

Department of Management Services Purchasing Division

241 West South Street Kalamazoo, MI 49007-4796 Phone: 269.337.8020

Fax: 269.337.8500 www.kalamazoocity.org

VIRTUAL PRE-BID MEETING, March 1, 2023 @ 11:00 a.m. Local Time REGISTER IN ADVANCE FOR THIS ZOOM MEETING:

https://us06web.zoom.us/webinar/register/WN_bOpvLiiiQ2CFI1_NeEmcrA

INVITATION FOR BID (IFB)

The City of Kalamazoo, Michigan is soliciting sealed bids for:

PROJECT NAME: Big Rock Drive Water Main Extension

BID REFERENCE #: 91360-006.0

IFB ISSUE DATE: February 20, 2023

BID DUE/OPENING DATE: March 15, 2023 @ 3:00 p.m. Local Time

Facsimile Bids Will Not Be Accepted.

MAILING ADDRESS & INSTRUCTIONS

Mail to:

Purchasing Division

Questions about this IFB should be directed to:

Department Contact: Eric Sajtar, P.E., Senior Civil

241 W. South Street Engineer at sajtare@kalamazoocity.org

Kalamazoo, MI 49007

Include on the Envelope the Project Name and Bid Reference Number. All Envelopes Must Be Sealed.

You are invited to submit a bid for this project. Specifications, terms, conditions, and instructions for submitting bids are contained herein. This Invitation for Bid with all pages, documents and attachments contained herein, or subsequently added to and made a part hereof, submitted as a fully and properly executed bid shall constitute the contract between the City and the successful bidder when approved and accepted on behalf of the City by an authorized official or agent of the City. Please review the bid document as soon as possible and note the **DEADLINE FOR QUESTIONS** in the Instructions to Bidders.

All bidders shall complete and return the Bid and Award page(s) and submit all information requested herein in order for a bid to be responsive. The bid document shall be returned in its entirety, in a properly identified and sealed envelope to the Purchasing Division at the above address. **BIDS MUST BE RECEIVED BEFORE THE DUE DATE - LATE BIDS WILL NOT BE CONSIDERED.** The City reserves the right to postpone the bid opening for its own convenience.

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STATEMENT OF NO BID

Bid Reference #: 91360-006.0

NOTE: If you <u>DO NOT</u> intend to bid on this commodity or service, please complete and return this form immediately. Your response will assist us in evaluating all responses for this important project and to improve our bid solicitation process.

The Purchasing Division of the City of Kalamazoo wishes to keep its bidders list file up-to-date. If, for any reason you cannot supply the commodity/service noted in this bid solicitation, this form must be completed and returned to remain on the particular bid list for future projects of this type.

If you do not respond to this inquiry within the time set for the bid opening date and time noted, we will assume that you can no longer supply this commodity/service, and your name will be removed from this bid list.

	Specifications too "tight", i below).	.e. geared toward one	brand or manufa	ecturer only (6	explain
	Specifications are unclear (ex	xplain below).			
	We are unable to meet specif	fications.			
	Insufficient time to respond to	to the Invitation for Bid.			
	Our schedule would not perm	nit us to perform.			
	We are unable to meet bond	requirements.			
	We are unable to meet insura	ance requirements.			
	We do not offer this product	or service.			
	Remove us from your bidder	rs list for this commodity	or service.		
	Other (specify below).				
REMARKS:					
SIGNED:		NAME:			
			(Type or Pri	nt)	
TITLE:		DATE:			
FIRM NAM	E:				
	(if any)				
ADDRESS:	(Street address)	(City)	(State)	(Zip)	
PHONE:			(3)		

Bid Reference #: 91360-006.0

SECTION I INSTRUCTIONS TO BIDDERS

- 1. **EXAMINATION OF BID DOCUMENT**-Before submitting a bid, bidders shall carefully examine the specifications and shall fully inform themselves as to all existing conditions and limitations. The bidder shall indicate in the bid the sum to cover the cost of all items included on the bid form.
- 2. **PREPARATION OF BID**-The bid shall be legibly prepared in ink or typed. If a unit price or extension already entered by the bidder on the Bid and Award form is to be altered, it shall be crossed out and the new unit price or extension entered above or below and initialed by the bidder with ink. The bid shall be legally signed, and the complete address of the bidder given thereon.

All bids shall be tightly sealed in an envelope plainly marked SEALED BID and identified by project name, bid opening date and time. Bids opened by mistake, due to improper identification, will be so documented and resealed. The Purchasing Division will maintain and guarantee confidentiality of the contents until the specified opening date and time. Bids submitted by Fax machine will not be accepted.

- 3. **EXPLANATION TO BIDDERS**-Any binding explanation desired by a bidder regarding the meaning or interpretation of the Invitation for Bid (IFB) and attachments must be requested in writing, at least 5 business days before the bid opening so a reply may reach all prospective bidders before the submission of bids. Any information given to a prospective bidder concerning the IFB will be furnished to all prospective bidders as an amendment or addendum to the IFB if such information would be prejudicial to uninformed bidders. Receipt of amendments or addenda by a bidder must be acknowledged in the bid by attachment, or by letter or fax received before the time set for opening of bids. Oral explanation or instructions given prior to the opening will not be binding.
- 4. **CASH DISCOUNTS**-Discount offered for payment of less than thirty (30) days will not be considered in evaluating bids for award. Offered discounts of less than thirty (30) days will be taken if payment is made within the discount period, even though not considered in evaluation of the bid.
- 5. **WITHDRAWAL OF BIDS**-Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the exact time set for receipt of bid. No bid may be withdrawn for at least ninety (90) days after bid opening.
- 6. **ALTERNATE BIDS**-bidders are cautioned that any alternate bid, unless specifically requested or any changes, insertions or omissions to the terms and conditions, specifications or any other requirement of this IFB may be considered non-responsive, and at the option of the City, result in rejection of the alternate bid.
- 7. **LATE BIDS**-Any bid received at the office designated herein after the exact time specified for receipt will not be considered. (Note: The City reserves the right to consider bids that have been determined by the City to be received late due to mishandling by the City after receipt of the bid and no award has been made.)
- 8. **UNIT PRICES**-If there is a discrepancy between unit prices and their extension, unit prices shall prevail.

CITY OF KALAMAZOO – INVITATION FOR BIDS

Big Rock Drive Water Main Extension

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SECTION II BID AND AWARD

The undersigned having become thoroughly familiar with all of the bid/contract documents incorporated herein, the project site and the location conditions affecting the work, hereby proposes to perform everything required to be performed in strict conformity with the requirements of these documents, and to provide and furnish all the equipment, labor and materials necessary to complete in a professional manner the furnishing and installing of all of the following, meeting or exceeding the specifications as set forth herein for the prices as stated below.

BIG ROCK DRIVE WATER MAIN EXTENSION

sc	scription	Quantity	Unit	Unit Price	Total Price
bili	pilization (5% max)	1	LS		
stin	ting	1	Allowance	\$10,000.00	\$10,000.00
ffic	fic Control	1	LS		
ΙE	Erosion Control	1	LS		
no	nove & Replace, HMA Roadway	1	LS		
no	noval & Replace, Driveway	18	EA		
no	nove & Replace Drive Culvert	2	EA		
ากเ	nular Material, Class III	100	CYD		
no	noval, Tree, 6"-18"	24	EA		
no	noval, Tree, 19"-24"	2	EA		
ter	er Main, 12" DI	5,650	LF		
ter	er Main, 12" Valve and Box	9	EA		
ter	er Main, 12" Fitting	19	EA		
ter	er Main, Hydrant Assembly	11	EA		
ter	er Main, Air Release Chamber	1	EA		
ter	er Main, PRV Station	1	LS		
ter	er Main, 1-1/4" Service	1,300	LF		
ter W	er Main, 1-1/4" Service, Outside of W	1,950	LF		
ter	er Main, 1-1/4" Service, Private	2,000	LF		
ter	er Main, 2" Service, Private	2,050	LF		
ter	er Main, 1-1/4" Meter Pit	26	EA		
ter	er Main, House Service Connection	26	EA		
ter	er Main, Service Relocating	26	EA		
ter	er Main, Polyethylene Encasement	40	LF		
	er Main, Well Abandonment	26	EA		
duc	er Main, Service Pressure lucing Valve	26	EA		
	toration, Turf Over Water Main and vices	5,650	LF		
	vices		MOUNT	\$	

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Bidder shall provide all of the information as requested herein with their bid. Failure to do so and/or failure to provide post-bid requested information may be cause for rejecting the bid as non-responsive.

Work shall be completed between **April 3, 2023, and October 27, 2023**, pending delivery of City supplied materials by **August 11, 2023**. If City supplied materials are not delivered by **August 11, 2023**, final completion shall be **July 14, 2024**. In either event, once work has begun, the project shall be completed within 60 calendar days.

Bidder/Contractor has examined and carefully studied the bidding documents and attachments, and acknowledges receipt of the following addenda:

Addendum No:		
Dated:	·	·
not use a past criminal conviction considered for employment with	n as a bar to or preclude a person the bidding firm unless otherwald agree to be bound by the pro	tract, when making hiring decisions, does on with a criminal conviction from being vise precluded by federal or state law. I visions of the City's Non-Discrimination.
Signed:	Name	:
Title		

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CITY OF KALAMAZOO EX-OFFENDER POLICY CHECKLIST

As part of the City's commitment to reducing unacceptable poverty, encouraging rehabilitation, reducing recidivism and strengthening families in Kalamazoo, the City has updated its Purchasing Policy to ensure that firms with whom the City does business share in this commitment by utilizing hiring practices that do not unfairly deny people with arrest and conviction records gainful employment. (Important: This requirement also extends to any subcontractors the bidder intends to use to fulfill the contract for goods or services being sought from the City.)

art I: Proof that the bidder does not inqu ry on the bidders employment applicat		or criminal
Attach a copy of the current application	for employment being used by the bid	dder
ort II: Certification that the bidder does by to unlawfully discriminate against th		
That pursuant to federal or state law bid criminal records from holding particular providing a cite to the applicable statute citation to the applicable statute or rule relying:	positions or engaging in certain occup or regulation; if checking this box, pro	ations by
That bidder conducts criminal history ba after making a conditional offer of employment to an individual because of consistent with business necessity after individualized assessment opportunity to of past criminal conduct being relied upon	lyment; that any withdrawal of an offer a past criminal history is job-related a the individual has been provided an o review and challenge or supplement	r of and
That the use by bidder of criminal history Equal Employment Opportunity Commis Consideration of Arrest and Conviction I bidder has not had a determination rend discriminated against a person through history	ssion's Enforcement Guidance on the Records in Employment Decisions and lered against it in past 7 years that it	d that the
I CERTIFY THAT THE ABOVE STATEM	MENTS ARE TRUE.	
Date	Signature	
	Printed Name	
	Position	

CITY OF KALAMAZOO – INVITATION FOR BIDS

Big Rock Drive Water Main Extension

CITY OF KALAMAZOO LOCAL PREFERENCE POLICY AND CERTIFICATION

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The lowest responsive Kalamazoo County bidder whose bid is not low but falls within 2% of the lowest responsive bid is afforded the opportunity to become the successful bidder if it agrees to reduce its bid to match the lowest responsive bid. The City of Kalamazoo is the sole determiner whether a bidder is responsible, qualifies as a Kalamazoo County bidder, and if its bid is responsive to the City's specifications, terms and conditions.

If the lowest Kalamazoo County bidder chooses not to match the lowest bid, the next lowest responsive Kalamazoo County bidder whose bid falls within 2% of the lowest bid, is given the opportunity to match the lowest responsive bid.

To qualify as a Kalamazoo County bidder, the bidder must meet both the following criteria:

- 1. Have a physical presence in Kalamazoo County by maintaining a permanent office, factory or other facility in Kalamazoo County with employees working in Kalamazoo County.
- 2. Have paid real or personal property taxes related to said business to the City of Kalamazoo, County of Kalamazoo or other municipal corporation within Kalamazoo County in the previous tax year, except that a non-profit entity need not meet this requirement.

This local preference policy applies only to purchases for materials, supplies, capital outlay, and services for maintenance, repair or operation of City facilities that are over \$25,000. If more than 50% of the contract is subcontracted to firms located outside of Kalamazoo County that bid does not qualify for the local preference policy outlined above. The local preference policy will not apply if prohibited by law. The Purchasing Agent has the authority to finally determine if the bidder qualifies as a Kalamazoo County bidder as set forth herein. The Purchasing Agent may take into account the permanency of the business in Kalamazoo, and whether the business appears to be claiming to be a Kalamazoo County business solely or primarily to qualify as a Kalamazoo County business under this Resolution, and any other material factors.

CERTIFICATION

Revised April 2008

If you qualify as a Kalamazoo County bidder and wish to be considered for the local preference provisions as provided above please certify that fact by providing the information requested below and attesting to its accuracy.

Firm Name:		_
Street Address of Business:		_
City, State, and Zip Code:		
Number of employees working in Kalamaz	zoo County:	_
Name the city or township to which busine	ss real and/or personal property taxes are paid or provide non-profi	t status:
The above information is accurate:		
Signature:	Date:	
Title:		

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SUB-CONTRACTING INFORMATION

Using the table below provide information regarding the sub-contractors that will be working to fulfill the requirements of this contract. Submit as complete a list as possible at the time of your bid. You will have two business days after the bid opening to update the list as needed. The information provided will be used for evaluating your bid and to assist in determining if you qualify as a Kalamazoo County Bidder.

INSTRUCTIONS:

Nature of Contract - State a brief description of the work or product that will be provided.

BIDDER – Provide the percentage of services or construction activity that will be provided by your firm. **Subcontractors:**

- Provide the Name and Address for each subcontractor providing services or construction activities for this contract.
- Indicate with **YES** or **NO** under the "Local?" box if they qualify as a "Kalamazoo County bidder" (see local preference certification page)
- Provide the percentage for the dollar amount of the contract work they will be performing.

If there are not enough lines in the table below make additional copies as needed.

Nature of Contract:			
Subcontractor Name/Address	Local?	% Of Total Contract	
BIDDER			

Does this List of Subcontractors need to be updated after the bid opening? Yes __ No __

Please answer the following questions completely.

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REFERENCE QUESTIONNAIRE

1. Firm name: Established: Year Number of Employees: 2. 3. Type of organization: b. Partnership: _____ a. Individual: c. Corporation: d. Other: 4. Former firm name(s) if any, and year(s) in business: 5. Include at least 3 references of contracts for similar work performed over the last five (5) years. Include: owner, contact person and phone number and description of work performed. 5.1 Company Name: _____ Type of work or contract: 5.2 Company Name: Phone: Type of work or contract: 5.3 Company Name: _____ Phone: _____ Contact: _____ Type of work or contract: I hereby certify that all of the information provided is true and answered to the best of my ability. Signed: ______ Name: _____ (type or print) Title: Date:

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NOTE: This blanket addendum is for informational purposes only and does not need to be acknowledged by bidders in their submission.

COVID-19 ADDENDUM #2

January 1, 2022

TO: ALL Prospective Bidders PROJECT: ALL Upcoming Projects

The purpose of this addendum is to clarify and/or modify the sealed bid delivery and bid opening process for all upcoming projects. All work affected is subject to all applicable terms and conditions of the Bidding and Contract Documents.

1. UPDATE TO SEALED BID DELIVERY AND BID OPENING POLICY:

Effective immediately and continuing until further notice, the City of Kalamazoo will return to IN-PERSON bid openings following City Hall guidelines, including Mask Mandate.

BIDS MUST BE RECEIVED BEFORE THE DUE DATE AND TIME – LATE BIDS WILL NOT BE CONSIDERED.

Bidders can submit sealed bids in one of the following ways:

- **Mail your bid,** to be received before the bid due date and time indicated in the bid document, to the City of Kalamazoo at the following address:

City of Kalamazoo Purchasing Division 241 West South Street Kalamazoo, MI 49007

- **Deliver your bid to the Treasurer's Office Payment Drop Box** located in the northwest corner of City Hall before the bid due date and time indicated in the bid document.
- **Deliver your bid to City Hall In Person before** the bid due date and time indicated in the bid document.

