

CITY OF ANN ARBOR  
INVITATION TO BID



2022 Sewer Lining Project

ITB No. 4704

Due Date: February 1, 2022 at 10:00AM (Local Time)

Public Services Area / Engineering

Issued By:

City of Ann Arbor  
Procurement Unit  
301 E. Huron Street  
Ann Arbor, MI 48104

**TABLE OF CONTENTS**

TABLE OF CONTENTS..... TC-1  
NOTICE OF PRE-BID CONFERENCE..... NP-1  
INSTRUCTIONS TO BIDDERS.....IB-1 to 6  
INVITATION TO BID.....ITB-1 to 3  
BID FORMS.....BF-1 to 11  
CONTRACT.....C-1 to 4  
BOND FORMS..... B-1 to 2  
GENERAL CONDITIONS..... GC-1 to 18  
STANDARD SPECIFICATIONS..... SS-1  
DETAILED SPECIFICATION..... DS-1 to DS-78

APPENDIX..... APDX-1

**ATTACHMENTS**

- City of Ann Arbor Prevailing Wage Declaration Form*
- City of Ann Arbor Living Wage Forms*
- City of Ann Arbor Vendor Conflict of Interest Disclosure Form*
- City of Ann Arbor Non-Discrimination Ordinance Declaration Form and Notice*

## **NOTICE OF PRE-BID CONFERENCE**

Due to restrictions in place no pre-bid conference will be held for this ITB. Please contact staff indicated within this ITB Document with general questions regarding this project/ITB

# INSTRUCTIONS TO BIDDERS

## General

Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents. All work to be done under this Contract is located in or near the City of Ann Arbor.

Any Bid which does not conform fully to these instructions may be rejected.

## Preparation of Bids

Bids should be prepared providing a straight-forward, concise description of the Bidder's ability to meet the requirements of the ITB. Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bids must be submitted on the "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid. No alternative bid will be considered unless alternative bids are specifically requested. If alternatives are requested, any deviation from the specification must be fully described, in detail on the "Alternate" section of Bid form.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision.

## Questions or Clarifications / Designated City Contacts

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before, **January 14, 2022 at 3:00PM** and should be addressed as follows:

Specification/Scope of Work questions emailed to [ikotlyar@a2gov.org](mailto:ikotlyar@a2gov.org)  
Bid Process and Compliance questions emailed to [cspencer@a2gov.org](mailto:cspencer@a2gov.org)

Any error, omissions or discrepancies in the specification discovered by a prospective contractor and/or service provider shall be brought to the attention of **Igor V. Kotlyar, P.E. at [ikotlyar@a2gov.org](mailto:ikotlyar@a2gov.org)** after discovery as possible. Further, the contractor and/or service provide shall not be allowed to take advantage of errors, omissions or discrepancies in the specifications.

## Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) [www.mitn.info](http://www.mitn.info) and/or City of Ann Arbor web site [www.A2gov.org](http://www.A2gov.org) for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received; but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall

not relieve the Bidder of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

## Bid Submission

All Bids are due and must be delivered to the City of Ann Arbor Procurement Unit on or before **February 1, 2022 at 10:00AM (local time)**. Bids submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Bidder must submit one (1) original Bid and **one ( 1 )** Bid copies in a sealed envelope clearly marked: **ITB No. 4704 – 2022 Sewer Lining Project**.

### **Bids must be addressed and delivered to:**

City of Ann Arbor  
Procurement Unit,  
c/o Customer Services, 1<sup>st</sup> Floor  
301 East Huron Street  
Ann Arbor, MI 48104

All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

**The following forms provided within this ITB Document should be included in submitted bids.**

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

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

Hand delivered bids may be dropped off in the Purchasing drop box located in the Ann Street (north) vestibule/entrance of City Hall which is accessible to the public at all hours. The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time for submission of bids past the stated due date and time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines in its sole discretion that circumstances warrant it.

