,0 \$5,000 \$1,000 \$2,000 \$2,000	000 0 0,000 0,000
Α	X		X	X	BA00000042434S		11/1 //2014	11/17/2016	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	\$ 1,000 \$ \$ \$ \$),000
Α	Х	UMBRELLA LIAB EXCESS LIAB DEDUCTIBLE RETENTION \$	X	X	CMB00000042435S		11/17/2014	11/17/2015	EACH OCCURRENCE AGGREGATE	\$2,000 \$2,000 \$	
В	ANY OFF (Ma	RKERS COMPENSATION EMPLOYERS' LIABILITY PROPRIETOR:/PARTNER:/EXECUTIVE N Madatory in NH) s, describe under SCRIPTION OF OPERATIONS below	N/A	Х	WC0001100555		05/01/2014	04/30/2015	X WC STATU- TORY LIMITS OTH- EL. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	\$500,0 \$500,0 \$500,0	000
Α		tallation	Х		MPA00000042433S		11/17/2014	11/17/2015	\$150,000		
Floater \$1,000 deductible											
CEF	TIF	ICATE HOLDER				CANC	ELLATION				
CERTIFICATE HOLDER Municipality Name 18500 Street Name AnyCity, MI 48025				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.							
		1				AUTHO	RIZED REPRESE	NTATIVE	SIGNA	TUR	RE

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ACORD 25 (2009/09) 1 of 2 #S264726/M258177

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DESCRIPTIONS (Continued from Page 1)

employees, as well as the engineer; Hubbell Roth & Clark, their owners, directors, officers, constultants, agents, and employees are included as Additional Insured per written contract with respect to the general, auto and umbrella liability coverages for the work performed by the named insured for the certificate holder. Insurance is considered primary and non contributing and a waiver of subrogation applies. Should any of the above described policies be cancelled before the expiration date thereof, the issuing Company will mail 30 days prior written notice to the Certificate holder. Endorsements evidencing the change of Policy are attached.



AMS 25.3 (2009/09)

2 of 2

#S264726/M258177

POLICY NUMBER: TRA 4820287

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EARLIER NOTICE OF CANCELLATION PROVIDED BY US

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE PART
CRIME AND FIDELITY COVERAGE PART
EQUIPMENT BREAKDOWN COVERAGE PART
FARM COVERAGE PART
COMMERCIAL PROPERTY COVERAGE PART
COMMERCIAL INLAND MARINE COVERAGE PART
COMMERCIAL LIABILITY UMBRELLA COVERAGE PART
OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PROFESSIONAL LIABILITY COVERAGE

SCHEDULE

Number of Days' Notice 30

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
431	

(If no entry appears above information required to complete this Schedule will be shown in the Declarations as applicable to this endorsement.)

For any statutorily permitted reason other than nonpayment of premium, the number of days required for notice of cancellation, as provided in paragraph 2. of either the CANCELLATION Common Policy Condition or as amended by an applicable state cancellation endorsement, is increased to the number of days shown in the Schedule above.

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POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY CG 20 37 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations				
	0				
Information required to complete this Schedule, if not	shown above, will be shown in the Declarations.				

A. Section II – Who Is An insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard"

However:

- The insurance afforded to such additional insured only applies to the extent permitted by law; and
- If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the contract or agreement; or
- Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

CG 20 37 04 13

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Page 1 of 1

COMMERCIAL GENERAL LIABILITY CG 20 33 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – AUTOMATIC STATUS WHEN REQUIRED IN CONSTRUCTION AGREEMENT WITH YOU

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

- A. Section II Who Is An Insured is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
 - 1. Your acts or omissions; or

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The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured:

- Only applies to the extent permitted by law; and
- Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

- "Bodily injury" "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
 - a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

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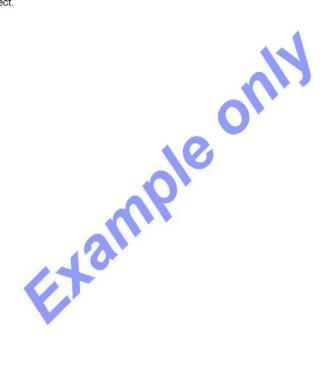
- "Bodily injury" or "property damage" occurring after:
 - a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
 - b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.
- C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

The most we will pay on behalf of the additional insured is the amount of insurance:

- Required by the contract or agreement you have entered into with the additional insured; or
- Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations



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NOTE: IMPORTANT STATE INFORMATION ON REVERSE SIDE MSB @ ACORD CORPORATION 1993

ACORD 75 (2001/01) 1 of 3 #5069

CONDITIONS

This Company binds the kind(s) of insurance stipulated on the reverse side. The Insurance is subject to the terms, conditions and limitations of the policy(ies) in current use by the Company.

This binder may be cancelled by the Insured by surrender of this binder or by written notice to the Company stating when cancellation will be effective. This binder may be cancelled by the Company by notice to the Insured in accordance with the policy conditions. This binder is cancelled when replaced by a policy. If this binder is not replaced by a policy, the Company is entitled to charge a premium for the binder according to the Rules and Rates in use by the Company.

Applicable in California

When this form is used to provide insurance in the amount of one million dollars (\$1,000,000) or more, the title of the form is changed from "Insurance Binder" to "Cover Note".

Applicable in Delaware

The mortgagee or Obligee of any mortgage or other instrument given for the purpose of creating a lien on real property shall accept as evidence of insurance a written binder issued by an authorized insurer or its agent if the binder includes or is accompanied by: the name and address of the borrower; the name and address of the lender as loss payee; a description of the insured real property; a provision that the binder may not be canceled within the term of the binder unless the lender and the insured borrower receive written notice of the cancellation at least ten (10) days prior to the cancellation; except in the case of a renewal of a policy subsequent to the closing of the loan, a paid receipt of the full amount of the applicable premium, and the amount of insurance coverage.

Chapter 21 Title 25 Paragraph 2119

Applicable in Florida

Except for Auto Insurance coverage, no notice of cancellation or nonrenewal of a binder is required unless the duration of the binder exceeds 60 days. For auto insurance, the insurer must give 5 days prior notice, unless the binder is replaced by a policy or another binder in the same company.

Applicable in Nevada

Any person who refuses to accept a binder which provides coverage of less than \$1,000,000.00 when proof is required: (A) Shall be fined not more than \$500.00, and (B) is liable to the party presenting the binder as proof of insurance for actual damages sustained therefrom.