All bids shall be tightly sealed in an envelope plainly marked SEALED BID and identified by project name, bid opening date and time. Bids opened by mistake, due to improper identification, will be so documented and resealed. The Purchasing Division will maintain and guarantee confidentiality of the contents until the specified opening date and time. Bids submitted by fax machine or email will not be accepted.

The Purchasing Division will post bid tabulations to the City of Kalamazoo website within 24 hours after the bid opening date and time at: https://www.kalamazoocity.org/bidopportunities.

Questions regarding this sealed bid delivery and bid opening policy change related to the COVID-19 virus should be directed to the City of Kalamazoo at (269) 337-8020.

Sincerely,

Michelle Emig

Purchasing Division Manager

CITY OF KALAMAZOO – INVITATION FOR BIDS Big Rock Drive Water Main Extension

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I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have the authority to submit this bid which will become a binding contract if accepted by the City of Kalamazoo. I hereby state that I have not communicated with nor otherwise colluded with any other bidder, nor have I made any agreement with nor offered/accepted anything of value to/from an official or employee of the City of Kalamazoo that would tend to destroy or hinder free competition.

The firm's identification information provided will other contractual purposes. If the contractual relatiplease provide a complete explanation on your letterh payable purposes:	onship is with, or	the payment mad	le to, another firm
Tax Identification Number (Federal ID):			
Remittance Address:			
Financial Contact Name:	Financial Contact	Phone Number:_	
Financial Contact Email Address:			
I hereby state that I have read, understand and agredocument.	ee to be bound by	all terms and cor	nditions of this bid
SIGNED:	_ NAME:	(Type or Print)	
		(Type or Print)	
TITLE:	_ DATE:		
FIRM NAME:(if any)			
ADDRESS:	(6')	(6, ,)	(7:)
(Street address) PHONE:	(City) F∆Y ·	(State)	(Zip)
111O11D.			

FOR CITY USE ONLY - DO NOT WRITE BELOW

Bid Reference #: 91360-006.0

SECTION III CITY OF KALAMAZOO INDEMNITY AND INSURANCE

Contractor, or any of their subcontractors, shall not commence work under this contract until they have obtained the insurance required under this paragraph, and shall keep such insurance in force during the entire life of this contract. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan and acceptable to the City of Kalamazoo within ten (10) days of the Notice of Award. The requirements below should not be interpreted to limit the liability of the Contractor. All deductibles and SIR's are the responsibility of the Contractor.

The Contractor shall procure and maintain the following insurance coverage:

<u>Workers' Compensation Insurance</u> including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included and (E) XCU coverage if the nature of the contract requires XC or U work.

<u>Automobile Liability</u> including Michigan No-Fault Coverages, with limits of liability not less than \$1,000,000 per occurrence, combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

Additional Insured: Commercial General Liability and Automobile Liability, as described above, shall include an endorsement stating that the following shall be *Additional Insureds*: The City of Kalamazoo, all elected and appointed officials, all employees and volunteers, all boards, commissions, and/or authorities and board members, including employees and volunteers thereof. It is understood and agreed that by naming the City of Kalamazoo as additional insured, coverage afforded is considered to be primary and any other insurance the City of Kalamazoo may have in effect shall be considered secondary and/or excess.

To the fullest extent permitted by law the Contractor agrees to defend, pay on behalf of, indemnify, and hold harmless the City of Kalamazoo, its elected and appointed officials, employees, agents and volunteers, and others working on behalf of the City of Kalamazoo against any and all claims, demands, suits, or loss, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Kalamazoo, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, which arises out of, or is in any way connected or associated with this contract.

<u>Cancellation Notice</u>: All policies, as described above, shall include an endorsement stating that it is understood and agreed that thirty (30) days, or ten (10) days for non-payment of premium, Advance Written Notice of Cancellation, Non-Renewal, Reduction, and/or Material Change shall be sent to: City of Kalamazoo, Purchasing Division, 241 W. South Street, Kalamazoo, MI 49007.

<u>Proof of Insurance Coverage</u>: The Contractor shall provide the City of Kalamazoo at the time that the contracts are returned by him/her for execution, or within 10 days of Notice of Award, whichever is earlier, a Certificate of Insurance as well as the required endorsements. In lieu of required endorsements, if applicable, a copy of the policy sections where coverage is provided for additional insured and cancellation notice would be acceptable. Copies or certified copies of all policies mentioned above shall be furnished, if so requested.

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Big Rock Drive Water Main Extension

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INDEMNITY AND INSURANCE Continued

If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to City of Kalamazoo at least ten (10) days prior to the expiration date.

Scope of Coverage: The above requirements and conditions shall not be interpreted to limit the liability of the Contractor under this Contract but shall be interpreted to provide the greatest benefit to the City and its officers and employees. The above listed coverages shall protect the Contractor, its employees, agents, representatives and subcontractors against claims arising out of the work performed. It shall be the Contractor's responsibility to provide similar insurance for each subcontractor or to provide evidence that each subcontractor carries such insurance in like amount prior to the time such subcontractor proceeds to perform under the contract.

Bid Reference #: 91360-006.0

SECTION IV SPECIAL REQUIREMENTS

1. BID BOND/GUARANTEE

The bid must be accompanied by a bid bond which shall not be less than five (5%) percent of the total amount of the bid. No bid will be considered unless it is accompanied by the required guarantee. The bid guarantee shall ensure the execution of the bid and award, and the furnishing of a performance bond and a labor and material bond (A and B below) by the successful bidder. (Contractors Note: A cashier's or certified check in lieu of a bid bond is **NOT** acceptable.)

A. PERFORMANCE BOND

A performance bond shall be furnished in the full amount of the contract ensuring the City of faithful performance of all the provisions of the contract, and the satisfactory performance of any equipment required hereunder. The bond shall also ensure the City against defective workmanship and/or materials.

B. LABOR AND MATERIAL (PAYMENT) BOND

A labor and material (payment) bond shall be furnished for the period covered by the contract, in the full amount of the contract for the protection of labor and material suppliers and sub-contractors.

Bonds shall be secured by a guaranty, or a surety company listed in the latest issue of the U.S. Treasury, circular 570, and licensed to do business in the State of Michigan, and written in favor of the City of Kalamazoo. The amount of such bonds shall be within the maximum amount specified for such company in said circular 570. The bonds shall be accompanied by a power of attorney showing authority of the bonding agent to sign such bonds on behalf of the guaranty or surety company. The cost of the bonds shall be borne by the Contractor.

Failure of the Contractor to supply the required bonds within ten (10) days after Notice of Award, or within such extended period as the Purchasing Agent may agree to, shall constitute a default and the City of Kalamazoo may either award this contract to the next lowest bidder or re-advertise for bids and may charge against the Contractor for the difference between the amount of the bid and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the City of Kalamazoo for a refund.

2. WAIVERS OF LIEN

Upon completion of all work and request for final payment, the Contractor shall furnish a 100% waiver of lien from each supplier and sub-contractor covering all items of the work. Failure to supply waivers of lien for the entire job upon completion and final payment request will be considered grounds for withholding final payment.

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3. SUBCONTRACTORS

- A. Contractors shall state on the Bid and Award page any and all subcontractors to be associated with their bid, including the type of work to be performed. Any and all subcontractors shall be bound by all of the terms, conditions and requirements of the contract; however, the prime contractor shall be responsible for the performance of the total work requirements.
- B. The Contractor shall cooperate with the City of Kalamazoo in meeting its commitments and goals with regard to maximum utilization of minority and women business enterprise and shall use its best efforts to ensure that minority and women business enterprises have maximum practicable opportunity to compete for subcontract work under this agreement.

4. PREVAILING WAGES

The successful bidder will be required to comply with Section 2-125 of the Code of Ordinances of the City of Kalamazoo regarding prevailing wages and Appendix B attached, incorporated herein by reference. Special note: This provision applies only to projects in excess of \$100,000 for City (\$2,000 federal) funded projects.

The City's requirements as it relates to prevailing wages includes a meeting with the City's Purchasing Division **prior** to work and payroll and work monitoring during the duration of the contract. Please contact Purchasing at (269) 337-8020 if you have any questions regarding Davis-Bacon provisions.

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SECTION V GENERAL PROVISIONS

1. **INTENT**

It is the intent of these plans and specifications to provide for a contractor who shall provide all labor, materials, tools, and equipment necessary to perform in a professional manner for the **BIG ROCK DRIVE WATER MAIN EXTENSION** project as described in the specifications and bid document.

2. **SCOPE OF WORK**

INSTALLATION OF WATER MAIN IN PUBLIC RIGHT-OF-WAY, INSTALLATION AND CONNECTION OF SERVICE LINES, AND ABANDONMENT OF POTABLE WELLS.

3. **QUANTITIES**

The quantities shown or indicated on the plans are only estimated. Payment will be made based upon unit pricing of quantities installed.

4. UNIT PRICING

The unit price, including its pro-rata share of overhead, multiplied by the quantity shown shall represent the total bid and shall be held firm for the life of this contract. Any bid not conforming to this requirement may be rejected as non-responsive.

5. **INSPECTION OF WORK**

The City may maintain inspectors on the job who shall at all times have access to work.

6. **INSPECTION OF SITE**

Each bidder shall visit the site of the proposed work and fully acquaint himself/herself with the existing conditions relating to construction and labor and shall fully inform himself/herself as to the facilities involved and the difficulties and restrictions attending the performance of this contract. The bidder shall thoroughly examine and become familiar with the drawings, specifications and all other bid/contract documents. The Contractor, by the execution of this contract, shall in no way be relieved of any obligation under it due to his/her failure to receive or examine any form or legal instrument, or to visit the site and acquaint himself/herself with the conditions there existing. No allowance shall be made subsequently in this connection in behalf of the Contractor for any negligence of his/her part. For inspection call the Public Services Department, Water Resources Division.

7. INSPECTION AND TESTING

The Contractor shall give the City's Project Manager (Project Manager) timely notice of readiness of the work for all required inspections, tests or approvals, and shall cooperate with inspections and testing personnel to facilitate required inspections or tests. Verification that testing required by the contract has been completed on one phase of the project prior to proceeding to the next phase is the responsibility of the Contractor. In the event that the project has proceeded without required testing, the Contractor shall insure that the required testing is obtained retroactively and shall provide access for testing as necessary at his/her sole expense.

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8. MATERIALS INSPECTION AND RESPONSIBILITY

- 8.1 The Project Manager shall have the right to inspect any materials to be used in carrying out the terms of the contract.
- 8.2 The City does not assume any responsibility for the contracted quality and standard of all materials, equipment, components or completed work furnished under this contract.
- 8.3 Any materials, equipment, components or completed work which does not comply with contract specifications, MDOT, or State codes may be rejected by the City, and shall be replaced by the Contractor at no cost to the City.
- 8.4 Any materials, equipment or components rejected shall be removed within a reasonable period of time from the premises of the City at the entire expense of the Contractor after notice has been given by the City to the Contractor that such materials, equipment or components have been rejected.

9. **LAYING OUT WORK**

Before submitting a bid the Contractor shall verify all measurements and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of differences between actual dimensions and the measurements indicated on the drawings. Any difference that may be found shall be submitted to the City Engineer for consideration before proceeding. The City Engineer will provide staking for the project.

10. **SUPERVISION**

The Contractor shall employ an experienced superintendent or foreperson on the job at all times.

11. TEMPORARY UTILITIES

- 11.1 Temporary or construction water will NOT be available on the sites. The Contractor must provide for drinking water.
- 11.2 Temporary toilets: To be supplied by the Contractor as may be necessary.

12. **SITE SECURITY**

The Contractor shall be responsible for job site security of all materials and tools and no claim for loss or damage will be considered by the City.

13. TARDINESS

Construction delays resulting from tardiness on the part of the Contractor will be reviewed by the City in the event of any request for contract extension by the Contractor.

14. PROGRESS SCHEDULE

- Work shall be completed between **April 3, 2023, and October 27, 2023**, pending delivery of City supplied materials by **August 11, 2023**. If City supplied materials are not delivered by **August 11, 2023**, final completion shall be **July 14, 2024**. In either event, once work has begun, the project shall be completed within 60 calendar days.
- 14.2 Work of a similar nature may be added to this contract if agreed to by the City and the Contractor. In the event that work is added, the progress schedule for the work will remain unchanged. Any contract time added for additional work will be applied to that additional work only and cannot be added to items in the original contract. Any work done on the items in the original contract past the number of working days stated herein will be subject to liquidated damages regardless of any work that may be added at a later date.

Bid Reference #: 91360-006.0

PROGRESS SCHEDULE (cont.)

- 14.3 The Contractor will be required to meet with the Public Services representatives to work out detailed progress schedule. The schedule for this meeting will be within two weeks after contract award has been made.
- 14.4 The named sub-contractor(s) for all items shall also be present at the scheduled meeting and they will be required to sign the Progress Schedule to indicate their approval of the scheduled dates of work set forth in the Progress Schedule.
- 14.5 The Progress Schedule shall include, as a minimum, the starting and completion dates for major items, and where specified in the bid document the date the project is to be opened to traffic as well as the final project completion date specified in the bid documents. The Progress Schedule shall be coordinated with all aspects of the work occurring at the site.
- 14.6 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.
- 14.7 The starting date and the contract time to the completion date for this project may be adjusted by Public Services without imposing liquidated damages upon the receipt of satisfactory documented evidence that unforeseen delayed delivery of critical materials will prevent the orderly prosecution of the work.

15. CONSTRUCTION SCHEDULE AND COORDINATION

- The Contractor shall supply the City with an agreeable construction schedule before commencing work on this contract. This schedule shall detail beginning and completion dates for each major component of the project. Traffic Control Plan will be implemented as described in the construction plans and in order of specified phasing.
- 15.2 The Contractor shall coordinate and cooperate with all other contractors who may be working on the site in order to allow for the orderly progress of work being done.
- 15.3 The Contractor is required to keep the Project Manager fully informed of any proposed work which will tend to interfere with the existing operations at the site.
- 15.4 The Contractor shall schedule all work to accommodate the City's schedule. In the event Contractor's schedule falls on weekends, nights or overtime work is required, no additional compensation will be allowed. All work shall be part of this contract without regard to when it is done.

CONTRACTOR COORDINATION 16.

- 16.1 The Contractor shall make every effort to coordinate every aspect of his work with that of other contractors on the site to assure an efficiently managed and proper installation.
- Consideration shall be given to timing of construction, maintaining adequate construction 16.2 access, and construction staging. Any costs associated with this coordination shall be included in the contract.

17. **COORDINATING CLAUSE**

The Contractor's attention is called to Article 104.08 of the MDOT 2012 Standard 17.1 Specifications for Construction entitled "Cooperation by Contractor."

Bid Reference #: 91360-006.0

18. **ADDITIONS**

18.1 Any modification to the contract shall be subject to prior approval by the Purchasing Agent. City Commission approval may also be required.

18.2 Prices for additional work required are not requested in the itemized listing contained herein for the base project. Should additional work be authorized, compensation shall be made on the basis of price or prices to be mutually agreed upon. Such additional work shall not begin until approved.

19. **MAINTAINING TRAFFIC**

- 19.1 This work shall be in accordance with the requirements of Section 812 of the MDOT Standard Specifications for Construction, MDOT and RCKC Permit conditions, and as specified herein. The Contractor is advised that the current Michigan Manual of Uniform Traffic Control Devices is hereby established as governing all work in connection with traffic control devices, barricade lighting, etc. required on this project.
- 19.2 The Contractor shall furnish, erect, maintain and, upon completion of the work, remove all traffic control devices and barricade lights within the project and around the perimeter of the project for the safety and protection of through and local traffic. This includes, but is not limited to: Advance, regulatory and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the project and at right-of-way lines for intersecting streets which are to be closed with the first usable street on each side of the project. Traffic regulators, where required by the Engineer, are included.
- 19.3 Where the existing pavement or partial widths of new pavement are to be utilized for the maintenance of through and local traffic, drum type barricades will be required at 50' intervals or as directed by the Engineer for channeling and directing traffic through the construction area.
- 19.4 Through traffic shall be maintained utilizing sidewalk closures with detours and traffic shifts per MDOT traffic and safety details.
- 19.5 Protection of all pedestrian traffic shall be maintained at all times.
- 19.6 Payment for the traffic control devices shall be based on the contract lump sum price.
- 19.7 Under Article 812.04.D "Operated Pay Items" the term 'Relocating' shall include the relocating of the item from any street covered by the contract to any other street covered by the contract.