## Award

The City intends to award a Contract(s) to the lowest responsible Bidder(s). On multi-divisional contracts, separate divisions may be awarded to separate Bidders. The City may also utilize alternatives offered in the Bid Forms, if any, to determine the lowest responsible Bidder on each division, and award multiple divisions to a single Bidder, so that the lowest total cost is achieved for the City. For unit price bids, the Contract will be awarded based upon the unit prices and the

lump sum prices stated by the bidder for the work items specified in the bid documents, with consideration given to any alternates selected by the City. If the City determines that the unit price for any item is materially different for the work item bid than either other bidders or the general market, the City, in its sole discretion, in addition to any other right it may have, may reject the bid as not responsible or non-conforming.

The acceptability of major subcontractors will be considered in determining if a Bidder is responsible. In comparing Bids, the City will give consideration to alternate Bids for items listed in the bid forms. All key staff and subcontractors are subject to the approval by the City.

## Official Documents

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not Official copies. Addenda and other bid information will only be posted to these official distribution sites. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on [www.MITN.info](http://www.MITN.info) and obtain an official Bid. Bidders do not need to be shown on the plan holders list provided by MITN to be considered an official plan holder.

## Bid Security

Each bid must be accompanied by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

## Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of ninety (90) days.

## Contract Time

Time is of the essence in the performance of the work under this Contract. The available time for work under this Contract is indicated on page C-2, Article III of the Contract. If these time requirements can not be met, the Bidder must stipulate on Bid Form Section 3 - Time Alternate its schedule for performance of the work. Consideration will be given to time in evaluating bids.

## Liquidated Damages

A liquidated damages clause, as given on page C-2, Article III of the Contract, provides that the Contractor shall pay the City as liquidated damages, and not as a penalty, a sum certain per day for each and every day that the Contractor may be in default of completion of the specified work, within the time(s) stated in the Contract, or written extensions.

Liquidated damages clauses, as given in the General Conditions, provide further that the City shall be entitled to impose and recover liquidated damages for breach of the obligations under Chapter 112 of the City Code.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

## Human Rights Information

All contractors proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Section 5, beginning at page GC-2 shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

## Wage Requirements

Section 4, beginning at page GC-1, outlines the requirements for payment of prevailing wages and for payment of a "living wage" to employees providing service to the City under this contract. The successful bidder and its subcontractors must comply with all applicable requirements and provide proof of compliance.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. Use of the Sample Certified Payroll form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

For laborers whose wage level are subject to federal, state and/or local prevailing wage law the appropriate Davis-Bacon wage rate classification is identified based upon the work including within this contract. **The wage determination(s) current on the date 10 days before bids are due shall apply to this contract.** The U.S. Department of Labor (DOL) has provided explanations to assist with classification in the following resource link: [beta.SAM.gov](http://beta.SAM.gov).

For the purposes of this ITB the Construction Type of Highway will apply.

## Conflict Of Interest Disclosure

The City of Ann Arbor Purchasing Policy requires that prospective Vendors complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected Vendor unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Vendor Conflict of Interest Disclosure Form is attached.

## Major Subcontractors

The Bidder shall identify on Bid Form Section 4 each major subcontractor it expects to engage for this Contract if the work to be subcontracted is 15% or more of the bid sum or over \$50,000, whichever is less. The Bidder also shall identify the work to be subcontracted to each major subcontractor. The Bidder shall not change or replace a subcontractor without approval by the City.

## Debarment

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred,

suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

## Disclosures

After bids are opened, all information in a submitter's bid is subjected to disclosure under the provisions of Michigan Public Act No. 442 of 1976, as amended (MCL 15.231 et seq.) known as the "Freedom of Information Act." The Freedom of Information Act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted.

## Bid Protest

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The bidder must clearly state the reasons for the protest. If a bidder contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the bidder to the Purchasing Agent. The Purchasing Agent will provide the bidder with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

*Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by any prospective bidder to initiate contact with anyone other than the Designated City Contacts provided herein that the bidder believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.*

## Cost Liability

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the Bidder prior to the execution of a contract with the City. By submitting a bid, a bidder agrees to bear all costs incurred or related to the preparation, submission and selection process for the bid.

## Reservation of Rights

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.

## Idlefree Ordinance

The City of Ann Arbor adopted an idling reduction Ordinance that went into effect July 1, 2017. The full text of the ordinance (including exemptions) can be found at: [www.a2gov.org/idlefree](http://www.a2gov.org/idlefree).