ACORD 75 (2001/01) 2 of 3

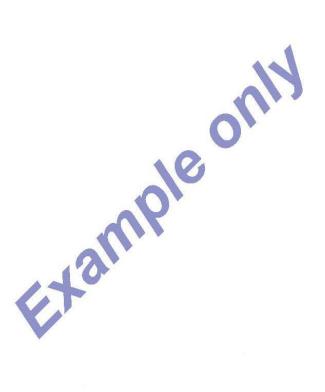
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SPECIAL CONDITIONS/OTHER COVERAGES (Cont. from page 1)

consultants, agents, employees, & such public corporations in whose jurisdiction the work is located.

** Continued From Additional Interests Section **

Hubbell, Roth & Clark, Inc. 555 Hulet Drive; P.O. Box 824 Bloomfield Hills, MI 48303-0824 Type: Additional Insured



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#5069

COMMERCIAL GENERAL LIABILITY CG 20 31 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – ENGINEERS, ARCHITECTS OR SURVEYORS

This endorsement modifies insurance provided under the following:

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY COVERAGE PART

- A. Section II Who Is An Insured is amended to include as an additional insured any architect, engineer or surveyor engaged by you, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:
 - 1. In connection with your premises; or
 - **2.** In the performance of your ongoing operations. However:
 - The insurance afforded to such additional insured only applies to the extent permitted by law; and
 - 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.
- B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury" or "property damage" arising out of the rendering of or the failure to render any professional services by or for you, including:

 The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the rendering of or the failure to render any professional services by or for you.

- C. With respect to the insurance afforded to these additional insureds, the following is added to Section III Limits Of Insurance:
 - If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:
 - Required by the contract or agreement; or
 - 2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

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SECTION 01000

GENERAL SPECIFICATIONS

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1.1 WORKING SPACE

- A. The contractor shall interfere as little as possible with traffic and in all cases shall confine the work operations to the minimum space possible.
- B. Stockpiling of construction material and equipment will be permitted as necessary, but in no case shall traveled roadways, driveways, or entrances be unduly obstructed.

C. Should storage areas be desired on private property, the Contractor may obtain such space on privately owned property at his own expense, by agreement with the property owner thereof. The Contractor shall provide the Owner with a copy of the written permission from the private property owner prior to occupying the property.

1.2 WORK WITHIN PUBLIC STREETS OR LAND

A. Where the centerline of the proposed improvement is within the public street or land, the contractor shall confine his operations to within the public street or land unless easements have been acquired (See "Easements"). It shall be the contractor's responsibility to use such methods and/or materials, including sheeting, so as to prevent any portion of the excavation from encroaching on private property. This shall not preclude the contractor from obtaining the right to encroach on private land in accord with the foregoing article "Working Space." All signing and barricading shall be done in accordance with current edition of the Michigan Manual of Uniform Traffic Control Devices (M.M.U.T.C.D.) as issued by the Michigan Department of Transportation.

1.3 EASEMENTS

A. In certain instances the owner may have acquired certain permanent easements and construction easements for the contractor's use in constructing the work. The contractor shall confine work operations to these easements except as noted under the foregoing article "Working Space."

1.4 LOCATING WORK

A. The contractor shall accurately locate the work from reference points established by the Owner along the surface of the ground and the line of work. For sewers, "cut sheets" will be furnished by the Owner. Reference points shall be protected and preserved by the contractor.

1.5 SOIL CONDITIONS

- A. The contractor, as such and as bidder, shall make his own determination as to soil and/or rock conditions and shall complete the work in whatever material and under whatever conditions may be encountered or created, without extra cost to the owner. This shall apply whether or not borings are shown on the drawings.
- B. The owner does not guarantee that the ground encountered during construction will conform with any boring information furnished herein.
- C. The Owner and Engineer may have been involved in the design, construction observation, and/or construction of other underground projects in the area of the proposed construction. The observation field reports, soil reports, and any soil information connected with these projects are available for review by the prospective bidders.

1.6 SURVEY MONUMENTS

A. Monuments or other recognized property boundary markers at street intersections, section corners, acreage or lot corners, and right-of-way lines shall be preserved and protected. Where such monuments or markers must be removed during construction, the Owner shall be

notified and the Contractor shall make all necessary arrangements with a land surveyor registered in the State of Michigan to have these monuments or markers properly witnessed prior to disturbance or removal and later reset by the registered land surveyor at no cost to the Owner.

1.7 TRENCH BACKFILL

- A. The Contractor, as such and as bidder, shall carefully review the contract drawings and specifications and shall determine the extent of the "Special Backfill" requirements. The cost of providing for and meeting the requirements for Special Backfill shall be included in the unit price of the work as bid at no extra cost to the Owner.
- B. Special backfill shall be used at all locations and of the type called for on the drawings, and at other locations specified herein whether called for on the drawings or not.
- C. The type and method of backfilling is dependent on its locations and function and shall conform with the following requirements. The owner will supply field observation on the special backfill compaction requirements.
- D. Backfilling of trenches in the shoulder area and under private gravel drives shall be carried to within 6 inches of the existing surface as specified under Trench A or Trench B as required. The shoulder shall be defined herein as the area within ten feet of the pavement edge, or the width of the existing graveled shoulder, whichever is the lesser. The remaining depth shall be backfilled with 6 inches of compacted 21AA aggregate. Backfilling of trenches crossing gravel roads or streets shall be carried to within 8 inches of the existing surface and the remaining depth shall be backfilled with 8 inches of compacted 21AA limestone aggregate. Compaction shall be performed by a pneumatic-tired roller or a vibratory compactor until the compaction requirements as required for Trench A or Trench B and as detailed in the following paragraphs are met.
- E. The requirements as specified herein are in addition to the conditions provided for under permit granted by the Board of County Road Commissioners of the County or the Michigan Department of Transportation.

F. Trench A

1. All trenches under graveled, slag or hard surfaced roads, pavements, hard surfaced parking lots and driveways, sidewalks, curbs and where the trench edge is within 3 feet of a pavement shall be backfilled with bank run sand meeting the requirements of Granular Material, MDOT Class II. The material shall be placed by the Controlled Density Method or other effective means having the approval of the Engineer and is to be compacted to 95 percent of maximum unit weight as determined by ASTM D-1557 Modified Proctor. Trenches under pavement to be constructed in the near future, as noted or shown on the drawings, shall be backfilled with MDOT Class II Granular Material, meeting the requirements of Table 902-3 Grading Requirements for Granular Materials 1996 in the MDOT 1996 Standard Specifications for Construction.

G. Trench B

1. Trench B shall be used where called for on the drawings and where the trench crosses slag or gravel drives, shoulders, or parking lots whether called for on the drawings or not.