Special Restrictions: Access to frontage properties shall be maintained as much as practical. Emergency access shall be maintained at all times. The Contractor shall maintain two-way traffic with flag control as needed when the road is restricted to only one traffic lane.

20. LIQUIDATED DAMAGES

- 20.1 Liquidated damages, if applicable, shall be \$500.00 a day regardless of contract size.
- 20.2 The provisions of Article 108.11B of the MDOT 2003 Standard Specifications for Construction for reducing liquidated damages of 50 percent of the amount indicated in Table 108-1 of article 108.11C for projects where traffic is maintained during construction will not apply.

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Big Rock Drive Water Main Extension

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21. **REMOVAL OF RUBBISH**

The Contractor shall daily remove all rubbish and accumulated materials due to his/her construction.

22. SITE ACCESS

The City will provide fair and reasonable access to the job site within the working schedules of both parties.

23. GUARANTEE

The Contractor shall guarantee all of his/her work for a period of two (2) years following the date of final acceptance of the completed work and shall repair, replace or make good any materials or work which fail to function or perform or be found defective, without cost to the City.

24. **SAFETY**

The Contractor shall comply with all applicable OSHA and MIOSHA regulations.

25. PAY ESTIMATES

The Contractor shall be responsible for the generation of invoices for payment. Payment will be generated by the City based upon an approved invoice. Recommended frequency of payment is monthly; however, frequency of payment will not exceed bi-weekly.

26. PRODUCT/SYSTEM SUBSTITUTIONS

Submit a written request, to be received not later than 10 days prior to scheduled bid opening, for Substitution of any Product not named. If no substitutions are submitted, it will be reasonably concluded by the Owner and Landscape Architect that the specified product will be incorporated into the Work and the Bidder will be committed to supplying the specified product.

- 26.1 Describe in detail any variance to the Product specified. All proposed substitution for specified items shall be substantially the same size (height, length, width, diameter, etc.), type, color, construction quality and shall meet the design intent to be considered for substitution for the Product specified.
- 26.2 Document each request with complete data substantiating compliance of proposed Substitution with Product specified including written certification that Product conforms to or exceeds all requirements of the Product specified.
- 26.3 Document all coordination information, including a list of changes or modifications needed to the Contract Documents or other parts of the Work and to construction performed by the Owner and Separate Contractors that will become necessary to accommodate the proposed substitution.
- 26.4 Provide name, address and telephone number of manufacturer's authorized representative.
- 26.5 Submit three copies of all documents for each request for Substitution for consideration.
- 26.6 Approval of the Substitution request, if given, will be in the form of an addendum issued prior to scheduled opening date and hour at local time.

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27. SAMPLES AND DEMONSTRATIONS

Evidence in the form of samples may be requested. Such samples are to be furnished after the date of bid opening only upon request of The City unless otherwise stated in the bid proposal. If samples should be requested, such samples must be received by The City no later than seven (7) days after formal request is made. When required, The City may request full demonstrations of any unit(s) bid prior to the award of any contract. Samples, when requested, must be furnished free of expense to The City and if not used in testing or destroyed, will upon request within thirty (30) days of bid award be returned at the bidder's request.

28. ACCEPTANCE OF MATERIAL

The material delivered under this proposal shall remain the property of the seller until a physical inspection and actual usage of the material and/or services is made and thereafter accepted to the satisfaction of The City and must comply with the terms herein and be full in accord with specifications and of the highest quality. In the event the material and/or service supplied to The City is found to be defective or does not conform to specifications, The City reserves the right to cancel the order upon written notice to the seller and return the product to seller at the seller's expense.

29. VARIATIONS TO SPECIFICATIONS

For purposes of evaluation, the bidder MUST indicate any variances from our specifications, terms and/or conditions, <u>no matter how slight</u>. If variations are not stated in the proposal, it will be assumed that the product or service fully complies with our specifications, terms and conditions.

30. **SAFETY STANDARDS**

The bidder warrants that the products supplied to The City conform in all respects to the standards set forth in the Occupational Safety and Health Act of 1970 and its amendments and the failure to comply with this condition will be considered a breach of contract.

31. MANUFACTURER'S CERTIFICATION

The City reserves the right to request from bidders separate manufacturer certification of all statements made in the bid.

32. **PROTECTION OF WORK**

The Contractor shall maintain adequate protection of all his/her work from damage and shall protect all public and private abutting property from injury or loss arising in connection with this contract.

33. PROTECTION OF PROPERTY

- 33.1 The Contractor shall confine his/her equipment and operations to those areas of the work site necessary for the completion of the work, or as authorized by the Project Manager. The Contractor shall protect and preserve from damage any facilities, utilities or features including trees, shrubs and turf which are not required to be disturbed by the requirements of the work.
- 33.2 The Contractor shall be responsible to determine the location of and to protect from damage any utilities or other improvements.

CITY OF KALAMAZOO – INVITATION FOR BIDS

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34. VIRTUAL PRE-BID MEETING

All prospective contractors and subcontractors are invited to attend a Virtual Pre-Bid Meeting with representatives from the City of Kalamazoo on Wednesday, March 1, 2023, at 11:00 a.m. local time. Click here to register in advance for this Zoom meeting. Questions must be emailed to Eric Sajtar at sajtare@kalamazoocity.org by 10:00 a.m. on March 6, 2023.

Before submitting bids for his/her work, the Contractor shall be responsible for examining the work site and satisfying himself/herself as to the existing conditions under which he/she will be obligated to operate, or that in any way affects the work under this contract. No allowance shall be made subsequently, on behalf of the Contractor, for any negligence on his/her part.

35. **QUESTIONS**

Bidders shall address questions regarding the specifications to Eric Sajtar, P.E., Senior Civil Engineer at <u>sajtare@kalamazoocity.org</u>, (This does not relieve the requirements of Page 1, Item 3.) Questions regarding terms, conditions and other related bid requirements may be addressed to Monica Johnson, Buyer at (269) 337-8603 or johnsonm2@kalamazoocity.org.

Bid Reference #: 91360-006.0

SECTION VI TERMS AND CONDITIONS

1. AWARD OF CONTRACT

A. This contract will be awarded to that responsible bidder whose bid, conforming to this solicitation, will be most advantageous to the City, price and other factors considered. The City reserves the right to accept or reject any or all bids and waive informalities and minor irregularities in bids received. Other factors include, as an example but not limited to, delivery time, conformance to specifications, incidental costs such as demurrage and deposits, etc.

Notification of award will be in writing by the Purchasing Agent. Upon notification, the Contractor shall submit to the Purchasing Division all required insurance certificates (if required) and such other documentation as may be requested or required hereunder. Upon their receipt and subsequent approval by the City, the Purchasing Agent will forward to the Contractor a written **NOTICE TO PROCEED**. Work shall **NOT** be started until such **NOTICE TO PROCEED** is received by the Contractor.

- B. Unilateral changes in bid prices by the bidder shall not be allowed. However, the City, at its sole option, reserves the right to negotiate with bidders in the event of, but not limited to:
 - 1) No bids received;
 - 2) A single bid being received; or
 - 3) Prices quoted are over budget and/or unreasonable.

2. COMPLETE CONTRACT

This bid document together with its addenda, amendments, attachments and modifications, when executed, becomes the complete contract between the parties hereto, and no verbal or oral promises or representations made in conjunction with the negotiation of this contract shall be binding on either party.

3. SUBCONTRACTORS - NON-ASSIGNMENT

Bidders shall state in writing any and all sub-contractors to be associated with this bid, including the type of work to be performed. The Contractor shall cooperate with the City of Kalamazoo in meeting its commitments and goals with regard to maximum utilization of minority and women-owned business enterprises.

The Contractor hereby agrees and understands that the contract resulting from this solicitation shall not be transferred, assigned or sublet without prior written consent of the City of Kalamazoo.

4. TAXES

The City of Kalamazoo is exempt from all federal excise tax and state sales and use taxes. However, depending upon the situation, the vendor or contractor may not be exempt from said taxes and the City of Kalamazoo is making no representation as to any such exemption.

Bid Reference #: 91360-006.0

5. INVOICING

All original invoice(s) will be sent to the Finance Division, 241 W. South Street, Kalamazoo, MI 49007 or via email at apinvoice@kalamazoocity.org. Faxed copy of invoice(s) will not be accepted, unless it is to replace an original invoice that was lost in the mail. The Finance Division processes payments after receipt of an original invoice from the Contractor and approval by the department.

The City of Kalamazoo policy is to pay invoice(s) within 30 days from the receipt of the original invoice, if the services or supplies are satisfactory and the proper paperwork and procedures have been followed. In order to guarantee payment to the vendor on a timely basis, the vendor needs to receive a purchase order number before supplying the City of Kalamazoo with goods or services. All original, and copies of original invoice(s), will clearly state which purchase order they are being billed against.

The City of Kalamazoo is a government municipality and therefore is tax exempt from all sales tax. Our tax-exempt number is 38-6004627.

The vendor is responsible for supplying the Finance Division with a copy of their W-9 if they are providing a service to the City of Kalamazoo.

6. PAYMENTS

Upon issuance of certificates of Payment by the Architect/Engineer for labor and material incorporated in the work and the materials suitably stored at the site payment shall be made up to ninety (90%) percent of the value thereof.

When the cumulative total of payment is equal to fifty (50%) percent of the contract sum, subsequent payments will be made in the full amount for labor and material certified by the Architect/Engineer.

The amount retained shall be held until final acceptance of the work, receipt of all payrolls, releases, and waiver of liens.

7. CHANGES AND/OR CONTRACT MODIFICATIONS

The City reserves the right to increase or decrease quantities, service or requirements, or make any changes necessary at any time during the term of this contract, or any negotiated extension thereof. Price adjustments due to any of the foregoing changes shall be negotiated and mutually agreed upon by the Contractor and the City.

Changes of any nature after contract award which reflect an increase or decrease in requirements or costs shall not be permitted without prior approval by the Purchasing Agent. City Commission approval may also be required. SUCH CHANGES, IF PERFORMED IN ADVANCE OF PURCHASING AGENT APPROVAL, MAY BE SUBJECT TO DENIAL AND NON-PAYMENT.

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8. LAWS, ORDINANCES AND REGULATIONS

The Contractor shall keep himself/herself fully informed of all local, state and federal laws, ordinances and regulations in any manner affecting those engaged or employed in the work and the equipment used. Contractor and/or employees shall, at all times, serve and comply with such laws, ordinances and regulations.

Any permits, licenses, certificates or fees required for the performance of the work shall be obtained and paid for by the Contractor, including City of Kalamazoo Right-Of-Way permit and Soil Erosion and Sediment Control permit for, construction, construction staging, and construction stockpiling.

This contract shall be governed by the laws of the State of Michigan.

9. **RIGHT TO AUDIT**

The City or its designee shall be entitled to audit all of the Contractor's records, and shall be allowed to interview any of the Contractor's employees, throughout the term of this contract and for a period of three years after final payment or longer if required by law to the extent necessary to adequately permit evaluation and verification of:

- A. Contractor compliance with contract requirements,
- B. Compliance with provisions for pricing change orders, invoices or claims submitted by the Contractor or any of his payees.

10. HOLD HARMLESS

If the acts or omissions of the Contractor/Vendor or its employees, agents or officers, cause injury to person or property, the Contractor/Vendor shall defend, indemnify and save harmless the City of Kalamazoo, and LL Harris and Associates, their agents, officials, and employees against all claims, judgments, losses, damages, demands, and payments of any kind to persons or property to the extent occasioned from any claim or demand arising therefrom.

11. **DEFAULT**

The City may at any time, by written notice to the Contractor, terminate this contract and the Contractor's right to proceed with the work, for just cause, which shall include, but is not limited to the following:

- A. Failure to provide insurance and bonds (when called for), in the exact amounts and within the time specified or any extension thereof.
- B. Failure to make delivery of the supplies, or to perform the services within the time specified herein, or any extension thereof.
- C. The unauthorized substitution of articles for those bids and specified.
- D. Failure to make progress if such failure endangers performance of the contract in accordance with its terms.
- E. Failure to perform in compliance with any provision of the contract.

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DEFAULT (cont.)

F. Standard of Performance - Contractor guarantees the performance of the commodities, goods or services rendered herein in accordance with the accepted standards of the industry or industries concerned herein, except that if this specification calls for higher standards, then such higher standards shall be provided.

Upon notice by the City of Contractor's failure to comply with such standards or to otherwise be in default of this contract in any manner following the Notice to Proceed, Contractor shall immediately remedy said defective performance in a manner acceptable to the City. Should Contractor fail to immediately correct said defective performance, said failure shall be considered a breach of this contract and grounds for termination of the same by the City.

In the event of any breach of this contract by Contractor, Contractor shall pay any cost to the City caused by said breach including but not limited to the replacement cost of such goods or services with another Contractor.

The City reserves the right to withhold any or all payments until any defects in performance have been satisfactorily corrected.

In the event the Contractor is in breach of this contract in any manner, and such breach has not been satisfactorily corrected, the City may bar the Contractor from being awarded any future City contracts.

G. All remedies available to the City herein are cumulative and the election of one remedy by the City shall not be a waiver of any other remedy available to the City.

12. TERMINATION OF CONTRACT

The City may, at any time and without cause, suspend the work of this contract for a period of not more than ninety days after providing notice in writing to the Contractor. The Contractor shall be allowed an adjustment in the contract price or an extension of the contract times, or both, directly attributable to the suspension if Contractor makes an approved claim.

The City may, without prejudice to any other right or remedy of the City, and with or without cause, terminate the contract by giving seven days written notice to the Contractor. In such case the Contractor shall be paid, without duplication, for the following items:

- A. Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such work;
- B. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the contract documents in connection with uncompleted work, plus fair and reasonable sums for overhead and profit on such expenses;
- C. All documented claims, costs, losses and damages incurred in settlement of terminated contracts with Subcontractors, Suppliers and others; and
- D. Reasonable expenses directly attributable to termination.

The Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

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13. INDEPENDENT CONTRACTOR

At all times, the Contractor, any of his/her employees, or his/her sub-contractors and their subsequent employees shall be considered independent contractors and not as City employees. The Contractor shall exercise all supervisory control and general control over all workers' duties, payment of wages to Contractor's employees and the right to hire, fire and discipline their employees and workers. As an independent contractor, payment under this contract shall not be subject to any withholding for tax, social security or other purposes, nor shall the Contractor or his/her employees be entitled to sick leave, pension benefit, vacation, medical benefits, life insurance or workers' unemployment compensation or the like.

14. **PROJECT SUPERVISOR**

The Contractor shall employ an individual to act as Project Supervisor. The Project Supervisor shall be available to the Contractor's workers and the Project Manager at all times by use of a beeper or other reliable means. The Project Supervisor shall prepare daily work plans for the employees, monitor employee performance, attendance and punctuality; and work closely with the City's Project Manager in assuring contract compliance.

15. **MEETINGS**

The Contractor and/or Project Supervisor shall be available to meet with the Department Head or Project Manager at a mutually agreeable time to discuss problems, issues or concerns relative to the contract. Either party may call a meeting at any time. When such a request for a meeting is made, the meeting date shall, in no case exceed five (5) working days after the request; and, if in the sole opinion of the Department Head, the severity of the circumstance warrants, no more than one (1) working day.