Under the ordinance, No Operator of a Commercial Vehicle shall cause or permit the Commercial Vehicle to Idle:

- (a) For any period of time while the Commercial Vehicle is unoccupied; or
- (b) For more than 5 minutes in any 60-minute period while the Commercial Vehicle is occupied.

In addition, generators and other internal combustion engines are covered

- (1) Excluding Motor Vehicle engines, no internal combustion engine shall be operated except

when it is providing power or electrical energy to equipment or a tool that is actively in use.

## **Environmental Commitment**

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City's commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City's environmental principles.



**AIA**

# Document A310™ – 2010

## Bid Bond

**CONTRACTOR:**  
*(Name, legal status and address)*  
**SAK CONSTRUCTION, LLC**  
864 Hoff Road  
O'Fallon, MO 63366

**SURETY:**  
*(Name, legal status and principal place of business)*  
**Travelers Casualty And Surety Company of America**  
One Tower Square  
Hartford, CT 06183

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

**OWNER:**  
*(Name, legal status and address)*  
**City of Ann Arbor**  
301 E. Huron Street  
Ann Arbor, MI 48104

**Mail Notices To:**  
**Travelers**  
**Attn: Surety Claim Dept.**  
One Tower Square 2S1A  
Hartford, CT 06183

**BOND AMOUNT:** Five Percent of the Amount Bid ----- dollars (\$ 5 % of Amount Bid)

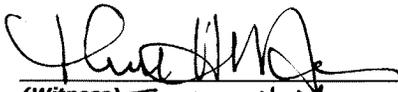
**PROJECT:** ITB No. 4704 2022 Sewer Lining Project, Ann Arbor, MI  
*(Name, location or address, and Project number, if any)*

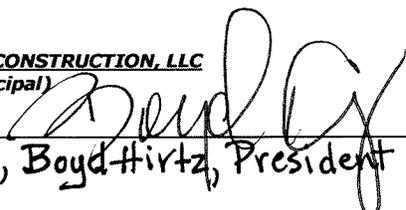
The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

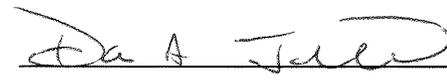
If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 1<sup>st</sup> day of February, 2022.

  
*(Witness) Theresa H. Messer, Witness*

**SAK CONSTRUCTION, LLC**  
*(Principal)*  *(Seal)*  
*(Title) Boyd Hirtz, President*

  
*(Witness) Dana A. Johnessee, Witness*

**Travelers Casualty And Surety Company of America**  
*(Surety)*  *(Seal)*  
*(Title) Andrew P. Thome, Attorney-In-Fact*

ACKNOWLEDGEMENT FOR CONTRACTOR

ACKNOWLEDGEMENT FOR CONTRACTOR, IF LIMITED LIABILITY COMPANY

STATE OF Missouri }

COUNTY OF St. Charles }

ON THE 1<sup>st</sup> DAY OF February, 2022, BEFORE ME  
PERSONALLY APPEARED Boyd Hertz TO ME KNOWN AND  
KNOWN TO ME TO BE THE President OF SAK Construction, LLC,  
A LIMITED LIABILITY COMPANY, DESCRIBED IN AND WHO EXECUTED THE  
FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE  
EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT  
HE EXECUTED THE SAME AS AND FOR THE ACT AND DEED OF SAID LIMITED  
LIABILITY COMPANY.



THERESA H. MESSER  
My Commission Expires  
March 30, 2023  
St. Charles County  
Commission #15634377

Theresa H. Messer  
Notary Public

State of Missouri  
County of St. Louis

On FEBRUARY 1, 2022, before me, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared ANDREW P. THOME known to me to be Attorney-in-Fact of

## TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

the corporation described in and that executed the within and foregoing instrument, and known to me to be the person who executed the said instrument in behalf of said corporation, and he duly acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year stated in this certificate above.