H. All trenches shall be backfilled with granular material, MDOT Class II to a point 12 inches above the pipe for diameters less than 24 inches and up to the spring line with materials meeting the requirements of the 1996 MDOT Table 902-2, Class 34R for diameters 24 inches or larger. This portion of the backfill is to be placed in layers not exceeding 6 inches in depth, and shall be thoroughly compacted by mechanical tamping to not less than 95% of maximum unit weight utilizing ASTM D-1557 Modified Proctor. The remainder of the backfill shall be made with suitable excavated material (excluding blue and gray clays, peat, muck, marl or other organic materials) placed in one foot layers with each layer being thoroughly compacted by approved mechanical methods, or other effective means having the approval of the Engineer, to a density of 90% of maximum unit weight utilizing ASTM D-1557 Modified Proctor.

1.8 MAINTENANCE AND RESTORATION OF PAVEMENTS, ROAD SURFACES, STRUCTURES AND TRENCH BACKFILL

- A. Where trenches cross existing improved roadways or drives or where the trench parallels an existing improved roadway which is disturbed by the contractor's operations, the contractor shall consolidate the trench backfill and shall place a temporary gravel fill, meeting 21AA Aggregate Gradation or (County Road Specifications) at least 8" thick; and shall, during the life of the contract, maintain the same in good condition with additional gravel as settling takes place. All structures, including curbing, walks, paving, gravel, or street road surfaces, etc., that may be damaged or destroyed by the contractor's operations, shall be repaired and replaced by him at his own expense. In restoring pavement, a saw shall be used and a cut equal to at least 3/4 of the thickness of the existing pavement shall be made on each side of the part to be restored, with the exception of expansion joints that shall be saw cut the full depth of the pavement. Concrete shall be 3500 psi, using six (6) sacks of cement per cubic yard of concrete, unless otherwise required.
- B. If the pavement removed had an asphaltic concrete surface, the surface shall be removed to a distance one foot beyond the limits of the removed concrete pavement. The butt joint in asphaltic concrete removal shall be prepared by sawing through the total depth of asphaltic concrete. The surface shall be replaced with a nominal two inches of MDOT bituminous surface mixture as required by the Owner and meeting the requirements of the Michigan Department of Transportation as to materials and method of replacement at no extra cost to the Owner.
- C. Trenches shall be backfilled to the requirement of "Trench A" or "Trench B" specifications as described in this section and as specified on plans and profiles. After completion of backfill, the work area shall be restored as noted under "Final Cleanup Grading, Topsoil, and Seeding and/or Sodding".

1.9 ROAD PERMITS

A. The contractor shall obtain any necessary construction permits required of contractors for work within public streets, highways, roads, or alleys. The cost of construction permits, including, but not limited to, inspection fees, application fees, and/or review fees that may be required in connection with such permits, shall be at the Contractor's expense. Construction operations shall be conducted in accordance with provisions of such permits, including tunneling of pavements where required. The cost of any required bonds shall be included in the cost of the work as bid.

1.10 ROAD DETOURS

A. The contractor shall provide and maintain all temporary roadways as required for work operations or as required under "Road Permits" or otherwise specified or shown on the drawings at no extra cost to the Owner.

1.11 PROTECTION OF THE PUBLIC

A. The contractor shall provide sufficient barricades, guard railings, fencing, advance construction signing, coverings or other means to protect the public from injury due to the work operations, including completed or uncompleted work, at all times until acceptance of the work by the Owner at no extra cost to the Owner.

1.12 BARRICADES AND PROTECTION

- A. The contractor shall provide and maintain in good repair, all barricades, guard railings, etc., as required for the protection of the workers, the Owner's employees and employees of Owner's agent in strict compliance with state and local requirements.
- B. At dangerous points throughout the work, the contractor shall provide and maintain guard rails, colored lights, and flags. All possible precautions shall be taken to protect the workers from injury at no extra cost to the Owner.

1.13 MAINTENANCE OF TRAFFIC

- A. During the progress of the work, the contractor shall accommodate both vehicular and pedestrian traffic as provided in these specifications and as indicated on the drawings. In the absence of specific requirements, traffic shall be maintained in accordance with the current edition of the Michigan Manual of Uniform Traffic Control Devices. Access to fire hydrants and water valves shall always be maintained. The contractor's truck and equipment operations on public streets shall be governed by County regulations, all local traffic ordinances, and regulations of the Fire and Police Department.
- B. Small street openings necessary for manholes, alignment holes, sewer connections, etc. will be permitted. Such holes shall not be open longer than necessary and shall be protected and any traffic detouring necessary shall be done to the satisfaction of the Owner. Wherever possible, small openings shall be covered with steel plates at pavement level secured in place during periods that work is not being performed at no extra cost to the Owner.
- C. Where streets are partially obstructed, the contractor shall place and maintain temporary driveways, ramps, bridges and crossings which in the opinion of the Owner are necessary to accommodate the public at no extra cost to the Owner. In the event of the contractor's failure to comply with the foregoing provisions, the Owner may, with or without notice, cause the same to be done and deduct the cost of such work from any monies due or to become due the contractor under this contract. However, the performance of such work by the Owner, or at his insistence, shall serve in no way to release the contractor from his liability for the safety of the traveling public.
- D. The contractor shall provide flagmen, warning lights, signs, fencing and barricades necessary to direct and protect vehicular and pedestrian traffic at no extra cost to the Owner.

E. The contractor shall inform the local fire department in advance of work operations of street obstructions and detours, so that the fire department can set up plans for servicing the area in case of an emergency. The governing police department and the owner shall be notified at least one week prior to obstructing any street.

1.14 PRESERVATION OF TREES

- A. The contractor shall protect and preserve all trees along the line of work, and will be held responsible for any damage to trees. Where necessary to preserve a tree and its main roots, the contractor shall tunnel under such tree. Where specifically called for on the drawings, the contractor shall remove trees completely, including stumps and main roots.
- B. Where tunneling is not required for trees close to the trench and root trimming is necessary, the contractor shall hand trench ahead of the machine digging and cut all roots cleanly to minimize damage to the roots.
- C. Tree branches shall be tied back to protect them from the contractor's machinery.
- D. When a tree is removed by the contractor for his convenience and with the permission of the Owner and the adjacent property owner (where required), the contractor shall furnish one three (3) inch dia. tree for every six (6) inches of diameter of the tree removed. The species shall be as directed by the Owner. All trees installed shall be guaranteed to grow for a period of one (1) year.
- E. The contractor will receive no extra compensation for preservation of trees or for their removal and replacement where called for, and the cost of all work involved shall be included in the unit price bid or at no extra cost to the owner.

1.15 REPLACEMENT OF SHRUBBERY

A. The contractor shall protect and/or replace all shrubbery damaged or destroyed by operations under this contract at no extra cost to the owner.