APPENDIX A NON-DISCRIMINATION CLAUSE FOR ALL CITY OF KALAMAZOO CONTRACTS

The Contractor agrees to comply with the Federal Civil Rights Act of 1964 as amended; the Federal Civil Rights Act of 1991 as amended; the Americans With Disabilities Act of 1990 as amended; the Elliott-Larson Civil Rights Act, Act. No. 453, Public Act of 1976 as amended; the Michigan Handicappers Civil Rights Act, Act No. 220, Public Act of 1976 as amended, City Ordinance 1856 and all other applicable Federal and State laws. The Contractor agrees as follows:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability, family status, sexual orientation or gender identity that is unrelated to the individual's ability to perform the duties of the particular job or position. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment advertising, layoff or termination; rates of pay or other forms of compensations; and selection for training, including apprenticeship.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability family status, sexual orientation or gender identity that is unrelated to the individual's ability to perform the duties of the particular job or position.
- 3. If requested by the City, the Contractor shall furnish information regarding practices, policies and programs and employment statistics for the Contractor and subcontractors. The Contractor and subcontractors shall permit access to all books, records and accounts regarding employment practices by agents and representatives of the City duly charged with investigative duties to assure compliance with this clause.
- 4. Breach of the covenants herein may be regarded as a material breach of the contract or purchasing agreement as provided in the Elliott-Larsen Civil Rights Act and City Ordinance 1856.
- 5. The Contractor will include or incorporate by reference the provisions of the foregoing paragraphs 1 through 4 in every subcontract or purchase order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission* and will provide in every subcontract or purchase order that said provision will be binding upon each subcontractor or seller.
- 6. The Contractor will not preclude a person with a criminal conviction from being considered for employment unless otherwise precluded by federal or state law. (for contracts over \$25,000)

The Elliott-Larson Civil Rights Act, Sec. 202 of Act. No. 453 of 1976 reads in part as follows:

Sec. 202. (1) An employer shall not:

- (a) Fail or refuse to hire, or recruit, or discharge or otherwise discriminate against an individual with respect to employment, compensation, or a term condition or privilege of employment because of religion, race, color, national origin, age, sex, height, weight or marital status.
- (b) Limit, segregate or classify an employee or applicant for employment in a way which deprives or tends to deprive the employee or applicant of an employment opportunity or otherwise adversely affects the status of an employee or applicant because of religion, race, color, national origin, age, sex, height, weight or marital status.
- (c) Segregate, classify or otherwise discriminate against a person on the basis of sex with respect to a term, condition or privilege of employment, including a benefit plan or system.

^{*} Except for contracts entered into with parties employing less than three employees. 1-2010

APPENDIX B - PREVAILING WAGES

Prevailing wages are applicable to this contract, therefore, rates will apply as follows:

(XX) Project is funded by City of Kalamazoo monies and is estimated to be in excess of \$100,000.00. The applicable prevailing wage rates are attached.

Specifications for projects in which the City of Kalamazoo is party for construction, alterations and/or repair including painting and decorating of public buildings or public works in or for the City of Kalamazoo and which requires or involves the employment of mechanics and/or laborers shall contain the following provisions stating the minimum wages to be paid the various classes of laborers and mechanics for the project. Prevailing wage rates determined by the U.S. Department of Labor under Davis Bacon and related acts will be used for City of Kalamazoo construction projects.

By the incorporation of prevailing wage rates within this specification, the City of Kalamazoo stipulates that:

- ✓ Contractor or his/her subcontractor shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and not less than once a week and without subsequent deduction or rebate on any account the full amount, accrued at the time of payment, computed at wage rates as incorporated herein regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and such laborers and mechanics;
- ✓ The scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
- ✓ The Prime Contractor and all subcontractors shall submit weekly certified payrolls documenting the hours worked and wages paid by work classification. **NOTE: Contactor shall not include Social Security numbers of employees on certified payrolls.**
- ✓ There may be withheld from the contractor's accrued payments the amount considered necessary by the City's Contracting Official to pay to laborers and mechanics employed by the contractor or any subcontractor on the work for the difference between the rates of wages required by the contract and the rates of wages received by such laborers and mechanics except those amounts properly deducted or refunded pursuant to the terms of the Davis-Bacon Act (USC, Title 40, Sec. 276a) and interpretations thereof.

Special Note: The City's requirements as it relates to prevailing wages **includes a meeting with the City's Purchasing Agent prior to starting work and the submission of weekly certified payrolls by prime contractors and all subcontractors.** The City will monitor certified payrolls, work progress, and conduct interviews with the mechanics and labors employed directly upon the site during the duration of the contract Please contact the Purchasing Department at (269) 337-8020 if you have any questions regarding prevailing wage provision.

The overtime pay to which a laborer or mechanic is entitled under this contract shall be that overtime pay to which he/she is entitled by any agreement made with the contractor or subcontractor or by any applicable provision of law; but in no event shall such amount be less than the prevailing wage in the Kalamazoo community for such overtime.

Revised 4-08



PREVAILING WAGES

Big Rock Water Main Extension

Bid Reference #: 91360-006.0

February 2023

"General Decision Number: MI20230061 02/17/2023

Superseded General Decision Number: MI20220061

State: Michigan

Construction Type: Heavy

County: Kalamazoo County in Michigan.

Heavy, Includes Water, Sewer Lines and Excavation (Excludes Hazardous Waste Removal; Coal, Oil, Gas, Duct and other similar

Pipeline Construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:

- Executive Order 14026 generally applies to the contract.
- |. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.

If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- Executive Order 13658 generally applies to the contract.
- The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number

Publication Date 01/06/2023

1	02/03/202
2	02/17/202

CARP0525-006 06/01/2021

	Rates	Fringes
CARPENTER, Includes Form Work	.\$ 25.94	20.59
ELEC0131-006 06/01/2022		
	Rates	Fringes
ELECTRICIAN	.\$ 37.66	8.95+27%
ENGI0325-009 09/01/2022		

POWER EQUIPMENT OPERATORS: Underground Construction (Including Sewer)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	\$ 37.67	24.85
GROUP 2	\$ 32.78	24.85
GROUP 3	\$ 32.28	24.85
GROUP 4	\$ 32.00	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

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

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

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

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

.....

ENGI0326-025 06/01/2022

EXCLUDES UNDERGROUND CONSTRUCTION

	I	Rates	Fringes
OPERATOR:	Power Equipment		
GROUP	1\$	44.13	24.85
GROUP	2\$	40.83	24.85
GROUP	3\$	38.18	24.85
GROUP	4\$	36.47	24.85
GROUP	5\$	36.47	24.85
GROUP	6\$	30.61	24.85
GROUP	7\$	28.13	24.85

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane operator with main boom and jib 400', 300', or 220' or longer.

GROUP 2: Crane operator with main boom and jib 140' or longer, tower crane, gantry crane, whirley derrick

GROUP 3: Backhoe/Excavator; Boring Machine; Bulldozer; Crane; Grader/Blade; Loader; Roller; Scraper; Tractor; Trencher

GROUP 4: Bobcat/Skid Loader; Broom/Sweeper; Fork Truck (over 20' lift)

GROUP 5: Boom truck (non-swinging)

GROUP 6: Fork Truck (20' lift and under for masonry work)

GROUP 7: Oiler

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 per hour above the group 1 rate.

Crane operator with main boom and jib 400' or longer: \$3.00 per hour above the group 1 rate.

IRON0025-011 06/01/2022

ſ	Rates	Fringes
(REINFORCING)\$ (STRUCTURAL)\$		34.77 38.44

^{*} LAB00334-011 09/01/2022

SCOPE OF WORK:

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

	Rates	Fringes
LABORER		
(1) Common or General	\$ 22.42	12.95
(2) Mason Tender-		
Cement/Concrete	\$ 22.55	12.95
(4) Grade Checker	\$ 22.73	12.95
(5) Pipelayer	\$ 22.85	12.95

LAB00355-010 06/01/2022

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
LABORER		
Common or General; Grade		
Checker; Mason Tender -		
Cement/Concrete	\$ 26.70	12.95
Pipelayer	\$ 20.34	12.85

		SAM.gov	
	Rates	Fringes	
PAINTER Brush & Roller Spray	\$ 22.75	11.94 11.94	
PLAS0016-020 04/01/2014			
	Rates	Fringes	
CEMENT MASON/CONCRETE FINISHER		12.83	
* PLUM0333-026 06/01/2022			
Fort Custer			
	Rates	Fringes	
PLUMBER	•	23.94	
PLUM0357-012 07/01/2020			
Excluding Fort Custer			
	Rates	Fringes	
PLUMBER	•	22.35	
TEAM0007-011 06/01/2020			
	Rates	Fringes	
TRUCK DRIVER Lowboy/Semi-Trailer Truck Tractor Haul Truck		.50 + a+b .50 + a+b	
FOOTNOTE: a. \$470.70 per week. o. \$68.70 daily.			
* SUMI2010-059 11/09/2010			
	Rates	Fringes	
_ABORER: Landscape	\$ 12.25 **	0.00	
TRUCK DRIVER: Dump Truck	\$ 18.00	6.43	
TRUCK DRIVER: Off the Road Truck		3.69	
WELDERS - Receive rate prescri operation to which welding is		erforming	

^{**} Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any

solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates

the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor

2/20/23, 3:10 PM SAM.gov

200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"



MEASUREMENT & PAYMENT and PROJECT SPECIFICATIONS

Big Rock Water Main Extension

Bid Reference #: 91360-006.0

February 2023

SECTION 01 22 00 - UNIT PRICES - MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes descriptions of the method of measurement and the basis of payment for Unit Price Work under this Contract.
- B. Basis of Contract Payments:
 - Final Contract Price shall be determined by actual quantities installed at unit prices stated in Contractor's Bid.
 - 2. Engineer shall determine actual as-built quantities.
 - All work identified on the Drawings, but not included as a Bid item shall be considered incidental to construction and not paid for directly, except Work that would be considered additional Work due to unforeseen conditions.
 - 4. Unit price payments for individual items shall include everything necessary for such item to function as intended in the system.
 - 5. Owner reserves the right to increase, decrease or eliminate any quantities for items listed in Contractor's Bid or which become a part of the Contract Documents.
 - All work shall be completed in accordance with the City of Kalamazoo Standard Specifications for Water Main and Service Installation 2021.
- C. Items included as incidental to Unit Prices for systems and appurtenances. Unless there is a specific pay item identified, the unit price payment shall include, but not be limited to:
 - 1. Clear, excavate, trench, bedding, trench backfill, compaction, disposal of items for clearing and unsuitable or excess excavated materials.
 - 2. Temporary sheeting, bracing and shoring of excavations.
 - 3. Support, protection, repair, connection or reconnection of existing pipelines and utilities. Cleanup and surface restoration.
 - 4. Water service repair.
 - 5. Sewer lead repair.
 - 6. Bulkhead of pipes to be abandoned.
 - 7. Removal of pipes, valves, structures and appurtenances located within the excavation limits of new utilities whether identified on the removal Drawings or not.
 - 8. Coordination of mail delivery and refuse removal with residents, post office, and refuse collectors.
 - 9. Coordination with public transportation and schools/buses.
 - 10. Support of utility poles and existing underground utilities during excavation and installation of sanitary sewer, water main and storm sewer.
 - 11. Remove, salvage, and replace street signs.
 - 12. Remove and disposal of trees/stumps less than or equal to 8-inches in diameter.
 - 13. Protection, repair, and/or replacement of leaching basins/storm inlets damaged by Contractor.
 - 14. Remove and replace guard rails.
 - 15. The Contractor shall provide a written statement of warranty (Warranty Bond) for a period of 2 years from the date of final acceptance (after all service connections are complete). Warranty work shall cover any necessary cost to repair water main or appurtenance leaks and water main or appurtenance leak damage at no cost to the City of Kalamazoo. Final acceptance will only be given once all water service connections are complete.

D. City provided materials

- 1. City shall provide all items listed in the table below at no cost to the Contractor.
- 2. Contractor shall be responsible for coordinating delivery of materials by contacting the City's specified supplier a minimum of 10 working days prior to desired delivery. In advance of material delivery, a centralized delivery yard shall be established by the Contractor and agreed upon with the City and City's material supplier on or adjacent to the project site. The Contractor shall supply any materials not explicitly listed below that are necessary to construct the project. These materials shall be incidental to construction. No second hand or salvaged materials shall be allowed or supplied. All supplied products shall be "Buy American" unless otherwise specified and shall comply with the conditions of this section.
- 3. Contractor shall review the plans and list of City supplied materials during bidding and throughout construction. If Contractor believes additional quantities will be required, Contractor shall immediately notify the City in writing, and the City will provide the additional quantities at no cost to the Contractor (THIS ONLY PERTAINS TO MATERIALS LISTED IN TABLE CITY PROVIDED MATERIALS). City shall not be responsible for any downtime or construction delays associated with insufficient materials being available during construction. Contractor shall be responsible for all delays and downtime associated with Contractor supplied materials, and shall purchase, provide, and install materials not explicitly listed below that are necessary to construct the project as designed.
- 4. All City provided materials, not used during construction, shall be returned to the City within one week of water main and service installation completion, unless otherwise directed by the City's project manager. The Contractor shall be responsible for transporting and unloading any excess material from the project site to 415 E. Stockbridge Ave., Kalamazoo, MI. This includes, but is not limited to, partial and full sticks of pipe, partial and full rolls of copper (including tag ends of copper services), valves, fittings, gaskets, bolts, etc.
- 5. City provided materials shall be used efficiently and waste from cutting pipes, etc. shall be minimized. City provided materials shall be handled with care and protected from damage, vandalism and thievery. Contractor shall be responsible for providing additional materials due to theft, vandalism or damage caused by the contractor.
- 6. Contractor shall wash the inside of all pipe and fittings with chlorinated water (maximum 200 ppm chlorine solution) immediately prior to placement in the trench. Water pressure and velocity during washing shall not exceed manufacture's recommendations or damage the pipe or fittings.
- 7. Contractor shall provide 2 year warranty as described in the City of Kalamazoo Standard Specifications for Water Main and Service Installation. Warranty shall cover all City and Contractor provided parts and materials; and associated contractor labor costs.
- 8. Contractor and Engineer shall track City provided material delivery and usage on a daily basis.

ITEM	QUANTITY
DIP_6 INCH (includes pipe and standard gaskets)	60
DIP_12 INCH (includes pipe and standard gaskets)	5800
FLANGE X PLAIN END STAND PIPE, 6 INCH DIA, 10 FT LONG	2
6" SOLID SLEEVE	2
12" SOLID SLEEVE	3
6" 90 DEG BEND	5
6" 45 DEG BEND	4
12" 45 DEG BEND	12
6" 22.5 DEG BEND	2
12" 22.5 DEG BEND	8
6" 11.25 DEG BEND	2
12" 11.25 DEG BEND	4
6" CAP	1
12" CAP	1
4" PLUG X 2" FPT	1
12" PLUG	2
6" X 2" FPT BLIND FLANGE	2
12" X 4" TEE	1
12" X 6" TEE	14
12" X 12" TEE	2
4" MEGA LUGS W/ GASKET AND BOLT KIT	1
6" MEGA LUGS W/ GASKET AND BOLT KIT	70
12" MEGA LUGS W/ GASKET AND BOLT KIT	100
12" FIELD LOCKING GASKETS	60
6" GATE VALVE	14
12" BUTTERFLY VALVE	10
VALVE BOX	26
HYDRANT	12
6" X 13" SWIVEL X SOLID ADAPTER W/ SWIVEL GLAND	26
12" X 1" SADDLE	30
1.25" COPPER PIPE	3250
1.25" SERVICE BRASS - STREET	30
1.25" SERVICE BRASS - YARD	30
FORD BOX COMPLETE, 1.25 INCH	26
CURB BOX	30
AIR RELEASE VALVE, 2 INCH (CLA-VAL SERIES 36)	1

Item 1.25" SERVICE BRASS – STREET: Shall include one each of the following parts per the Standard Specifications.

Part	Ford #	AY McDonald #
1" CC x 1.25" FC Corporation Stop	FB600-45-NL	74701B, 5142-013
1.25" FCxFC Curb Stop	B22-555-NI	76100, 5142-340

Item FORD BOX COMPLETE, _INCH: Shall include the meter setter (Ford V81-22-33-NL for 0.75" service with 5/8" meter or Ford V84-22-55-NL for 1.25" service for 1" meter), box, and complete meter pit cover.

Item 1.25" SERVICE BRASS – YARD: Shall include one each of the following parts per the Standard Specifications.