**Dana A. Johnessee, Notary Public**

DANA A JOHNESSEE  
NOTARY PUBLIC - NOTARY SEAL  
STATE OF MISSOURI  
COMMISSIONED FOR ST. LOUIS COUNTY  
MY COMMISSION EXPIRES SEP. 20, 2025  
ID #13516439

My Commission Expires: \_\_\_\_\_

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2020

CAPITAL STOCK \$ 6,480,000

ASSETS		LIABILITIES & SURPLUS	
CASH AND INVESTED CASH	\$ 239,403,348	UNEARNED PREMIUMS	\$ 1,121,070,380
BONDS	3,831,156,861	LOSSES	1,003,200,666
STOCKS	109,074,035	LOSS ADJUSTMENT EXPENSES	163,346,678
INVESTMENT INCOME DUE AND ACCRUED	36,856,709	COMMISSIONS	48,805,693
OTHER INVESTED ASSETS	4,970,512	TAXES, LICENSES AND FEES	13,561,421
PREMIUM BALANCES	277,653,788	OTHER EXPENSES	42,506,558
NET DEFERRED TAX ASSET	55,188,715	CURRENT FEDERAL AND FOREIGN INCOME TAXES	4,865,484
REINSURANCE RECOVERABLE	32,553,518	REMITTANCES AND ITEMS NOT ALLOCATED	8,646,391
RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES	34,876,347	AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	42,228,250
OTHER ASSETS	4,155,794	POLICYHOLDER DIVIDENDS	12,353,304
		PROVISION FOR REINSURANCE	7,930,280
		ADVANCE PREMIUM	1,867,512
		CEDED REINSURANCE NET PREMIUMS PAYABLE	63,102,972
		RETROACTIVE REINSURANCE RESERVE ASSUMED	800,763
		OTHER ACCRUED EXPENSES AND LIABILITIES	568,668
		<b>TOTAL LIABILITIES</b>	<b>\$2,534,855,020</b>
		CAPITAL STOCK	\$6,480,000
		PAID IN SURPLUS	433,803,760
		OTHER SURPLUS	1,650,750,847
		<b>TOTAL SURPLUS TO POLICYHOLDERS</b>	<b>\$2,091,034,607</b>
<b>TOTAL ASSETS</b>	<b>\$ 4,625,889,627</b>	<b>TOTAL LIABILITIES &amp; SURPLUS</b>	<b>\$4,625,889,627</b>

STATE OF CONNECTICUT )  
 COUNTY OF HARTFORD ) SS.  
 CITY OF HARTFORD )

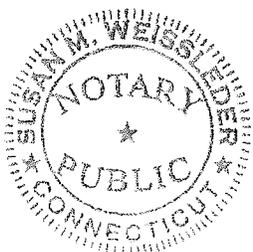
MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS VICE PRESIDENT - FINANCE, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2020.

*Michael J. Doody*  
 VICE PRESIDENT - FINANCE

*Susan M. Weissleder*  
 NOTARY PUBLIC

SUBSCRIBED AND SWORN TO BEFORE ME THIS  
 26TH DAY OF MARCH, 2021

SUSAN M. WEISSLEDER  
 Notary Public  
 My Commission Expires November 30, 2022





**Travelers Casualty and Surety Company of America**  
**Travelers Casualty and Surety Company**  
**St. Paul Fire and Marine Insurance Company**

**POWER OF ATTORNEY**

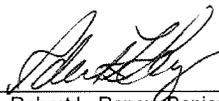
**KNOW ALL MEN BY THESE PRESENTS:** That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **ANDREW P THOME** of **CHESTERFIELD**, Missouri, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

**IN WITNESS WHEREOF**, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, 2021.



State of Connecticut

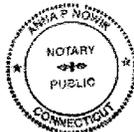
City of Hartford ss.

By:   
 Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, 2021, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

**IN WITNESS WHEREOF**, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2026



  
 Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

**RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

**FURTHER RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

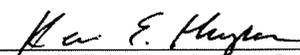
**FURTHER RESOLVED**, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

**FURTHER RESOLVED**, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **1st** day of **February**, 2022 .



  
 Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.**  
**Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.**

## **INVITATION TO BID**

City of Ann Arbor  
Guy C. Larcom Municipal Building  
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, Instructions to Bidders, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered   1  , the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

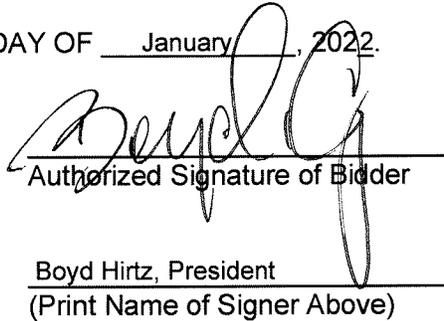
If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 31st DAY OF January, 2022.