1.16 SODDING

- A. Where called for in the specifications, or on the drawings, the contractor shall furnish all labor and material and place Grade A sod to the finished grade shown or to conform with existing grades and provide a smooth and uniform surface to meet existing ground surface.
- B. Sod shall be densely rooted blue grass or other approved perennial grasses, free from noxious weeds and reasonably free from other weeds. Sod shall be not less than 2 inches thick, cut in strips not less than 10 inches wide by 18 inches long. The type of grass shall match the adiacent lawn.
- C. The area to be sodded shall be made smooth and shall be covered with not less than 2 inches of approved top soil screened to remove all debris uniformly spread over the scarified ground surface.
- D. Sod shall be moist and shall be laid in a moist earth bed. Pegs shall be used where required to hold the sod in place.

d o c s \

- E. Sod shall not be placed during a drought nor during the period from July 1 to August 15.
- F. Sod to be kept moist by the contractor for fourteen (14) days to insure growth.
- G. The cost of providing for and meeting the sodding requirements shall be included in the bid price or at no extra cost to the owner.

1.17 FINAL CLEANUP, GRADING, TOP SOIL AND SEEDING

- A. Upon completion of construction and before final payment is made, the contractor shall restore the working area to as clean a condition as existed before construction operations started.
- B. The Contractor shall go over the entire area and regrade and fill any areas that may have settled, including fills made from excess excavated materials and all other areas that may have been disturbed during construction operations.
- C. Where established lawn or grass areas have been disturbed by the contractor's operations, the Contractor shall provide, unless otherwise specified or called for on the drawings or in the specifications, not less than the minimum depth of approved top soil and shall grade, seed, fertilize and mulch the areas as required by the Owner and per the following Table:

Location	Seed Mixture	Amount of Seed	<u>Fertilizer</u>	Top Soil (min.)
Lawn	MDOT Class A	100 lb/Acre	400 lb/Acre	3"
Other Areas	MDOT Roadside	35 lb/Acre	200 lb/Acre	2"

- D. Fertilizing and sowing shall be done in an approved manner, and the seed shall be covered by light raking or dragging, and then rolled with a light roller. Fertilizer shall be 10-6-4 commercial type.
- E. Seeding areas are to be kept moist for fourteen (14) days to insure growth. The cost of providing for and meeting these requirements shall be incidental to the project unless otherwise provided.

1.18 EXISTING STRUCTURES AND UTILITIES

A. Certain underground structures and utilities have been shown as an aid to the contractor, but the owner does not guarantee their location or that other underground structures or utilities may not be encountered.

1.19 PUBLIC AND PRIVATE UTILITIES

A. Utilities

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- 1. The Contractor must provide adequate protection for water, sewer, gas, telephone, TV cable, or any other public or private utilities encountered. The Contractor will be held responsible for any damages to such utilities arising from his operation.
- 2. When it is apparent that construction operations may endanger the foundations of any utility conduit, or the support of any structure, the contractor shall notify the utility owner of this possibility and shall take steps as may be required to provide temporary bracing or support of conduit or structures.

- 3. In all cases where permits or inspection fees are required by utilities in connection with changes to or temporary support of their conduits, the contractor shall secure such permits and pay all inspection fees.
- 4. Where it is necessary in order to carry out the work, that a pole, electric or telephone, be moved to a new location, or moved and replaced after construction, the contractor shall arrange for the moving of such pole or poles, and the lines thereof, and shall pay any charges therefor.
- 5. Where it is the policy of any utility owner to make repairs to damaged conduit or other structures, the contractor shall cooperate to the fullest extent with the utility and shall see that construction operations interfere as little as possible with the utilities operations. The contractor shall pay any charges for these repairs.

B. Existing Sewer Facilities

- 1. Existing sewers or drains may be encountered along the line of work. In all such cases, the contractor shall perform the work in such a manner that sewer service will not be interrupted. and shall make all temporary provisions to maintain sewer service as incidental to the work as bid.
- 2. Unless otherwise indicated on the drawings, the contractor shall replace any disturbed sewer or drain, or relay same at a new grade and/or location to be established by the Owner such that sufficient clearance for the sewer will be provided.
- 3. The contractor will receive no extra compensation for replacement or relocation of sewers or drains encountered, or for relaying at a new grade where called for by the drawings unless a separate bid item has been included in the proposal.

C. Existing Water Facilities

- 1. Where existing water mains are encountered in the work, they shall be maintained in operation. If necessary, they shall be re-laid using ductile iron pipe of the type and with joints as specified within the current water main specifications of the governmental agency controlling said utility.
- 2. The contractor will receive no extra compensation for the relaying and/or lowering or raising of water mains or water service leads, except where a separate bid item has been included in the proposal.

D. Existing Gas Facilities

1. Where existing gas mains and services are encountered, the contractor shall arrange with the gas company for any necessary relaying, and shall pay for the cost of such work unless otherwise provided.

1.20 PUMPING, BAILING AND DRAINING

- A. The contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of water from trenches or other excavations.
- B. Where the work is in ground containing an excessive amount of water, the contractor shall provide, install, maintain, and operate suitable deep wells or well points, connecting manifolds and reliable pumping equipment to operate same to insure proper construction of the work. Alternate dewatering methods may be implemented if approved by the Owner.
- C. Drainage or discharge lines shall be connected to adjacent public storm water drains or extended to nearby water courses wherever possible. In any event, all pumping and drainage

- shall be done without damage to any highway or other property, public or private, and without interference with the rights of the public or private property owners and in accordance with the MDEQ and local requirements for soil erosion and sedimentation control.
- D. The contractor shall receive no extra compensation for providing, maintaining or operating any dewatering or drainage facilities.

1.21 SHEETING, SHORING AND BRACING

A. Where necessary in order to construct the work called for by the contract, to insure the safety of the workers, or to protect other things of value, the contractor shall use and, if necessary, leave in place, such sheeting, shoring, and bracing as is needed to carry out the work or to adequately insure the stability of such work, or to insure the safety of the workers and/or to protect adjoining things of value. The contractor will receive no extra compensation for sheeting, shoring, or bracing, whether removed or left in place.

1.22 DISPOSAL OF EXCAVATED MATERIAL

A. With the exception of an amount of excavated materials sufficient for backfilling and construction of fills, as called for on the drawings, all broken concrete, stone, and excess excavated materials shall be disposed of from the site by the contractor. The contractor will be required to obtain his own disposal ground, and will receive no extra compensation for disposing of any of the excess materials.

1.23 DISPOSAL OF WASTE MATERIALS

- A. Unless otherwise directed by the owner, all waste materials and debris resulting from the construction work shall be removed from the premises at no extra cost to the owner.
- B. The contractor shall, at all times, keep the premises free from accumulations of waste material or debris caused by his employees or work, and shall remove same when necessary or required by the owner.