Part	Ford #	AY McDonald #	Apollo
1.25" FCx1"MC Angle Valve	KV23-454W-NL	-	-
Meter Connector, 1" MCx1" MIP	C38-44-2-625-NL	74620, 5124-111	-
1" Ball Valve	-	-	77FLF-105-01

1.3 GENERAL CONDITIONS

- A. Item No. 1 Mobilization, (Maximum of 5% of Total Bid):
 - Includes:
 - a. Preparatory work and expenses incurred prior to beginning work onsite.
 - b. Transport materials, personnel, and equipment to the job site.
 - c. Establish temporary onsite construction facilities, including but not limited to, port-a-johns.
 - d. Provide insurance, bonds, and other costs associated with the project in general and not included in other pay items.
 - e. All required submittals.
 - 2. Unit of Measure:
 - a. Lump sum.
 - b. 50% payment will be made after 5% of the original contract amount is earned.
 - c. Final 50% payment will be made after 25% of the contract amount is earned.
- B. Item No. 2 Cash Allowances Testing:
 - 1. Includes cash allowance for:
 - a. Material certification.
 - b. Material density/compaction testing.
 - c. Material density/compaction testing requirements shall be per City of Kalamazoo Standard Specifications for Water Main and Services Installation 2021 and RCKC requirements.
 - 2. Cost for pressure testing and chlorination of the water main shall be included in the water main items. Owner shall perform and pay for bacterial sampling of water main.
 - Unit of measure:
 - a. Actual dollars paid to independent laboratory.
 - b. General Contractor allowable mark-up is 10%.
 - c. Documented by invoices.
- C. Item No. 3 Traffic Control:
 - Includes the following in accordance with the most recent Michigan Manual of Uniform Traffic Control Devices:
 - Furnish, install, and maintain:
 - a. Traffic control devices including barricades and barrels; provide flaggers as necessary.
 - b. Maintain access to residential driveways.
 - c. Detours in accordance with the Project Drawings.
 - d. Traffic Control as required due to Contractor's operations, MDOT or RCKC requirements.
 - e. Provide minimum 5-days notice to MDOT and RCKC before beginning work within ROW.
 - Unit of measure:
 - a. Lump sum.
 - b. 50% payment shall be made for installation of traffic control devices.
 - 50% payment shall be made after removal of traffic control devices and construction within the ROW is complete.

1.4 SOIL EROSION CONTROL

- A. Item No. 4 Soil Erosion Control:
 - Includes the following:
 - a. Develop and implement the soil erosion control plan including providing and maintaining the minimum required soil erosion and sedimentation control measures and any other measures necessary to adequately control soil erosion and sedimentation.
 - b. Apply for and obtain applicable permits.
 - c. Provide and maintain soil erosion and sedimentation control measures.
 - d. Provide inspections by a certified Storm Water Operator and provide inspection documentation to the City of Kalamazoo weekly and following precipitation events.
 - e. Sweep and clean roadways and sidewalks as necessary to prevent tracking of soil and sediment transport.

- f. Protect and clean catch basins and storm sewers as required.
- g. Bypass pump storm water during and after rain events while existing storm sewer is removed.
- h. Implementing the soil erosion and sedimentation control plan, including providing and maintaining the minimum required soil erosion and sedimentation control measures indicated on the Drawings and any other measures necessary to adequately control soil erosion and sedimentation.
- i. Provide and maintain tree protection fencing.
- Remove temporary soil erosion and sedimentation control measures after site is stabilized and turf is established.
- 2. Unit of Measure:
 - a. Lump sum.
 - b. 50% payment shall be made for installation of soil erosion and sedimentation control measures.
 - c. 50% payment shall be made upon project completion for operation and removal of soil erosion and sedimentation control measures.

1.5 DEMOLITION AND REMOVALS

- A. Item No. 5 Remove & Replace, HMA Roadway:
 - 1. Includes the following:
 - a. Sawcut, remove (full depth) and dispose of existing bituminous, concrete, composite pavement materials, and aggregate base.
 - Milling at ends of pavement removal per requirements of the Road Commission of Kalamazoo County.
 - c. Preparation and compaction of subgrade.
 - d. Furnish, place and compact sand subbase and aggregate base.
 - e. Furnish and place HMA base, leveling and top course mixture to match existing roadway.
 - f. Furnish and place aggregate shoulder and shoulder base.
 - 2. Unit of measure: Lump Sum.
- B. Item No. 6 Remove & Replace, Driveway:
 - 1. Includes the following:
 - Includes sawcut, remove, and dispose of existing HMA, concrete, or aggregate drive surfaces.
 - b. Contractor to determine required removal width based on proposed Means and Methods.
 - Costs for removal/replacement of surfaces damaged due to Contractor's activities shall be incidental to construction.
 - d. Preparation and compaction of subgrade.
 - e. Furnish, place and compact aggregate or sand base for appropriate surface type.
 - f. Furnish and place 8-inch thick MDOT 21AA aggregate surface for aggregate drives.
 - g. Furnish and place HMA to match existing asphalt surface for asphalt drives.
 - h. Utilize 6-inch thick "High Early Strength" concrete for concrete drives and protect until concrete is set.
 - 2. Unit of measure: Each
- C. Item No. 7 Remove and Replace Drive Culvert:
 - 1. Includes the Following:
 - a. Removal and disposal of existing culvert.
 - b. Installation of new 12-inch reinforced concrete culvert:
 - 1) Match existing inverts at elevations shown on the plans.
 - 2) Excavate, backfill, and compact trench.
 - 3) Provide pipe bedding and trench backfill material.
 - 2. Unit of measure: Each

- D. Item No. 8 Granular Material, Class III:
 - 1. Includes the following:
 - a. Remove and dispose of excavated soil, which in the opinion of the Engineer, is unsuitable for use as either bedding or backfill material.
 - b. Importation and placement of MDOT Class III material.
 - 2. Unit of Measure:
 - a. Cubic Yard compacted in-place.
- E. Item Nos. 9 and 10 Removal, Tree:
 - 1. Includes the following:
 - Remove trees, including stumps and roots, to 2 feet below finished grade, dispose of stumps and roots.
 - b. Dispose of all tree material not specifically retained by property owner.
 - 2. The size of trees shall be determined by the average diameter of the tree trunk, measured to the nearest full inch, at a point 4-1/2 feet above the base of the tree from the ground line. Trees having major limbs lower than 4-1/2 feet from the ground shall be measured at the smallest diameter below such limbs.
 - 3. Unit of Measure
 - a. Several trees originating from the same ground level trunk shall be measured separately.
 - b. Each.

1.6 WATER DISTRIBUTION SYSTEM

- A. Item No. 11 Water Main, 12" DI
 - 1. Includes the following:
 - a. Install, restrain, flush, pressure test and disinfect water main.
 - b. Excavate, backfill, and compact trench.
 - c. Provide pipe bedding and trench backfill material.
 - d. Dewatering required for pipe installation.
 - e. Additional pressure testing and disinfection shall be completed at the Contractor's expense until results are acceptable by the Owner.
 - 2. Unit of Measure:
 - a. Lineal foot.
 - b. Measure from center of fitting to center of fitting along centerline of pipe.
- B. Item No. 12 Water Main, 12" Valve and Box
 - 1. Install valve, restraints, and valve box adjusted to finished grade.
 - 2. Unit of Measure: Each.
- C. Item No. 13 Water Main, 12" Fitting
 - 1. Install fitting and joint restraint that are not specifically included with other pay items.
 - 2. Includes: 12"x12" tees, 12" bends and 12" plugs.
 - 3. Unit of Measure: Each.
- D. Item No. 14 Water Main, Hydrant Assembly:
 - Includes the following:
 - a. Install fire hydrant assembly, including main line tee, fire hydrant, valve and box, connecting spool (swivel x solid adapters w/ swivel gland), all 6-inch pipes, fittings and joint restraints.
 - b. Adjust hydrant to final grade according to City of Kalamazoo specifications.
 - c. Adjust valve box to final grade.
 - d. Hydrant extension (if necessary).
 - e. Hydrant Storz connection.
 - f. Hydrant marker.
 - Unit of Measure: Each.
- E. Item No. 15 Water Main, Air Release Chamber:

- 1. Includes the following:
 - a. Furnish and install air release chamber including all excavation, bedding, backfill, concrete vault and access port.
 - b. Furnish and install all fittings, piping, and appurtenances that are not provided by the City.
 - c. Install City provided 12x4 Tee, 4" plug x 2" FPT and Cla-Val Series 36 air release valve.
 - Voids between the water main and concrete vault shall be filled/sealed with link seal and nonshrink grout.
 - e. Drain hole in the chamber bottom shall be filled with pea gravel and 1-foot of pea gravel shall be placed beneath chamber to facilitate drainage.
- 2. Unit of Measure: Each.

F. Item No. 16 – Water Main, PRV Station:

- 1. Includes the following:
 - a. Furnish and install pressure reducing valve chamber including all excavation, bedding, backfill, concrete vault and access port. HS-20 loading capacity.
 - b. Install City provided main line tees, 6-inch piping, 6-inch valves, 6-inch bends and 6" x 2" FPT blind flanges.
 - c. Furnish and install all chamber internal fittings, piping, and appurtenances, including gaskets for 6" blind flanges.
 - d. Furnish and install two pipe bollards.
 - e. Furnish and install pressure reducing valve.
 - f. Voids between the water main and concrete vault shall be filled/sealed with link seal and nonshrink grout.
 - g. Drain hole in the chamber bottom shall be filled with 6A stone and 1-foot of 6A stone shall be placed beneath chamber to facilitate drainage.
- 2. Unit of Measure: Each.

G. Item No. 17 - Water Main, 1-1/4" Water Service

- 1. Includes the following:
 - Install water main tapping saddle and valve, tap the water main, install type K copper water service
 pipe, and curb stop and box, including all excavation, bedding and backfill.
 - b. Furnish and install copper disk in yard side of curb stop if yard side service is not installed at the time of curb stop installation.
 - c. Adjust Curb Box to final grade.
 - d. Restore disturbed area.
- 2. Unit of Measure:
 - a. Lineal foot from the water main tap location to the center of the curb stop
- H. Item No. 18 Water Main, 1-1/4" Water Service, Outside of ROW:
 - 1. Includes the following:
 - a. Install connection to curb stop, fittings and appurtenances, and type K copper water service pipe to interior of structure to be served (or connection point to existing well line), including all excavation, bedding and backfill.
 - Restore disturbed area.
 - 2. Unit of Measure: Lineal foot from center of the curb stop to exterior wall face of the structure (or connection point to existing well line).
- I. Item No. 19 Water Main, 1-1/4" Water Service, Private:
 - Includes the following:
 - a. Only to be used downstream of meter pits.
 - b. Furnish and install connection to K copper water service pipe 5 feet downstream of meter pit, including all fittings and appurtenances.
 - c. Furnish and install 1.25" diameter SDR-9 HDPE pipe with 12 AWG tracer wire to interior of structure to be served (or connection point to existing well line), including all excavation, bedding and backfill.

- d. 12AWG high strength HDPE insulated tracer wire shall have terminal loop 5' long inside of meter pit and 2' long inside house.
- e. All new pipe and fittings shall be NSF certified for potable water, rated to minimum 250 psi and joined to new piping using butt fusion or electrofusion. Compression fittings are not allowed.
- f. Pressure test from the meter pit to the end connection point for one hour at 150 psi, prior to connecting to the structure or existing well line. Leave final connection point exposed for minimum one hour after final connections are completed and water is turned on. Do not backfill until City or City's representative has inspected the work.
- g. Restore disturbed area.
- 2. Unit of Measure: Lineal foot from point of connection approximately 5 feet downstream of meter pit to exterior wall face of the structure (or connection point to existing well line).
- J. Item No. 20 Water Main, 2" Water Service, Private:
 - 1. Includes the following:
 - a. Only to be used downstream of meter pits.
 - b. Furnish and install connection to 1-1/4" K copper water service pipe 5 feet downstream of meter pit, including all fittings and appurtenances.
 - c. Furnish and install 2" diameter SDR-9 HDPE pipe with 12 AWG tracer wire to interior of structure to be served (or connection point to existing well line), including all excavation, bedding and backfill.
 - d. 12AWG high strength HDPE insulated tracer wire shall have terminal loop 5' long inside of meter pit and 2' long inside house.
 - e. All new pipe and fittings shall be NSF certified for potable water, rated to minimum 250 psi and joined to new piping using butt fusion or electrofusion. Compression fittings are not allowed.
 - f. Pressure test from the meter pit to the end connection point for one hour at 150 psi, prior to connecting to the structure or existing well line. Leave final connection point exposed for minimum one hour after final connections are completed and water is turned on. Do not backfill until City or City's representative has inspected the work.
 - g. Restore disturbed area.
 - 2. Unit of Measure: Lineal foot from point of connection approximately 5 feet downstream of meter pit to exterior wall face of the structure (or connection point to existing well line).
- K. Item No. 21 Water Main, 1-1/4" Meter Pit:
 - 1. Includes the following:
 - a. Install meter pit per City of Kalamazoo Specifications, including all excavation, bedding and backfill.
 - b. Install specified pipe and fittings in meter pit and prepare all plumbing for meter placement.
 - c. City of Kalamazoo will provide meter and remote/radio. Contractor to install both.
 - d. Restore disturbed area.
 - 2. Unit of Measure: Each
- L. Item No. 22 Water Main, House Service Connection:
 - Includes the following:
 - Furnish and install connection to new water service from exterior of house, through the foundation (or connecting to existing well line), to the existing house plumbing, including all excavation, bedding and backfill.
 - b. Furnish and install all piping, fittings, and appurtenances to connect new water service to existing house plumbing or existing well piping (if connecting outside of the structure) using a plumber licensed by the State of Michigan.
 - c. Utilizing existing water service penetration through foundation or coring new penetration.
 - d. Capping of existing water supply line at well head and at exterior of house foundation.
 - e. Connect water meter yolk and meter provided by the City using a plumber licensed by the State of Michigan.
 - f. Remove existing water pressure tank if not specifically retained by property owner.

- g. Restore disturbed area.
- h. Includes, up to 10 feet laterally of interior plumbing work to relocate a service entrance to the side of the structure with water main frontage, and to allow for meter placement inside the structure in accordance with City of Kalamazoo Standard Specifications for Water Main and Service Installation 2021.
- i. All pipe and fittings shall be NSF 61 and NSF 372 certified for drinking water.
- 2. Unit of Measure: Each

M. Item 23 - Water Main, Service Relocating:

- Includes the following:
 - a. Applies to situations where, more than 10 feet laterally of plumbing is necessary to allow meter placement inside a structure in accordance with City of Kalamazoo Specifications.
 - b. Furnish and install all interior pipe, fittings and supports necessary to facilitate meter placement at the side of the home with water main frontage (preferably front of home), when the existing water/well line enters the back or side of the home and the basement is unfinished.
 - c. Additional interior pipe and fittings shall be routed from the meter location at the front of the home to a location near the pressure tank at the back or side of the home using Type M or Type L Copper Pipe and fittings that are NSF 61 and NSF 372 certified for drinking water.
 - d. Abandon existing service connection by removing pipe from foundation and sealing the existing penetration inside and outside the structure with non-shrink grout.
 - e. All interior plumbing shall be performed by a plumber that is licensed in the State of Michigan.
 - f. The physical connection to the homes plumbing, pressure tank removal and other associated items shall be paid for under other existing pay items.
 - g. All associated methods and materials shall be in compliance with City of Kalamazoo Specifications, Michigan Plumbing Code, MI Act 399, and all other local, state and federal rules and regulations.
 - h. Restoration of unfinished interior surfaces shall be incidental.
- 2. Pay item may be used where directed by the City or Engineer.
- 3. Unit of Measure Lump Sum
- N. Item No. 24 Water Main, Polyethylene Encasement:
 - 1. Includes the following:
 - Provide and install polyethylene encasement of water main where groundwater is encountered or as directed by the Owner.
 - b. Polyethylene encasement shall be performed in accordance with City of Kalamazoo Standard Specifications for Water Main and Service Installation 2021.
 - 2. Unit of measure: Linear Feet as measured along the centerline of the water main.
- O. Item No. 25 Water Main, Well Abandonment:
 - 1. Includes the following:
 - a. Abandon existing water supply well using a State of Michigan Licensed Potable Well Driller including:
 - 1) Removal and disposal of existing well pump and well piping from inside well casing.
 - 2) Capping wires and waterproofing termination of electrical connection to well head.
 - 3) Filling of well casing with non-shrink grout or bentonite per requirements of Kalamazoo County Health Department.
 - 4) Cutting and capping of well below grade per requirements of Kalamazoo County Health Department and Michigan Department of Environment, Great Lakes, and Energy (EGLE).
 - 5) Provide well abandonment forms and required documentation to Owner and Kalamazoo County Health Department.
 - Restore disturbed area.
 - 2. Unit of Measure: Each
- P. Item No. 26 Water Main, Service Pressure Reducing Valve:
 - 1. Includes the following:

- a. Furnish and install service pressure reducing valve downstream of water meter if service line pressure exceeds 85 psi, or as required by Michigan Plumbing Code, Etc.:
 - 1) Furnish and install WATTS Lead-Free Pressure Reducing Valve 25 AUB Series, 1" with FNPT Union by FNPT Connections, Cla-Val CRD-L 1", or approved equal.
 - 2) Furnish and install all required fittings between water meter and house plumbing.
 - 3) Set pressure reducing valve to appropriate pressure and test.
- Unit of Measure: Each

1.7 RESTORATION

- A. Item No. 27 Restoration, Turf Over Water Main and Services:
 - Includes the following:
 - a. Regrade surface over areas disturbed by construction and restore to match preconstruction conditions.
 - b. Contractor shall utilize a professional landscaping company whose primary business is landscaping work,
 - 1) Furnish, place, and grade 4-inches of screened topsoil. Includes removal and disposal of any existing soil required to place new topsoil even with existing grade.
 - 2) Place hydroseed or match existing landscaping/surface materials.
 - 3) Place mulch and mulch anchoring where indicated on the drawings or as needed to prevent erosion until turf is established.
 - 4) maintain until vegetation is established, including, watering, fertilizing, reseeding, additional topsoil placement, etc.
 - 2. Payment shall not be authorized until appropriate vegetation is established.
 - 3. Unit of measure: Lineal foot as measured along the centerline of the water main outside of pavement areas.