SAK Construction, LLC  
Bidder's Name

  
Authorized Signature of Bidder

864 Hoff Road, O'Fallon, MO 63366  
Official Address

Boyd Hirtz, President  
(Print Name of Signer Above)

636.385.1000  
Telephone Number

bidcipcc@sakcon.com  
Email Address for Award Notice

## **ADDENDUM No. 1**

### **ITB No. 4704**

#### **2022 SEWER LINING PROJECT**

**Bids Due: February 1, 2022 at 10:00 A.M. (Local Time)**

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes 5 pages.**

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

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

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

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

## **I. QUESTIONS AND ANSWERS**

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

Question 1: Are recent CCTV files available for the lines expected to be rehabilitated?

Answer 1: Some lines have been recently televised, this information will be available to the contractor.

Question 2: Will the Owner please confirm that the following bypass requirement is required for any diameter pipe: "For sanitary sewerage, by-pass piping shall be PVC Schedule 80, ABS truss pipe, or equivalent with solvent welded joints; HDPE with butt fused joints; or completely watertight Flexible hoses."?

Answer 2: Yes.

Question 3: Will the Owner consider allowing lay flat discharge hose for diameters 12" and smaller?

Answer 3: The lay flat discharge hoses are allowed provided they are completely watertight.

Question 4: Will the city provide a bypass plan/route for the 30" and 40" segments?

Answer 4: It is Contractor's responsibility to provide the bypass plan/route for Engineer's review and approval.

Question 5: For better value will styrenated resin be allowed?

Answer 5: **Non-Styrene** resin is required for this project.

Question 6: Will the city or engineering firm locate the buried manholes or provide gps coordinates?

Answer 6: It is contractor's responsibility to locate the buried manholes, however the City of Ann Arbor will provide assistance when possible.

Question 7: Which manholes are scheduled for lining, chimney seals and channel reconstruction? Do all the Manholes in the CIPP lines to be rehabilitated?

Answer 7: The condition of the manholes to be evaluated in order to make this decision.

Question 8: Would the Owner allow a different product to be used for chimney seal if the one specified is no longer available?

Answer 8: The contractor can provide an alternative product for Engineer's review.

Question 9: Are recent CCTV files available for the lines expected to be rehabilitated?

Answer 9: Some lines have been recently televised, this information will be available to the contractor.

Question 10: Will specific hydrants be designated or will any available hydrant be ok to use? Will contractor be charged for water usage?

Answer 10: The use of City of Ann Arbor hydrants will be allowed and would need to be coordinated with the City of Ann Arbor Field Services Department. The contractor will not be charged for water usage.

Question 11: Will night work be approved on certain shots i.e. Downtown?

Answer 11: The afterhours work including nights and work on Sundays would require an approval by City of Ann Arbor Administrator.

Question 12: Can plans with adjacent sanitary and storm sewers be provided for potential bypass routes and discharge locations.

Answer 12: The information on adjacent utilities is included in the project plans. If additional information is required it will be provided.

Question 13: Are flow rates available for the lines expected to be rehabilitated??

Answer 13: The flow rates information that City of Ann Arbor have on record will be available to the contractor.

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

**LEGAL STATUS OF BIDDER**

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

~~\* A corporation organized and doing business under the laws of the State of \_\_\_\_\_, for whom \_\_\_\_\_, bearing the office title of \_\_\_\_\_, whose signature is affixed to this Bid, is authorized to execute contracts.~~

**NOTE:** If not incorporated in Michigan, please attach the corporation's Certificate of Authority

• A limited liability company doing business under the laws of the State of Missouri, whom Boyd Hirtz bearing the title of President whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

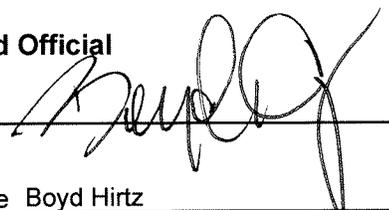
~~\* A partnership, organized under the laws of the state of \_\_\_\_\_ and filed in the county of \_\_\_\_\_, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):~~

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

~~\* An individual, whose signature with address, is affixed to this Bid:~~

  
\_\_\_\_\_  
(initial here)