1.24 TUNNELING

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A. The contractor shall construct the work in tunnel where shown on the drawings or required by permits, and at other locations may, at his option, construct the work in tunnel where it crosses existing roadways, public and private utilities, walks or other structures. Tunnel work shall be constructed in accordance with the drawings and specifications, "Road Permit" requirements, or as otherwise noted on the drawings at no extra cost to the owner.

1.25 COMPRESSED AIR

A. The contractor shall provide compressed air as required for the work at no extra cost to the owner.

1.26 EXPLOSIVES

Explosives may be brought or used on the premises only with the written consent of the owner.

- A. If explosives are used, the contractor shall comply with all laws, rules, and regulations governing their use. The contractor shall be fully responsible for the safety of all persons and property and any approval by the owner shall not relieve the contractor of such responsibility.
- B. All fees and assessments in connection therewith shall be paid for by the contractor, the cost of which shall be included in the proposal. The contractor shall be responsible for furnishing sufficient, properly qualified safety inspectors as required by the state and local governing bodies. The cost of providing for and meeting the requirements for handling explosives shall be at no extra cost to the owner.

1.27 INSPECTION OF PREMISES

A. The bidder shall visit the premises and thoroughly acquaint himself with the conditions to be encountered in the installation of the work shown on the drawings and described in the specifications, as no extras will be allowed to cover work which he has not included in his tender due to his failure to inspect the premises.

1.28 SCHEDULE OF OPERATIONS

A. The contractor shall submit, for the owner's review and approval, a schedule of his proposed operations. The contractor's schedule shall be complete and shall show in detail the manner in which he proposed to complete the work under this contract.

1.29 ORDINANCES AND CODES

- A. All work shall be executed and inspected in accordance with all local and state rules and regulations and all established codes applicable thereto and shall conform in all respects to the requirements of all authorities having jurisdiction thereover.
- B. Should any change in the contract plans and/or specifications be required to comply with local regulations, the contractor shall notify the owner in accordance with Specification 00120, Instructions to Bidders. After entering into contract, the contractor will be held to complete all work necessary to meet the local requirements without extra expense to the owner.
- C. Where the work required by the drawings and specifications is above the standard required, it shall be done as shown or specified.

1.30 REQUIREMENTS PERTAINING TO WORK WITHIN RAILROAD RIGHTS-OF-WAY

- A. Where the contract drawings call for work within railroad rights-of-way or where the work crosses under railroad tracks, the contractor shall secure the approval of the railroad company of the method and schedule of operations and shall carry out the work in strict accordance therewith, all to the satisfaction of the railroad company and at no extra cost to the owner.
- B. The owner will pay the cost of all inspectors and flagmen required and furnished by the railroad company during the construction operations.
- C. The additional named insured under General Supplementary Conditions for "Owner and Contractor's Protective Public Liability and Property Damage Insurance" shall include the name of the railroad company.

1.31 TRAFFIC CONTROL

A. During construction the contractor shall control traffic in accordance with the current edition of the Michigan Manual on Uniform Traffic Control Devices issued by the Michigan Department of Transportation.

1.32 DUST CONTROL

A. The contractor shall provide adequate measures to control dust caused by his operation. The methods employed, and frequency of application shall be as approved and directed by the Owner.

1.33 INCONVENIENCES

A. The contractor shall at all times be aware of inconveniences caused to the abutting property owners and general public. Where undue inconveniences are not remedied by the contractor, the municipality, upon four hours notice, reserves the right to perform the necessary work and to have the owner deduct the cost thereof from the money due or to become due to the contractor.

END OF SECTION

SECTION 01421

OBSERVATION CREW DAYS

PART 1 GENERAL

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1.1 General Requirements

- A. Included as a bid item is the Contractor's statement of the number of "Crew Days" in which he undertakes to complete the work.
- B. The cost per "Crew Day" is included in the comparative evaluation of bids, and the number of "Crew Days" for which the Owner will have to provide engineering supervision and observation including inspection of cleanup operations is a consideration of the contract.
- C. In addition, the Contractor will be charged observation time for the handling of complaints which are received on the job.
- D. Any provision of this contract for liquidated damages on account of failure to complete the work by a stated date or in a stated number of days shall be independent of and in addition to the provisions of this Section.
- E. If the Contractor completes the work using fewer "Crew Days" than the number stated in his Proposal, his final payment shall include, in addition to the balance due him for the pay items of work completed, the amount of the cost for each unused "Crew Day".
- F. If the work under the contract is incomplete when the Contractor has expended the number of "Crew Days" stated in his Proposal, subsequent payments to the Contractor shall include a deduction item in the amount of the cost for each excess "crew day" used during the period covered by payment.

1.2 Definitions

- A. A "Crew" as herein used shall be any Contractor's working force including cleanup crew which under normal practice requires the presence of an observer to assure the Owner that the quality of work and the operations of the Contractor conform to the requirements of the plans and specifications.
- B. Any force whose work can be satisfactorily followed by construction observation, otherwise on the project will not be counted an additional "Crew".
- C. In the event of question, whether any working force should be considered a separate "Crew" requiring the presence of construction observation, the Engineer's determination shall be final.
- D. To account for crews working other than 8 hours on a regular work day, the following equivalents shall apply to cover fractional days and overtime:
 - 1. Through 4 hours

1/2 Crew Day

2. Over 4 hours through 6 hours

3/4 Crew Day

3. Over 6 hours through 8 hours 1 Crew Day

4. Over 8 hours 3/8 Crew Day for each two hours or part thereof

5. Saturdays

a. Through 4 hours 3/4 Crew Day

b. Over 4 hours 3/8 Crew Day for each two hours or part thereof

E. If the quantity of work under the contract shall vary from that stated in the Proposal, the number of "Crew Days" allowed under this item shall be adjusted, up or down, in proportion to the change in the total value of work under the contract.