Project Specifications

Owner:	City of Kalamazoo
Project Title:	Big Rock Drive Water Main Extension
P&N Project #:	2211189

GENERAL

The intent of this project is to install new ductile iron water main, connect the new water main to existing water mains, provide service connections to the new water main, and properly abandon potable wells.

Owner = City of Kalamazoo

Engineer = Prein&Newhof, Eric Sajtar or Anna Crandall

All materials and labor shall be provided by contractor, unless specifically stated otherwise.

1. <u>SPECIFICATIONS</u>

The work under this contract shall be performed in accordance with the attached specifications titled:

"Specifications for Excavating, Trenching & Backfilling for Utilities" "Standard Specifications for Water Main and Service Installation 2021"

with the following modifications and additions in addition to the above specifications. In the event of a conflict between the above specifications and these "Project Specifications", the "Project Specifications" shall prevail.

The Michigan Department of Transportation Standard Specifications for Highway Construction 2020 Edition are included by specific paragraph reference.

2. PROJECT AREA

The Contractor shall confine his work to the project area needed for the work. Any other area required for equipment, material storage or for construction operation shall be the Contractor's responsibility. The Contractor shall receive written permission from the Owner's of adjacent properties before using any portion of the property outside the project area.

The Contractor shall take all necessary precautions to minimize disturbances to the area during the construction period. All damage caused by the Contractor or sub-contractors to the property outside the project area shall be repaired at no expense either to the property owner or to this project.

3. SUMMARY OF WORK

Work to be constructed in this project generally includes furnishing and installing the following:

Approximately 5,650 LF Water Main Installations Approximately 26 Water Service Installations

All labor, materials, equipment, transportation, and activity or costs necessary for completion of this work shall be included in this contract unless specifically stated otherwise.

4. PERMITS

Road Commission of Kalamazoo County Right of Way Permit EGLE Water Main Permit MDOT Right of Way Permit Kalamazoo County SESC Permit

5. SCHEDULING

The Contractor shall file a construction schedule with the Engineer and Owner and receive approval in writing prior to commencing construction.

The Construction Observer shall coordinate/communicate schedule of shut down and reconnection of service with Resident/Bill Payer for each property.

Certain areas within the project may require street closing. The Contractor shall coordinate his work with the Owner and RCKC and shall take the necessary precautions required by the Owner and RCKC to minimize traffic interference.

All costs associated with scheduling shall be considered incidental to the project.

6. MAINTENANCE OF TRAFFIC

Local traffic shall be maintained at all times during construction. All traffic control devices and placement shall be in accordance with the current MDOT Standards and Specifications for Construction or as directed by engineer.

During the progress of work, the Contractor shall accommodate vehicular traffic in road rights-of-way as provided in these specifications. Access to fire hydrants, water and gas valves shall be maintained at all times during construction.

Where streets and driveways are obstructed, the contractor shall place and maintain temporary driveways, ramps, etc., which, in the opinion of the Engineer, are necessary to accommodate the public. The Contractor shall provide access at night and on weekends for all properties in the immediate construction area. Emergency vehicle access shall be maintained at all times.

The Contractor shall be required to keep the surface of the roadway in a smooth, dust free and accessible condition for adjoining properties at all times. Dust control shall also apply to paved roads in the project area and are to be kept clean

by the use of a mechanical sweeping device. Maintenance shall consist of grading the disturbed or graveled surface and maintaining the surface free of "washboards" and "chuck-holes", suitable for traffic.

The Contractor shall inform the schools, local police, ambulance services and fire department in advance of his program of street obstruction and detours. Detouring and construction signing shall be in accordance with Michigan Manual of Uniform Traffic Control at the direction of the Owner.

Prior to construction the Contractor shall submit and obtain Owner and Road Commission of Kalamazoo County (RCKC) approval for his traffic control plans, including detour plans and schedules.

The Owner and RCKC must approve all detours. The Contractor shall pay for all costs of detours. All costs shall be included under proposal item "Traffic Control".

Cost of maintaining traffic including detouring, construction signing and traffic control shall be paid as specified in SECTION 01 22 00 - UNIT PRICES - MEASUREMENT AND PAYMENT.

7. LIMITATION ON OPERATIONS

The Contractor shall at all times conduct his work so that there is a minimum of inconvenience to the residents, businesses and industries within the project area.

8. PROTECTION OF WORK

The Contractor shall protect the work until it is accepted by the Engineer and Owner. Any part of the completed work that is damaged prior to acceptance by Engineer and Owner shall be replaced at the Contractor's expense.

9. DUST CONTROL

All haul roads, detour roads and other public and private roads (including backfilled trenches), driveways and parking lots used by the Contractor must be maintained in a dust free condition during the life of this Contract. The control of dust shall be accomplished by sweeping and by the application of dust control materials. The materials and methods of application shall be approved by the Engineer and shall be applied as often as is necessary to control the dust, or if directed to do so by the Owner's representative. If directed to do so, the Contractor shall complete the dust control measures within 24 hours. All spillage on public roadways used as haul routes shall be cleaned daily.

Costs of providing dust control shall be included in the major items of construction. Therefore, no additional payment shall be made.

10. MATERIAL HAUL ROADS

Any spillage on public roadways used as haul routes shall be cleaned daily.

Use of gravel roads is prohibited. Permission to use gravel roads shall be given to Contractor only if Contractor assumes responsibility of maintenance, dust control and restoration of the gravel roads to the satisfaction of the Owner.

11. DIGITAL PHOTOGRAPHS

The entire project area has been digitally photographed. These photographs will be available to the Contractor, Engineer, and Owner during construction of the project.

12. TOPSOIL STRIPPING

The Contractor shall perform clearing, grubbing and stripping of topsoil. Stripped topsoil shall be stockpiled on the site. The Contractor shall be allowed to use this stockpiled material when placing topsoil on the site and shall provide additional screened topsoil as necessary to meet the thickness specified. No fill shall be placed over topsoil or organic material. At completion of construction, topsoil shall be spread uniformly over the disturbed areas. Any excess topsoil shall become the property of the Contractor and properly disposed of off site.

13. PROTECTION OF NATURAL RESOURCES

The Contractor shall take all necessary steps to prevent damage to fish and game habitats and to preserve the natural resources of the State. Excavation and backfill shall be carried out to minimize discharge of damaging material into any stream, lake, or reservoir.

The Contractor shall exercise caution in the discharge of waters from pumps, deep wells, or well point systems in order that such discharges do not cause erosion, siltation, soil depositions, etc., in sewers, streams or other water courses or drainage structures.

The Contractor shall not permit any sand or debris of any kind to enter the existing ditches, streams, storm sewers or culverts.

The rules and regulations of all work shall comply with Part 301 (Inland Lakes and Streams Act), Part 91 (Soil Erosion and Sedimentation Control Act), and Part 303 Wetlands Protection Act) of Michigan Public Act 451, 1994.

14. SOIL EROSION AND SEDIMENTATION CONTROL (Part 91, P.A. No. 451)

All work shall comply with the rules and regulations of the Michigan Soil Erosion and Sedimentation Control Act (Part 91, Michigan Public Act No. 451, 1994). These measures have been developed from the Michigan Unified Keying System, described in "Michigan Soil Erosion and Sedimentation Control Guide Book" published by the Land and Water Management Division of MDEQ.

All of these measures shall be in place prior to excavating where required and shall be maintained until construction is complete except, "seeding with mulch matting" or aggregate cover, shall be done immediately after the pipe installation, where possible.

15. EXCESS DIRT

The Contractor shall remove all excess material resulting from construction and arrange for disposal at a suitable site. Excess material shall be the property of the Contractor and shall be disposed of properly by the Contractor.

16. USE OF SLAG

No slag shall be permitted.

17. EXISTING UTILITIES

As an aid to the Contractor, various utilities and underground structures are shown on the plans. All information concerning shown utilities were taken from field topo and from available records, but the Owner and the Engineer do not guarantee that the location shown on the plans is accurate, nor that additional underground utilities or structures may not be encountered.

The Contractor shall notify Miss Dig and Utility Companies for utility locations before starting any open cut or tunnel construction or before drilling holes for construction purposes. Contractor shall cooperate with the utility companies in any repair, relocation or other work to be performed on the utility caused by the construction of the contract.

The Contractor shall be fully responsible for locating, protecting, supporting and repairing all existing public and private utilities. Items in this category shall include, but are not limited to; water mains and services, gas mains and services, storm sewers and catch basins, telephone, electric, and cable TV wire, septic systems and plumbing, etc. Such work shall be considered incidental to the major items of construction unless otherwise noted on the construction drawings.

- A. Contractor shall coordinate access to private property with the Owner or Engineer to locate all private utilities.
- B. <u>Sewers</u> (Storm, Culverts, and Under drains)

Road Commission of Kalamazoo County provides storm sewer service in the project area.

C. Sanitary Sewer

Gull Lake Water and Sewer Authority.

D. Water Main

City of Kalamazoo provides water service in the project area.

E. Cable

Charter Communications provides cable service in the project area.

F. Electric Services

Consumers Energy operates the electrical system in the project area.

G. Gas

Consumers Energy provides natural gas service in the project area.

H. Telephone

AT&T Michigan provides telephone service in the project area.

I. Miss Dig

The Contractor shall contact "MISS DIG" not less than 72 hours before starting construction for assistance in locating utilities or for any work to be done on utilities. The toll free phone number is (800) 482-7171.

18. PROTECTION OF UTILITIES

The Contractor shall furnish, install, use, and maintain adequate sheeting, shoring, bracing, and stabilization methods required to insure the integrity of existing underground utilities both during and after completion of construction. When necessary, the Contractor shall shore and brace existing utility poles which interfere with construction.

The Contractor shall be responsible for repairing all cracks, leaks, breaks, and defects in the utilities during the standard contract guarantee period of two years after acceptance of construction, at no additional cost either to the project owner or the owner of the utility.

Should service provided by public utilities be interrupted by the Contractor, the Contractor shall be responsible for returning all public utilities to normal working order.

Locations of existing utilities are shown using available records. The Owner and the Engineer do not guarantee that the locations shown on the plans are accurate. Additional underground utilities or structures may be encountered. No additional payment will be made due to unknown or inaccurately located utilities.

The Contractor shall notify Miss Dig and Utility Companies for utility locations before starting any earth moving operations.

The Contractor shall coordinate daily construction activities with that of utility companies which may be relocating some of their facilities as required by the project. No claim for additional compensation will be allowed based on delays caused by utility relocations.

Cost for complying with this specification shall be included in major items of work in the proposal. Therefore, no additional payment for these items shall be made.

19. UTILITY POLES

When necessary, the Contractor shall shore and brace utility poles that interfere with construction. Shoring and bracing shall be such that sinking or excessive tilting does not take place. All relocation or removing and replacing of power

poles, light poles and telephone poles shall be done in accordance with Utility Owners Standards and all expenses shall be paid for by the Contractor. All arrangements for relocations with the Utility Company Owners shall be done by the Contractor at least 72 hours prior to need for relocations.

20. TELEPHONE

An emergency telephone system (listing of number) shall be set up and given to the Engineer and Owner so that the Contractor may be immediately notified of any unsafe conditions or emergencies encountered during times that the Contractor is not working on the project.

The Contractor shall provide a local number and a local employee so that he may be contacted at any time (including weekends and holidays) 24 hours a day.

21. EXISTING PRIVATE FACILITIES

Existing wells, septic tank, tile field, lawn sprinklers or other facilities disturbed or damaged by the Contractor shall be repaired and restored to working condition before the end of that working day. Under no circumstances will such interruptions be extended overnight. The Contractor shall take necessary precautions not to allow any discharge from the above to enter any lake, stream or canal along the line of work. Costs for repairs or temporary service caused by the Contractor shall be at his own expense and no claims for extra work will be allowed.

All precautions necessary shall be taken to insure no damage occurs to homes, including basements.

22. MAIL BOXES

The Contractor shall temporarily relocate mailboxes interfering with construction so that mail service is not interrupted. Mailboxes shall be replaced in a condition, elevation and location equal to that existing prior to construction in accordance with U.S. Post Office requirements. Costs are incidental.

23. MATERIAL TESTING

The Owner reserves the right to sample and test any of the materials required for the proposed construction, either before or after delivery to the project and to reject any material represented by any sample which fails to comply with the minimum requirements specified.

The Contractor shall furnish all materials reasonably required for sample testing and analysis necessary for the testing of materials as required by these specifications.

The cost of the above testing shall be paid for by the Owner. If any pipe fails to meet the specified requirements, all pipe represented by the sample shall be rejected unless the Contractor can demonstrate through additional tests, at his own expense, that the remainder of the pipe is satisfactory.

Contractor to contract for third party material density testing which shall be paid for under the allowance bid item "Testing".

24. COORDINATION

The Contractor shall coordinate construction with the Owner and Engineer. Contractor shall attend periodic coordination meetings scheduled by the Engineer as necessary.

25. RECORD PLANS

The Contractor shall maintain a set of record drawings throughout the project. The Contractor shall make the drawings available to the Owner and Engineer in a timely manner upon request. A set of record drawings shall be submitted to the Engineer at the completion of the project.

26. PAYMENT

Payment shall be made for the proposal items only. All of the work specified above, in SECTION 01 22 00 - UNIT PRICES - MEASUREMENT AND PAYMENT, and/or indicated on the drawings shall be considered included in the unit prices shown on the proposal. Work covered by the Prescriptive Work Allowance shall be performed only after Contractor has received written notice by Engineer and/or Owner to perform said work.

Work which, in the opinion of the Engineer or Owner, is considered incidental to or is required as a result of Contractor's operations in performance of the project covered by designated work items will not be considered for payment under the Prescriptive Work Allowance item.

Definitions of abbreviations for measurement/payment:

LF = Lineal Foot

EA = Each

VF = Vertical Foot LS = Lump Sum CY = Cubic Yard SY = Square Yard SF = Square Foot TON = Tonnage



MDOT Permit and RCKC Permit

Big Rock Water Main Extension

Bid Reference #: 91360-006.0

February 2023



INDIVIDUAL CONSTRUCTION PERMIT

For Operations within State Highway Right-of-Way

Issued To: City of Kalamazoo

241 W SOUTH ST KALAMAZOO MI 49007-4707

Contact:
Jesse Okeley
269-337-8607(O) 269-270-2022(Cell)
okeleyj@kalamazoocity.org

Permit Number: 39081-091366-23-021423
Permit Type: Individual Application

Permit Fee: \$525.00

Effective Date: Feb 14, 2023 to Feb 13, 2024

Bond Numbers:

Liability Insurance Expiration Date:

THIS PF	RMIT IS V	ALID ONLY	FOR THE	FOLLOWING	PROPOSED	OPERATIONS:
TITISFE	IZIVII I IO V	ALID ONL		. I OLLOWING	FIGURUSED	OF LIVATIONS.