**Authorized Official**

  
\_\_\_\_\_  
Date January 31, 2022

(Print) Name Boyd Hirtz Title President

Company: SAK Construction, LLC

Address: 864 Hoff Road, O'Fallon, MO 63366

Contact Phone (636) 385-1000 Fax (636) 385-1100

Email bidcippc@sakcon.com

BID FORM  
Section 1 - Schedule of Prices  
Project: ITB 4704 - 2022 Sewer Lining Project

LINE No.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT (\$)
130	Protective Fencing	LF	200	\$ 18.00	\$ 3,600.00 -
140	Exploratory Excavation (0-10' deep), Trench Detail - Type I Modified	EA	5	\$ 5,000.00	\$ 25,000.00 -
141	Exploratory Excavation (0-10' deep), Trench Detail - Type IV	EA	5	\$ 5,000.00	\$ 25,000.00 -
200	General Conditions, Modified, Maximum \$100,000	LS	1	\$ 100,000.00	\$ 100,000.00 -
201	Project Supervision, Modified, Maximum \$50,000	LS	1	\$ 50,000.00	\$ 50,000.00 -
202	Audiovisual Tape Coverage, Modified	LS	1	\$ 15,000.00	\$ 15,000.00 -
203	Minor Traffic Control, Modified, Maximum \$100,000	LS	1	\$ 100,000.00	\$ 100,000.00 -
204	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	EA	20	\$ 140.00	\$ 2,800.00 -
205	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	EA	20	\$ 4.00	\$ 80.00 -
206	Channelizing Device, 42 inch, Furn	EA	200	\$ 20.00	\$ 4,000.00 -
207	Channelizing Device, 42 inch, Oper	EA	200	\$ 3.00	\$ 600.00 -
208	Lighted Arrow, Type C, Furn	EA	6	\$ 930.00	\$ 5,580.00 -
209	Lighted Arrow, Type C, Oper	EA	6	\$ 13.00	\$ 78.00 -
210	Plastic Drum, High Intensity, Lighted, Furn	EA	200	\$ 25.00	\$ 5,000.00 -
211	Plastic Drum, High Intensity, Lighted, Oper	EA	200	\$ 2.00	\$ 400.00 -
212	Sign, Type B, Temp, Prismatic, Furn	SF	2,500	\$ 4.00	\$ 10,000.00 -
213	Sign, Type B, Temp, Prismatic, Oper	SF	2,500	\$ 0.50	\$ 1,250.00 -
214	"No Parking" Sign	EA	100	\$ 60.00	\$ 6,000.00 -
215	Sewer Flow Control	LS	1	\$ 115,000.00	\$ 115,000.00 -
217	8 inch Diameter CIPP Sewer Lining	LF	8,047	\$ 50.00	\$ 402,350.00 -
218	10 inch Diameter CIPP Sewer Lining	LF	2,900	\$ 61.00	\$ 176,900.00 -
219	12 inch Diameter CIPP Sewer Lining	LF	6,321	\$ 84.00	\$ 530,964.00 -
220	15 inch Diameter CIPP Sewer Lining	LF	334	\$ 118.00	\$ 39,412.00 -
221	18 inch Diameter CIPP Sewer Lining	LF	1,295	\$ 160.00	\$ 207,200.00 -
224	24 inch Diameter CIPP Sewer Lining	LF	342	\$ 207.00	\$ 70,794.00 -
225	30 inch Diameter CIPP Sewer Lining	LF	364	\$ 422.00	\$ 153,608.00 -
226	40 inch Diameter CIPP Sewer Lining	LF	483	\$ 606.00	\$ 292,698.00 -
Total This Page					\$ 2,343,314.00

BID FORM  
Section 1 - Schedule of Prices  
Project: ITB 4704 - 2022 Sewer Lining Project