F. The Contractor shall notify the Engineer at least 24 hours in advance of changes in his work force or operations which will increase or decrease the number of construction observers required on the project.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

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SECTION 02031

COLOR AUDIO VIDEO ROUTE SURVEY

PART 1 GENERAL

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1.1 GENERAL

- A. The bid item "Color Audio Video Route Survey" is included in the proposal to cover the cost of obtaining a record of the existing conditions prior to the start of construction.
- B. The Contractor shall engage the services of a professional electrographer actively engaged in color audio video recordings of projects similar to the work included under this Contract.
- C. The firm performing this work shall have the equipment and experience necessary to produce a digital color audio video recording of the prescribed quality, meeting all of the requirements specified herein.
- D. The Engineer may require the video taping of a "sample" route to verify the ability of the electrographer to perform the work.
- E. All digital recordings and written records shall become the property of the Owner. The firm performing this work shall also provide one complete copy of all DVD discs and written records to the Engineer.
- F. Complete coverage shall include all surface features located within the public right-of-way, easement areas and adjacent private properties up to building line when such properties lie within the zone of influence of construction and will be supported by appropriate audio descriptions made simultaneously with video coverage. Such coverage shall include but not be limited to all existing driveways, sidewalks, curbs, ditches, roadways, landscaping, trees, culverts, mail boxes, headwalls, and retaining walls, or buildings located within such zone of influence.
- G. Coverage shall include the entire project area impacted by construction and any portions of streets to be used by the Contractor as access roads and/or haul roads.
- H. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall not be less than twelve (12) feet to insure proper perspective.
- I. In some instances, audio video coverage will be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Owner.
- J. All recording must be made using digital equipment, full color audio video DVD discs. One complete copy of DVD discs and written records shall be provided to the Owner prior to commencing construction on this project.

- K. Digital audio-video discs (DVD) shall be Sony, Panasonic, J.V.C or equal on DVD discs suitable for recording and play-back on computer DVD ROM players and conventional DVD players utilizing DVD R format.
- L. Buildings shall be identified by street number, when visible, in such a manner that structures of the proposed system can be located by reference. In all instances, however, locations shall be identified by audio or visual means at intervals not-to-exceed 100 lineal feet in the general direction of travel.
- M. The rate of speed in the general direction of travel of the conveyance used during recording shall not exceed 30 feet/minute. Panning rates and zoom-in, zoom-out rates shall be controlled sufficiently such that stop-action during play-back will produce clarity of detail in the object viewed.
- N. All recording shall be done during times of good visibility. No recording shall be done during periods of visible precipitation, or when more than 10% of the ground area is covered with snow or standing water, unless otherwise authorized by the Owner.
- O. Any recorded coverage not acceptable to the Owner shall be rerecorded at no additional charge.
- P. The Owner shall have the authority to designate areas for which coverage may be added or omitted and this shall be considered as incidental to the Contract.
- Q. All DVD discs shall be properly identified as to location, time and date in a manner acceptable to the Owner.
- R. A record of the contents of each DVD disc shall be supplied by a sheet identifying each segment in the DVD disc by location, disc number, disc time, starting point, traveling direction and ending point.
- S. The recording shall be done prior to placement of materials or equipment on the construction area and the DVD disc and record of contents must be furnished one week prior to the start of construction.
- To preclude the possibility of tampering or editing in any manner, all video recordings, must, 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 10/5/96 and be placed directly below the time information. The time information shall consist of hours, minutes and seconds, separated by colons. For example 10:53:18. This transparent information will appear on the extreme upper left-hand third of the screen.
- U. The engineering stationing numbers must be continuous, accurate and correspond to the project stationing and must include the standard engineering symbols. For example 14+84. This transparent information will appear on the extreme area covered, direction of travel, viewing side, etc.
- V. Below the engineering station, periodic transparent alpha/numeric information will appear. This information will consist of the name of the project, name of area covered, direction of travel, viewing side, etc.

- W. Digital audio video discs must be originally recorded with minimum horizontal resolution of 480 lines. Reprocessed DVD discs will not be acceptable.
- X. In order to produce the proper detail and prospective, artificial lighting will be required where it is necessary to fill in shadow areas caused by trees, utility poles, road signs, or other such objects.

1.2 BASIS OF PAYMENT

A. Payment shall be by "Lump Sum" based on construction zones as identified on the construction plans.

END OF SECTION

SPECIAL PROVISION

FOR

PROGRESS CLAUSE

1.1 PROGRESS SCHEDULE

- A. Work for this project may commence after the award of the contract, weather permitting. In no case shall any work commence prior to receipt of formal Notice of Award by the Department. For the purposes of this Progress Clause, Work Day(s) shall be defined as: Monday through Friday, excluding Holidays, from 7 a.m. to 7 p.m. Night and weekend work may be permitted at the discretion of the City. Once the work has begun, work is to be continuous and the project must be completed by May 1, 2019.
- B. It is the intent of the Berkley DDA to attempt to expedite the project as much as possible and impact traffic flow and the business owners and residents as little as possible.

1.2 COMPLETION DATES

- A. All proposed work for the Coolidge Crosswalks, including punch list items, restoration, and clean-up within the limits shown above and as shown in the plans and described in Section 107.21 of the MDOT 2012 Standard Specifications for Construction, must be completed by **June 1, 2019**.
- B. Liquidated damages will be assessed for failure to complete on time in accordance with Section 108.11b of the Standard Specifications. Damages will continue to be assessed until the project is completed.

1.3 GENERAL PROGRESS SCHEDULE PROVISIONS

- A. Any extra costs incurred by the Contractor due to night work, insufficient manpower, and equipment necessary to maintain the schedule and/or meet any open traffic date or the completion date, and any overtime utilized will not be paid separately and are deemed to be included in the contractors unit bid prices.
- B. No extension of time will be granted for labor disputes unless it can be shown that such disputes are industry wide. No extensions of time will be granted as a result of work stoppages ordered by the City of Berkley/Berkley DDA for Contractor non-compliance.
- C. No extension of time will be granted for delays in delivery of critical materials unless delay can be shown to be industry wide and the delay affects a critical item of work.

1.4 CONTRACTOR'S PROGRESS SCHEDULE

A. The progress schedule shall include, as a minimum, the controlling items for the completion of the project and the planned dates (or days for workday project) that these work items will be controlling operations. When specified in the bidding Proposal, the date the project is to be opened to traffic, as well as the final project completion date specified in the bidding Proposal shall be included in the Progress Schedule. The start date of any subsequent controlling item

must follow the completion date of the preceding one even though operations may be identified as concurrent. Overlapping of controlling items shall not be allowed. If the Bidding Proposal specified other controlling dates, these shall also be included in the Progress Schedule.