PURPOSE:

Water main extension on Big Rock Drive.

STATE ROUTE: M-43 CITY OF: Oshtemo COUNTY: Kalamazoo County

NEAREST SIDE OF DISTANCE TO (in feet) DIRECTION TO NEAREST

INTERSECTION: ROAD: NEAREST INTERSECTION: INTERECTION:

Big Rock Drive and M43 N 0.00 North

CONTROL SECTION: MILE POINT FROM: MILE POINT TO: LOCATION:

LEFT MEDIAN RIGHT TRANSVERSE

39081 1.000 2.000 **X**

REQUISITION NUMBER: WORK ORDER NUMBER: MDOT JOB NUMBER: ORG JOB NUMBER:

This permit is incomplete without "General Conditions and Supplemental Specifications"

I certify that I accept the following:

- 1. I am the legal owner of this property or facility, the owner's authorized representative, or have statutory authority to work within state highway Right-of-Way.
- 2. Commencement of work set forth in the permit application constitutes acceptance of the permit as issued.
- 3. Failure to object, within ten (10) days to the permit as issued constitutes acceptance of the permit as issued.
- 4. If this permit is accepted by either of the above methods, I will comply with the provisions of the permit.
- 5. I agree that Advance Notice for Permitted Activities for shall be submitted **5 days prior** to the commencement of the proposed work.

I agree that Advance Notice for Permitted Utility Tree Trimming and Tree Removal Activities shall be submitted **15** days prior to the commencement of the proposed work for an annual permit.

CAUTION

Work shall <u>NOT</u> begin until the Advance Notice has been approved. Failure to submit the advance notice may result in a Stop Work Order.

City of Kalamazoo	Gilbert Abu	February 13, 2023
	MDOT	Approved Date
TSC Contact Info	Kalamazoo TSC	(269) 375-8900

THE STANDARD ATTACHMENTS, ATTACHMENTS AND SPECIAL CONDITIONS MARKED BELOW ARE A PART OF THIS PERMIT.

STANDARD ATTACHMENTS:

- 1 Special Conditions For Underground Construction (2205C)
- 2 Overview/Introduction of Trenchless Installation within MDOT ROW (3701)
- 3 Special Conditions for Horizontal Directional Drilling (HDD) (3703A)
- 4 ENVIRONMENTAL REQUIREMENTS FORACTIVITIES WITHIN MDOT RIGHT-OF-WAY (2486)
- 5 The Northern Long Ear and Indiana Bat Advisory (Bat Advisory)
- 6 Historical and Archaeological Discoveries During Construction Operations Updated 03/22 (Const. Advisory H
- 7 Regulated Eastern Massasauga Rattlesnake Habitat Advisory 3-2-22 (Eastern Massasauga Rattlesnake Advi
- 8 General Conditions (General Conditions)

ADDITIONAL ATTACHMENTS:

- 1 Maintenance of traffic Base Package.pdf
- 2 General Condition Base Package.pdf
- 3 122-NFW-SHL-(R).pdf
- 4 BIG ROCK WATER MAIN PERMIT SET 2022 08 30.pdf

39081-091366-23-021423 Issued To:City of Kalamazoo

AMENDMENT ATTACHMENTS:

SPECIAL CONDITIONS:

- 1 The Department of Transportation does not, by issuance of this permit, assume any liability claims or maintenance costs resulting from the Water Main facility placed by this permit. The Department reserves the right to require removal of all or any portion of this facility as needed for highway maintenance or construction purposes without replacement or reimbursement of any costs incurred by the permitted or other party. The permitted will defend, indemnify and hold harmless the Department for any claims whatsoever resulting from the construction or the removal of the authorized by this permit.
- 2 All disturbed areas within the right of way shall be top-soiled, seeded and mulched to match existing areas per current MDOT standards and specifications.
- 3 Upon completion of the work, the permitted shall furnish the Department with a set of as-built construction plans covered by this permit.
- 4 ...5 day advance notice required. Advance notice must be 5 BUSINESS DAYS. Submit a "Completion Notice" when finished
- 5 Make sure you maintain Traffic control every day and remove at the end of each day. See attachment in issued permit. Make sure your field employees and all contractors have the Permit, ALL THE ATTACHMENTS and THE ADVANCE NOTICE with them in the field. No excuses. They will be shut down if they don thave all the proper paper work with them.
- 6 No impacts to existing signs on page 10 identified. Must maintain the signs. Shoulder closure is the appropriate maintenance of traffic plan.

CRA 100 (03/2005)

Road Commission of Kalamazoo County 3801 E. Kilgore Road Kalamazoo, MI 49001-0000

Phone: 269-381-3171 Fax: 269-381-1760 Application No. Permit No. Issue Date 13800 2022-010431 09/01/2022

APPLICATION AND PERMIT TO CONSTRUCT, OPERATE, USE AND/OR MAINTAIN WITHIN THE RIGHT-OF-WAY OF; OR TO CLOSE, A COUNTY ROAD APPLICATION

An applicant is defined as an owner of property adjacent to the right-of-way, the property owner's authorized representative; or an authorized representative of a private or public utility who applies for a permit to construct, operate, use, and/or maintain a facility within the right-of-way for the purpose outlined within the application. A contractor who makes application on behalf of a property owner or utility must provide documentation of authority to apply for a permit

	right-of-way for the p ty must provide docu	•			эрригийн агийн аги	,,
APPLICANT	City of Kalamazoo 415 E Stockbridge Kalamazoo, MI 490 Phone(s): 269-337-6 EMail: mpresta@pre	3000		CONTRACTOR		
					f way of a county road: nt/shldr cuts, Service tap-no pvmt/shldr	cuts, Other
LC	OCATION: County R	oad <u>Big Rock</u>	Drive	Bet	ween Main Street, W (M-43) And	Main Street, W (M-43)
То	wnship <u>Oshtemo T</u>	wp Section	ı	Side of Ro	ad <u>North</u> Property ID	Big Rock Dr
DA	ATE: Work to begin o	on <u>04/01/202</u>	Work to be co	ompleted by	10/31/2023	
de thi	escribed in this applic	ation shall constitut ercial or residential	e acceptance of the	permit as issu	n is true and correct, (2) the commencer ed, including all terms and conditions th er of the property that this driveway will	ereof and, (3) if
Ap	oplicant's Signature:				Contractor's Signature:	
Tit	le:		Date:		Title:	Date:
whe	ere applicable. By pe	erforming work under frms and conditions	er this permit, the Pe set forth herein, incl	ermit Holder ad luding on the r	side hereof, refers to the applicant and the knowledges and agrees that this permit everse side hereof. Failure to comply wold. Letter of Credit Surety Bond Retainer Letter Approved Plans on File Certificate of Insurance Attachments/Supplemental Special Special Special Surety Bond Retainer Letter Approved Plans on File Certificate of Insurance Attachments/Supplemental Special Special Special Supplemental Special Special Special Supplemental Special Special Special Supplemental Special Special Supplemental Special Specia	is subject to all rith any of said
Per plan At a cov All	ns on file at the RCK a minimum, all crossr er from top of pipe to underground facilities	n of water-main alor C. coad underground fa to the bottom of the s parallel to the road bly with part 6 of the right of way shall c	acilities must have 5' ditch. d must be maintaine MMUTCD. Soil Ero	of cover from d at a minimur sion and Sedi	All work within the right of way to comply top of pipe to road surface and must ha n of 36" below existing ground level. mentation Control Measures must be in Approved By: Brian Franklin	ve at least 2' of

TERMS AND CONDITIONS

- 1. Specifications. All work performed under this permit must be done in accordance with the application, plans, specifications, maps and statements filed with the Road Commission of Kalamazoo County ("Road Commission") and must comply with the Road Commission's current procedures and regulations on file at its offices and the current MDOT Standard Specifications for Construction, if applicable.
- 2. **Fees and Costs**. The Applicant/ Permit Holder shall be responsible for all costs incurred by the Road Commission relating to this Application and Permit. The Applicant/Permit Holder shall deposit estimated fees and costs, as determined by the Road Commission, prior to permit issuance/approval.
- 3. **Bond**. The Permit Holder shall provide a cash deposit, irrevocable letter of credit or bond in a form and amount acceptable to the Road Commission prior to permit issuance.
- 4. Insurance. The Permit Holder shall furnish proof of general liability insurance in amounts not less than \$1,000,000 each occurrence and general aggregate, proof of automobile liability in amounts not less than \$1,000,000 combined single limit for each accident, bodily injury per accident, and property damage per accident, and in an amount not less than \$500,000 for bodily injury per person. Such proof of insurance shall include a valid certificate of insurance demonstrating that the Road Commission is an additional insured party on the policy. Such insurance shall cover a period not less than the term of this permit and shall provide that it cannot be cancelled without 30 days advance written notice to the Road Commission, by certified mail, first-class, return receipt requested. This permit is invalid if insurance expires during the authorized period of work described herein.
- 5. **Indemnification**. In addition to any liability or obligation of the Permit Holder that may otherwise exist, Permit Holder shall, to the fullest extent permitted by law, indemnify and hold harmless the Road Commission and its commissioners, officers, agents, and employees from and against any and all claims, actions, proceedings, liabilities, losses, and damages thereof, and any and all costs and expenses, including legal fees, associated therewith which the Road Commission may sustain by reason of claims for or allegations of the negligence or violation of the terms and conditions of this permit by the Permit Holder, its officers, agents, or employees, arising out of the work which is the subject of this permit, or arising out of work not authorized by this permit, or arising out of the continued existence of the operation or facility, which is the subject of this permit.
- 6. Miss Dig. The Permit Holder must comply with the requirements of Michigan Public Act 174 of 2013, as amended. CALL MISS DIG AT (800) 482-7171 or www.missdig.org AT LEAST THREE (3) FULL WORKING DAYS, BUT NOT MORE THAN FOURTEEN (14) CALENDAR DAYS, BEFORE YOU START WORK. The Permit Holder assumes all responsibility for damage to or interruption of underground utilities.
- 7. **Notification of Start and Completion of Work**. The Permit Holder must notify the Road Commission at least 48 hours before starting work, when work is completed, and additionally as directed by the Road Commission.
- 8. **Time Restrictions**. All work shall be performed Mondays through Fridays between and unless written approval is obtained from the Road Commission, and work shall be performed only during the period set forth in this permit. Perform no work except emergency work, unless authorized by the Road Commission on Saturdays, Sundays, or from on the day proceeding until the normal starting time the day after the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
- 9. **Safety**. Furnish, install and maintain all necessary traffic controls and protection during Permit Holder's operations in accordance with the Manual of Uniform Traffic Control Devices, Part 6 and any supplemental specifications set forth herein.
- 10. Restoration and Repair of Road. The construction, operation and maintenance of the activity covered by this permit shall be performed by the Permit Holder without cost to the Road Commission unless specified herein. The Permit Holder shall also be responsible for the cost of restoration and repair of the right-of-way determined by the Road Commission to be damaged as a result of the activity which is the subject of this permit. Restoration shall meet or exceed conditions when work is commenced and be in accordance with specifications. The Permit Holder shall be responsible for costs incurred by the Road Commission for emergency repairs performed by or on behalf of the Road Commission for the safety of the motoring public. Said repairs shall be performed with or without notice to the Permit Holder if immediate action is required. This determination shall be in the sole and reasonable opinion of the Road Commission.
- 11. **Limitation of Permit**. Issuance of this permit does not relieve Permit Holder from meeting any and all requirements of law, or of other public bodies or agencies. The Permit Holder shall be responsible for securing and shall secure any other permits or permission necessary or required by law from cities, villages, townships, corporations, property owners, or individuals for the activities hereby permitted. Any work not described by the application, including the time and place thereof, is strictly prohibited in the absence of the application for and issuance of an additional permit or amendment to this permit.
- 12. **Revocation of Permit**. This permit may be suspended or revoked at will, and the Permit Holder shall surrender this permit and alter, relocate or remove its facilities at its expense at the request of the Road Commission. It is understood that the rights granted herein are revocable at the will of the Road Commission and that the Permit Holder acquires no rights in the right-of-way and expressly waives any right to claim damages or compensation in case this permit is revoked.
- 13. **Assignability**. This permit is not assignable and not transferable unless specifically agreed to by the Road Commission in writing.
- 14. **Authority**. The statutory authority of the Road Commission to require compliance with permit requirements is predicated upon its jurisdictional authority and is set forth in various statutes including, without limitation and in no particular order, MCL §247.321 et seq; MCL §224.19b; MCL §560.101 et seq; and MCL §247.171 et seq.