- B. The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, is recommended to be at the preconstruction meeting if such items materially affect the work schedule.
- C. Failure on the part of the Contractor to carry out the provisions of the progress schedule, as established, may be considered sufficient cause to prevent bidding future projects until a satisfactory rate of progress is again established.
- D. The contractor is to submit their proposed construction schedule, list of subcontractors, staff emergency contact information, and sequence of operations at the Pre-Construction Meeting. Contractor is to sequence operations, including underground, road and sidewalk work, paving, etc. to minimize disruption to the local businesses and pedestrians.
- E. Locations for contractor parking and storage of construction materials and spoils are limited in the project area. The contractor is to submit a plan of proposed parking and storage locations at the Pre-Construction meeting. The Owner has the right to deny or relocate parking and storage areas as proposed by the Contractor. Grassed staging areas outside the typical disruption area shall be restored at the Contractor's expense per the Contract Specifications.
- F. The contractor shall route all construction equipment, material deliveries, and his own vehicles to access the site via the existing road sections. No access shall be across the new pavement sections without owner approval. Contractor to determine cure time for all concrete; fence, rope off, or post notice of no access until proper cure time has been achieved.
- G. Coordination is of the essence during this project and all entities, including the Cities' Public Safety (Police/Fire) and Public Works Departments, Beaumont Hospital (in Royal Oak, on Coolidge Hwy north of 12 Mile Road), shall be notified of the Contractor's Schedule and any changes to controlling items for the completion of the project and the planned dates that may need to be made. The Cities' Engineers will provide an updated notification list at the Pre-Construction meeting.

END OF SECTION

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR

SMALL QUANTITIES OF SPRAYABLE THERMOPLASTIC PAVEMENT MARKING MATERIAL

OPR:JGM 1 of 1 APPR:BRZ:DBP:09-14-10 FHWA:APPR:06-01-11

- **a. Description.** Place permanent pavement markings in accordance with section 811 of the Standard Specifications for Construction and this special provision.
- **b. Materials.** Select pavement marking material from the Qualified Products List (811.03D6) in accordance with section 920 of the Standard Specifications for Construction.
- **c. Construction.** On projects calling for 10,000 feet or less (per color) of sprayable thermoplastic pavement markings to be placed per workday, the Contractor, with approval of the Engineer, has the option of placing two applications of waterborne paint in lieu of the sprayable thermoplastic pavement markings. The second application is to be completed between 14 and 60 days after the initial application unless otherwise directed by the Engineer.
- **d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Pavt Mrkg, Sprayable Thermopl,	inch, (color)Foot

This work will be measured and paid as **Pavt Mrkg**, **Sprayable Thermopl**, __ inch, (color) per subsection 811.04 of the Standard Specifications for Construction whether the Contractor uses sprayable thermoplastic or two applications of waterborne paint.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR PERMANENT PAVEMENT MARKINGS

PMK:MKB 1 of 3

APPR:MWB:CRB:02-08-18

FHWA:APPR:03-01-18

Add the following to the end of the list of materials in subsection 811.02, on page 588 of the Standard Specifications for Construction:

Modified Urethane Pavement Marking Material	920
Preformed Thermoplastic Pavement Marking Material	920

Ensure preformed thermoplastic materials for surface applications have a thickness of 90 mils and preformed thermoplastic materials for recessed applications have a thickness of 125 mils.

Add the following paragraph after the first paragraph of subsection 811.03.B, on page 589 of the Standard Specifications for Construction:

If pavement marking plan sheets and/or Witness, Log are included in the project the markings will be laid out by the Contractor prior to the permanent markings being applied. Layout is considered incidental to placement of permanent pavement markings. Provide the Engineer documented notice at least 2 calendar days prior to the Contractor pavement marking crew arriving onsite to layout and place the permanent pavement markings to enable the Engineer or a representative being onsite for review of the layout prior to the marking application. Notify the Engineer if it is discovered during layout that the pavement width or geometry has been altered or is different from the planned or logged configuration. The Contractor and Engineer will discuss and document the resolution for marking layout in such areas. If pavement marking plans and/or Witness, Log are not in the project, it is the responsibility of the Engineer to provide layout for the permanent pavement markings.

Add the following rows to Table 811-1 of subsection 811.03.B, on page 591 of the Standard Specifications for Construction:

Polvurea 2	20	Binder (gal)	5.5	8.25	11	17	22	33	44	66
Polyurea 20		Bead (lb)	As directed by the manufacturer							
Modified	20	Binder (gal)	5.5	8.25	11	17	22	33	44	66
Urethane	Urethane 20		As directed by the manufacturer							

Add the following paragraph after the fifth paragraph on page 592 of subsection 811.03.B, of the Standard Specifications for Construction:

Beads are not to be placed in liquid shadow markings.

Add the following subsections after the last paragraph of subsection 811.03.D.7.c, on page 595 of the Standard Specifications for Construction:

8. **Modified Urethane.** Ensure the pavement is free of excess surface and subsurface moisture that may affect bonding. The Engineer will not decide the suitability of specific days for the application of modified urethane.

Surface preparation requirements for special, and longitudinal modified urethane pavement markings depend on surface conditions.

Prepare new HMA surfaces and HMA surfaces open to traffic for 10 days or less with no oil drips, residue, debris, or temporary or permanent markings, by cleaning the marking area with compressed air.

Prepare new PCC surfaces and PCC surfaces free of oil drips, residue, and debris, temporary, or permanent markings, by removing the curing compound from the area required for pavement markings.

Prepare existing HMA or PCC surfaces that do not have existing markings, but may have oil drip areas, debris, or both, by scarifying the marking area using non-milling grinding teeth or shot blasting. The Engineer will allow the use of water blasting to scarify the marking area on PCC surfaces.

Prepare existing HMA or PCC surfaces with existing pavement markings and that may have oil drip areas, debris, or both, by using the following methods:

- a. For existing liquid pavement markings, scarify the proposed marking area using non-milling grinding teeth or shot blast. Occasionally existing liquid pavement markings will require complete removal, which will be determined by the Engineer.
- b. For existing cold plastic markings, completely remove the existing markings.
- 9. **Preformed Thermoplastic.** Ensure the pavement is free of excess surface and subsurface moisture that may affect bonding. The Engineer will not decide the suitability of specific days for the application of preformed thermoplastic.

Heat and apply the preformed thermoplastic material as recommended by the manufacturer. Feather all edges of the material with a putty knife while the preformed thermoplastic is still soft.