PLANS/DRAWINGS

Big Rock Water Main Extension

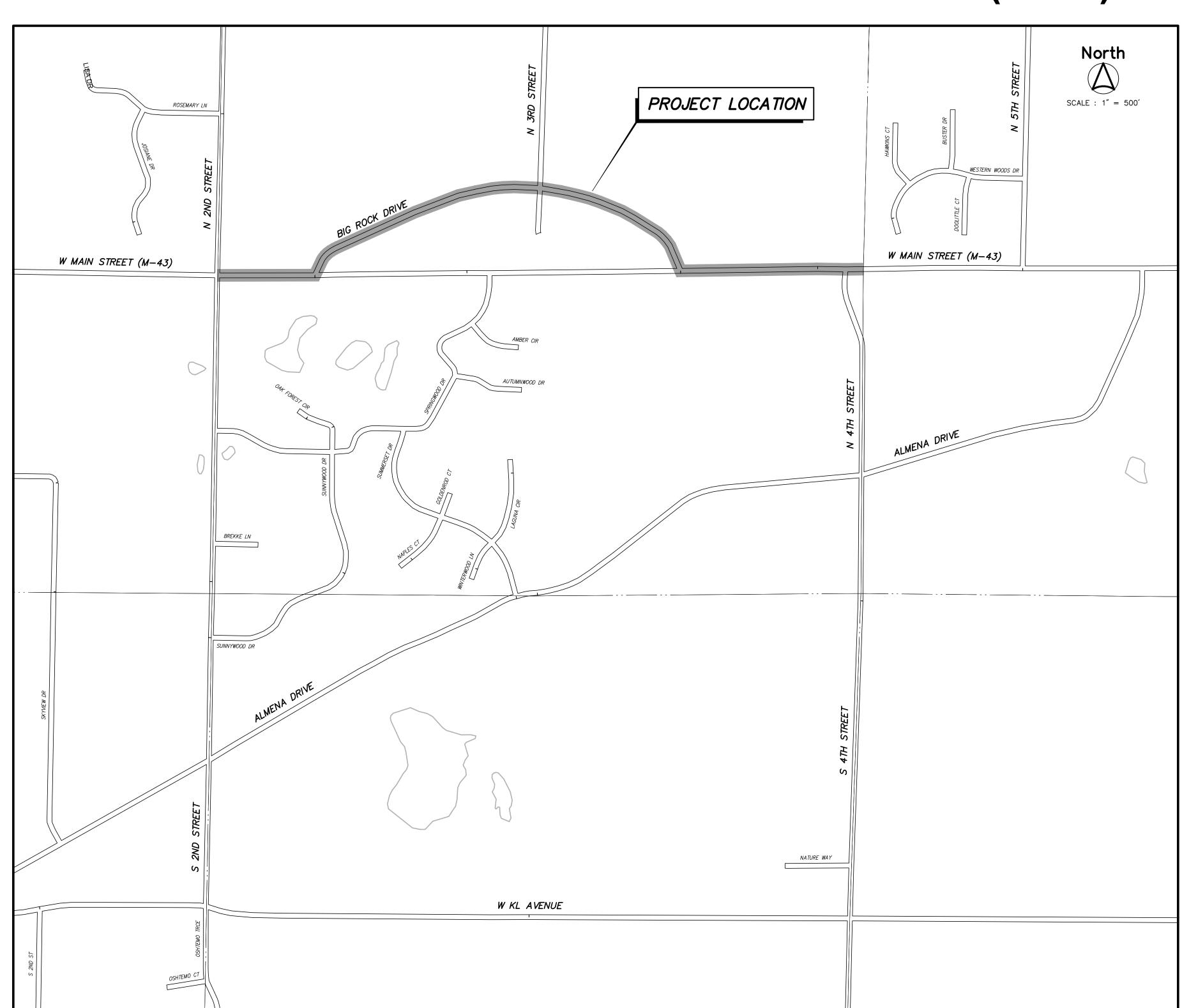
Bid Reference #: 91360-006.0

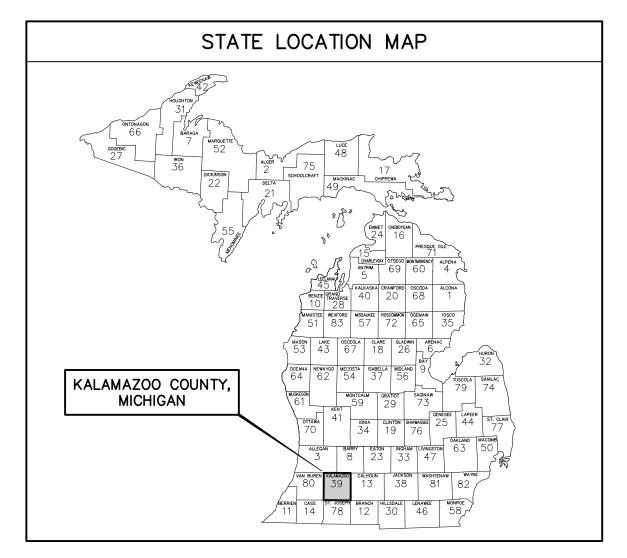
February 2023

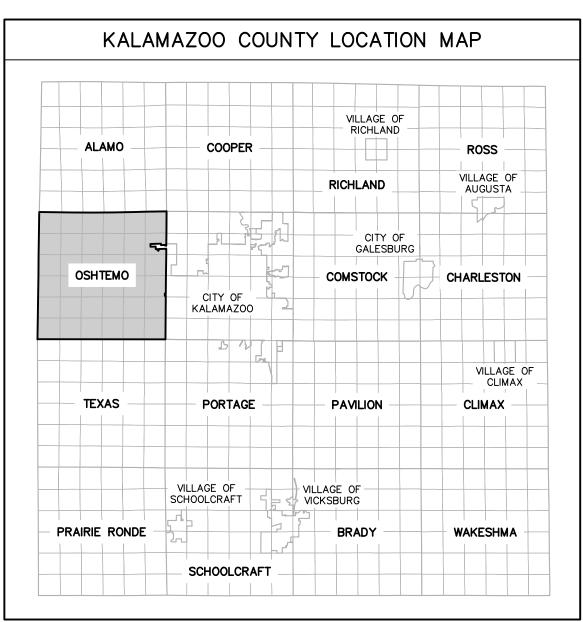
CITY OF KALAMAZOO KALAMAZOO COUNTY, MICHIGAN

WATER MAIN EXTENSION

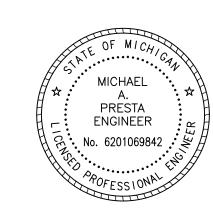
BIG ROCK DRIVE & WEST MAIN STREET (M-43)







	SHEET INDEX
SHEET No.	DESCRIPTION
1	COVER SHEET
2	TYPICAL CROSS SECTIONS & DETAILS
3	HIGHWAY M-43 (2ND ST. TO BIG ROCK DR.)
4	BIG ROCK DRIVE (M43 TO STA. 304+00)
5	BIG ROCK DRIVE (STA. 304+00 TO STA. 311+00)
6	BIG ROCK DRIVE (STA. 311+00 TO STA. 317+00)
7	BIG ROCK DRIVE (STA. 317+00 TO STA. 324+00)
8	BIG ROCK DRIVE (STA. 324+00 TO M43)
9	HIGHWAY M-43 (BIG ROCK DR. TO STA. 462+00)
10	HIGHWAY M-43 (STA. 462+00 TO STA. 472+00)





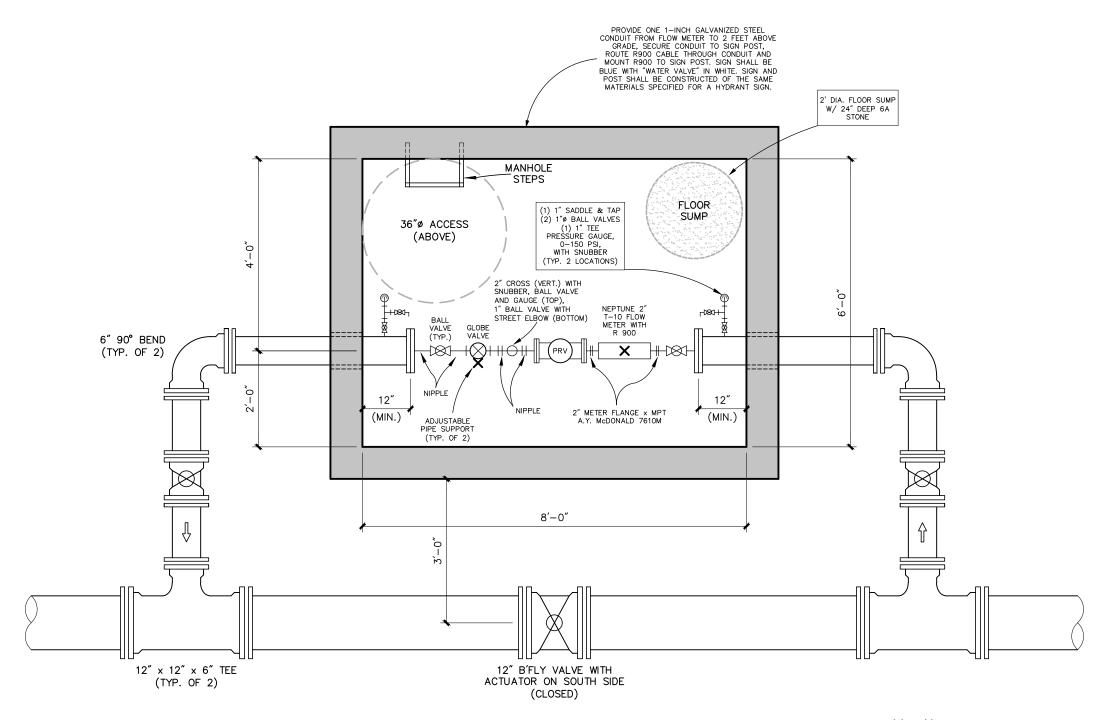
ELLIPSOID: GRS 80
HORIZONTAL DATUM: NAD 83 (2011)
VERTICAL DATUM: NAVD 88
GEOID: GEOID 18
UNITS: INTERNATIONAL FEET

PROJECT COMBINED SCALE FACTOR (PCSF) = 0.999959307064
GROUND DISTANCE = GRID DISTANCE / PCSF

	SOIL BORIN	NG GENE	RAL NOTES	
SPLIT-SPOON SAMPLER IS DRIV		NCREMENTS WITH A 14	ANDARD PENETRATION TEST METHOD, AST O POUND WEIGHT FALLING 30 INCHES. TH BORING LOGS.	
COBBLES, GRAVEL OR SAND. FI CLAYS OR CLAYEY SILTS IF THI	NE—GRAINED SOILS HAVE LESS TI EY ARE COHESIVE, AND <i>SILTS</i> IF	HAN 50% OF THEIR DR THEY ARE NON—COHES	ETAINED ON A #200 SIEVE; THEY ARE DE Y WEIGHT RETAINED ON A #200 SIEVE; T IVE. IN ADDITION TO GRADATION, GRANUL O ON THEIR STRENGTH OR <i>CONSISTENCY</i> ,	HEY ARE DESCRIBED AS: AR SOILS ARE DEFINED
MAJOR SOIL COMPONENT	GRADITION RANGE		DESCRIPTION TERM(S) (OF MINOR SOIL CONSTITUENTS)	PERCENT OF DRY WEIGHT
BOULDERS	OVER 12 INCHES (305mm)	F TO 76)		
COBBLES GRAVEL COARSE	12 INCHES TO 3 INCHES (30: 3 INCHES TO 3/4 INCHES (7	,	TRACE LITTLE	1 - 10 10 - 20
FINE	3/4 INCHES TO #4 SIEVE (19	•	SOME	20 - 35
SAND COARSE	#4 SIEVE TO #10 SIEVE (4.75	5mm TO 2.00mm)	AND	35 - 50
MEDIUM	#10 SIEVE TO #40 SIEVE (2.0	•		
FINE	#40 SIEVE TO #200 SIEVE (C) Consistency of cohe:	SIVE SOILS:
SILT CLAY	PASSING #200 SIEVE (0.074r SMALLER THAN 0.005mm	nm) 10 0.005mm		SIVE GOILGE
OLAT			UNCONFINED COMP STRENGTH, Qu (tsf)	CONSISTENCY
	SITY OF GRANULAR SOILS:		<0.25	VERY SOFT
N - BLOWS/FT.	IN-SITU DENSITY		0.25 - 0.50	SOFT
0 - 4	VERY LOOSE		0.50 - 1.00	MEDIUM (FIRM)
5 - 10	LOOSE		1.00 - 2.00	STIFF
11 - 30	MEDIUM DENSE		2.00 - 4.00	VERY STIFF
31 – 50 50 +	DENSE VERY DENSE		4.00 - 8.00 >8.00	HARD VERY HARD
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UTILITY LOCATIONS ARE DERIVED FROM ACTUAL
MEASUREMENTS OR AVAILABLE RECORDS. THEY
SHOULD NOT BE INTERPRETED TO BE EXACT
LOCATIONS NOR SHOULD IT BE ASSUMED ADDA

THEY ARE THE ONLY UTILITIES IN THIS AREA.



PRESSURE REDUCING VALVE CHAMBER DETAIL SCALE : 1/2'' = 1'-0''



NOTES

ALL PIPING, EXCEPT 12" AND 6" D.I., SHALL BE BRASS.

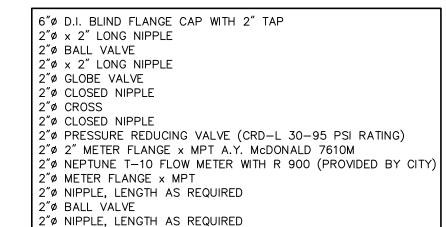
4. 6" D.I. PIPING CENTERLINE TO BE 36" ABOVE FLOOR.

. PRV CHAMBER INSIDE DIMENSIONS TO BE $8'-0'' \times 6'-0'' \times 7'-0''$ HIGH.

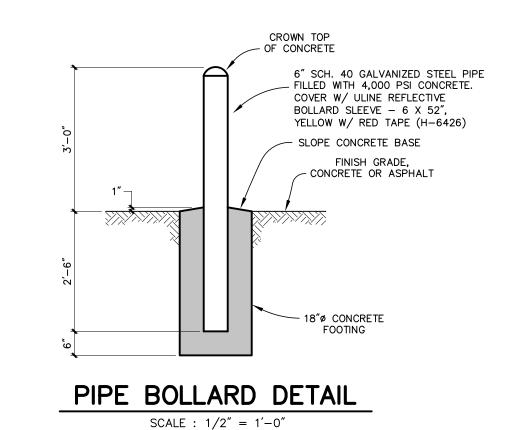
6"ø D.I. BLIND FLANGE CAP WITH 2" TAP

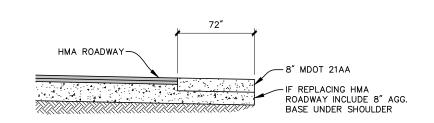
. 36"Ø ACCESS HATCH TO BE EJIW 1580 CASTING AND COMPOSITE LID, EJ COM3800 SERIES.

FITTING ORDER

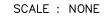


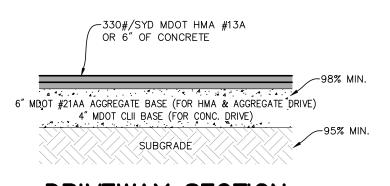






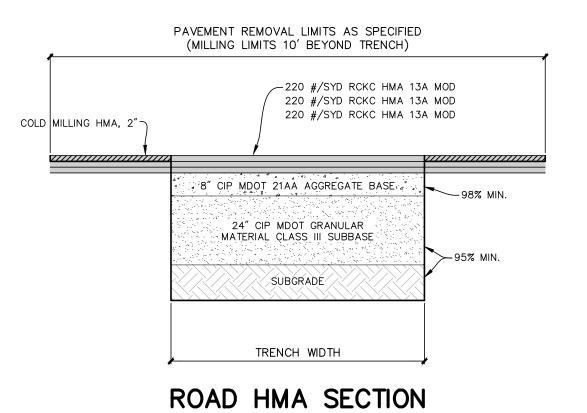
AGGREGATE SHOULDER DETAIL



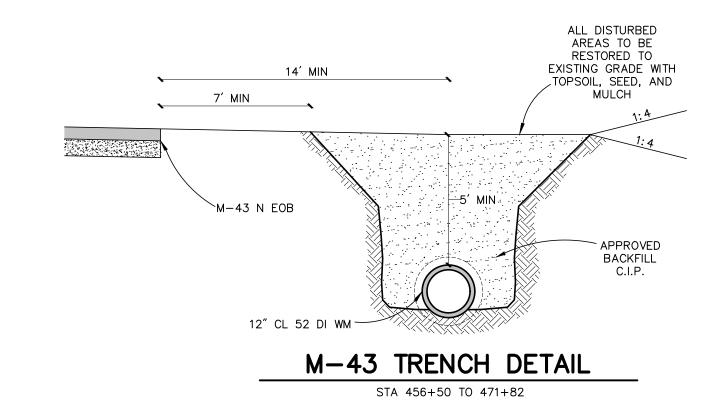


DRIVEWAY SECTION

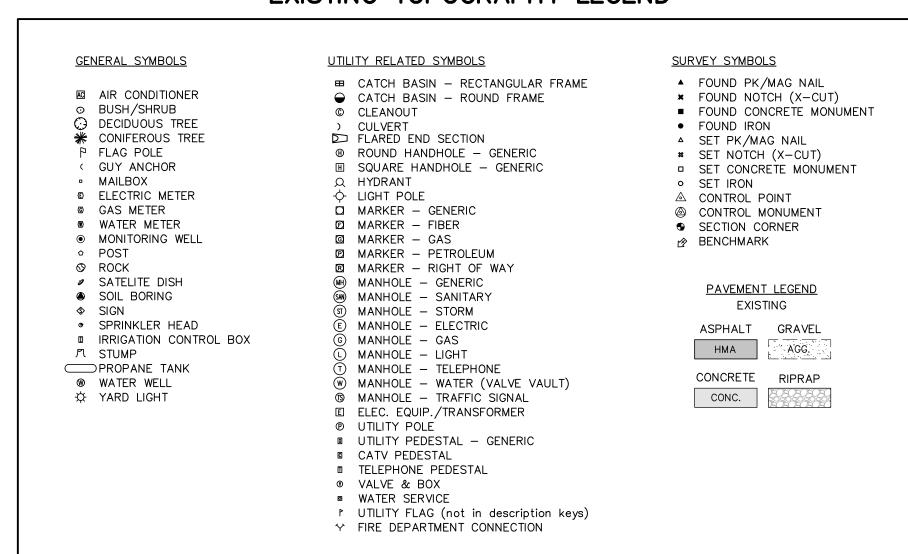
SCALE : NONE



SCALE : NONE



EXISTING TOPOGRAPHY LEGEND



REVISIONS BY DATE DRAWN J.E. ISSUED FOR BIDS M.A.P. 11 MDOT PERMIT REVISIONS M.A.P. 02, MAY '22 M.A.P. OCT. '22

Prein& Newhof
Engineers - Surveyors - Environmental - Laboratory

CITY OF KALAMAZOO KALAMAZOO COUNTY, MICHIGAN WATER MAIN EXTENSION

DETAILS

PROJECT NO. 2211189 SHEET NO.