Modify the following row in Table 811-2 of subsection 811.03.D, on page 596 of the Standard Specifications for Construction to read as follows:

Thermoplastic	50	50	May 1	Nov. 1

Add the following rows to Table 811-2 of subsection 811.03.D, on page 596 of the Standard Specifications for Construction:

PMK:MKB 3 of 3

Modified Urethane	40	40	Apr. 15	Nov. 15
Preformed Thermoplastic	35	35	Apr. 15	Nov. 15

Add the following pay items to the list of pay items in subsection 811.04, on page 598 of the Standard Specifications for Construction:

Pavt Mrkg, Modified Urethane, (symbol)	Each
Pavt Mrkg, Modified Urethane, (legend)	
Pavt Mrkg, Modified Urethane, inch, Crosswalk	
Pavt Mrkg, Modified Urethane, inch, Stop Bar	
Pavt Mrkg, Modified Urethane, inch, Cross Hatching (color)	
Pavt Mrkg, Modified Urethane, inch, (color)	
Pavt Mrkg, Ovly Cold Plastic,inch, Shadow Tape, Black	
Pavt Mrkg, Ovly Cold Plastic, inch, Wet Reflective, (color)	
Pavt Mrkg, Preformed Thermoplastic, (symbol)	
Payt Mrkg. (binder). inch. Shadow Liquid. Black	

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR PERMANENT PAVEMENT MARKING MATERIALS

PMK:MKB 1 of 4 APPR:MWB:CRB:05-25-18

FHWA:APPR:06-12-18

Delete the content of section 920, on page 890 of the 2012 Standard Specifications for Construction in its entirety and replace it with the following:

920.01. Marking Materials. Select pavement marking materials from the Qualified Products List unless specified otherwise by special provision in the contract.

When selecting preformed thermoplastic products, ensure preformed thermoplastic materials have a thickness of 90 mils for surface applications and a thickness of 125 mils for recessed applications. For black liquid shadow markings and blue markings used in parking areas, choose a specified binder material and color from the Qualified Products List or select a white specified binder material from the Qualified Products List and tint the product to the appropriate color.

Use liquid applied pavement marking materials manufactured in the previous 12 months or within the shelf-life directed by the manufacturer, whichever is less. Use solid applied materials within the shelf-life directed by the manufacturer. Provide certification that liquid and solid applied pavement marking materials have been stored per the manufacturer's requirements. Materials not in compliance will be rejected and removed at the Contractor's expense.

Pavement marking materials must meet the general packaging and labeling requirements of subsection 920.01.A, and applicable specific material requirements of subsection 920.01.B.

- A. **General Packaging and Labeling.** Material containers or packages must be marked on the tops and sides, using a durable, weather-resistant marking. Include the following information:
- 1. Manufacturer's name and address,
- 2. Description of the material.
- 3. Product identification number,
- 4. Lot or Batch number,
- 5. Date of manufacture,
- 6. Volume and
- 7. Weight.

- B. Packaging and Labeling for Cold Plastic and Thermoplastic Markings.
- 1. **Cold Plastic.** Containers or packages of cold plastic material and the core of each roll must be marked with the information specified in subsection 920.01.A.
- 2. **Thermoplastic.** In addition to the requirements of subsection 920.01.A, thermoplastic material must be packaged in non-stick containers, and labeled with "heat to manufacturer-recommended temperature range," or a Department-approved equal.

920.02. Glass Beads and Wet Reflective Beads/Elements.

- A. Glass Bead and Wet Reflective Bead/Element Packaging and Labeling. Glass beads and wet reflective beads/elements must be packaged in moisture resistant bags and labeled to include the following information:
- 1. Manufacturer's name and address,
- 2. Shipping point,
- 3. Trademark or name,
- 4. The wording "Glass Beads" or "Elements",
- 5. Specification number,
- 6. Weight,
- 7. Lot or Batch number, and
- 8. Date of manufacture.

Drop-on AASHTO M247 Type I beads, herein referred to as standard glass beads, must meet the general requirements of subsection 920.02.B and the applicable requirements for specific applications of subsection 920.02.D. Wet reflective beads/elements must meet the general requirements of subsection 920.02.C and the applicable requirements for specific applications of subsection 920.02.D. Large glass beads must meet federal specification TTB-1325 for a Type 4 glass bead.

All glass beads and wet reflective beads/elements to be used on Federal-aid projects must contain no more than 200 parts per million of arsenic or lead, as determined in accordance with Environmental Protection Agency testing methods 3052, 6010B, or 6010C.

B. **General Requirements for Standard Glass Beads.** Standard glass beads must meet the physical characteristics and gradation requirements specified in Table 920-1, unless otherwise specified in subsection 920.02.D for specific applications.

Table 920-1				
General Requirements for Standard Glass Bead				
Physical characteristics (MTM 711)				
General Appearance	Transparent, clean, smooth, free from milkiness, pits, or excessive air bubbles			
Shape	Spherical with ≥75% true spheres			

Color	Colorless, very light gray, very light gray tinge, or bright white				
Index of Refraction	≥1.50				
Alkalinity	≤2.0				
Gradation Red	Gradation Requirements (MTM 711)				
Sieve Size (No.)	Total Percent Passing				
20	100				
30	75–95				
50	15–35				
100	0–5				

C. **General Requirements for Wet Reflective Beads/Elements.** Wet reflective beads/elements must meet the retroreflectivity requirements specified in Table 920-2.

Table 920-2 General Wet Reflective Bead/Element Requirements Average Initial Retroreflectivity at 30 meter geometry in mcd/lux/m²				
Test Method	Color			
Test Method	White	Yellow		
Dry (ASTM E 1710)	700	500		
Wet Recovery (ASTM E 2177)	250	200		
Wet Continuous (ASTM E 2832)	100	75		

- D. Glass Bead and Wet Reflective Bead/Element Requirements for Specific Applications. For specific applications, glass beads and wet reflective beads/elements must be as follows:
- For recessed longitudinal markings, use a double drop system of large and standard glass beads, a double drop system of wet reflective beads/elements and standard glass beads, or an Engineer-approved alternate.
- 2. Waterborne and Low Temperature Waterborne. Standard and large glass beads for use with waterborne marking material and low temperature waterborne marking material require a moisture resistant coating and a silane coating. The type, gradation, and application rates for wet reflective beads/elements used with waterborne and low temperature waterborne marking materials must meet the waterborne manufacturer's recommendations.
- 3. Regular Dry. Standard and large glass beads for use with regular dry marking material may have a moisture resistant coating, a silane coating, or both. The type, gradation, and application rates for wet reflective beads/elements used with regular dry marking materials must meet the regular dry manufacturer's recommendations.

- 4. **Thermoplastic.** Standard and large glass beads for thermoplastic marking material must have a moisture resistant coating. The type, gradation, and application rates for wet reflective beads/elements used with thermoplastic marking materials must meet the thermoplastic manufacturer's recommendations.
- 5. **Sprayable Thermoplastic.** The type, gradation, and application rates for standard and large glass beads and wet reflective beads/elements used with sprayable thermoplastic marking material must meet the sprayable thermoplastic manufacturer's recommendation.
- 6. **Polyurea.** The type, gradation, and application rates for standard and large glass beads and wet reflective beads/elements used with polyurea marking material must meet the polyurea manufacturer's recommendation.
- 7. **Modified Urethane.** The type, gradation, and application rates for standard and large glass beads and wet reflective beads/element used with modified urethane marking material must meet the modified urethane manufacturer's recommendation.