LINE No.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT (\$)
228	Rem. Concrete Curb or Curb and Gutter, Any Type, Modified	LF	100	\$ 44.50	\$ 4,450.00 -
229	Rem. Concrete Sidewalk, Ramp and Drive, Any Thickness, Modified	SFT	100	\$ 21.50	\$ 2,150.00 -
230	Aggregate Base	TON	100	\$ 128.00	\$ 12,800.00 -
231	Hand Patching	TON	100	\$ 500.00	\$ 50,000.00 -
232	Concrete Curb or Curb & Gutter – Any Type	LF	100	\$ 167.00	\$ 16,700.00 -
233	4" Concrete Sidewalk, Modified	SFT	50	\$ 50.00	\$ 2,500.00 -
234	6" Concrete Sidewalk, Ramp, Drive Approach, Modified	SFT	50	\$ 56.00	\$ 2,800.00 -
235	6" Concrete Sidewalk, Ramp, Drive Approach, High Early	SFT	50	\$ 67.00	\$ 3,350.00 -
236	Concrete Type M Drive Opening, High Early	LF	50	\$ 223.00	\$ 11,150.00 -
237	Inlet Filter, Special	Each	25	\$ 167.00	\$ 4,175.00 -
238	Level 2 MACP Inspect Manhole	EA	50	167.00	\$ 8,350.00 -
239	Internal Chimney Seal	Each	50	\$ 139.00	\$ 6,950.00 -
240	Reconstruct Flow Channel	Each	50	\$ 589.00	\$ 29,450.00 -
241	Manhole Cementitious Liner	Vf	100	\$ 179.00	\$ 17,900.00 -
242	Clean-Up & Restoration, Special	LS	1	\$ 5,000.00	\$ 5,000.00 -
243	Certified Payroll Complianace and Reporting	LS	1	\$ 3,500.00	\$ 3,500.00 -
305	8" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 767.00	\$ 76,700.00 -
306	10" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 706.00	\$ 70,600.00 -
307	12" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 889.00	\$ 88,900.00 -
308	15" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 784.00	\$ 78,400.00 -
309	18" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 972.00	\$ 97,200.00 -
310	24" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 1,000.00	\$ 100,000.00 -
311	30" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	100	\$ 1,222.00	\$ 122,200.00 -
353	4" SDR 35 PVC Service Lead	LF	100	\$ 567.00	\$ 56,700.00 -
Total This Page					\$ 871,925.00 -
Total From BF-1					\$ 2,343,314.00 -
<b>Total Base Bid</b>					<b>\$ 3,215,239.00 -</b>

# BID FORM

## Section 2 – Material, Equipment and Environmental Alternates

The Base Bid proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

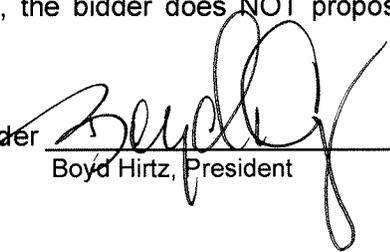
If the Contractor wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

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

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

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

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

Signature of Authorized Representative of Bidder  Date 01/31/22  
Boyd Hirtz, President

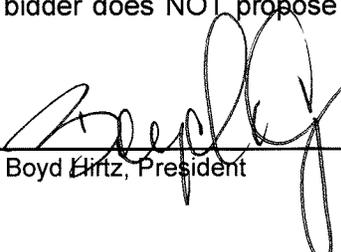
# BID FORM

## Section 3 - Time Alternate

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion, page C-2, it is requested to stipulate below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

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

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

Signature of Authorized Representative of Bidder  Date 01/31/22  
Boyd Elftz, President

# BID FORM

## Section 4 - Major Subcontractors

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

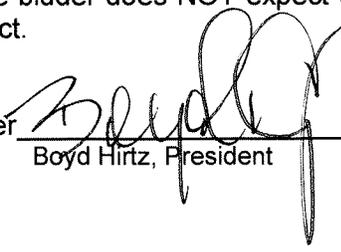
Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision to Section 4 of the General Conditions covering subcontractor's employees who perform work on this contract.

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

<u>Subcontractor (Name and Address)</u>	<u>Work</u>	<u>Amount</u>
Fossas Construction, 7644 Whitman Rd Brighton, MA 48116	Excavator, etc.	\$800,350.00
Doetsch Environmental Services 21221 Mullin, Warren, MA 48089	TV, Clean, Warranty work	\$174,249.80
G M e Sons, 46900 West Rd. Wixom, MI 48393	Concrete	\$32,750.00
Merrino Newkasing, 2475 E. Judd Rd Barton, MI 48529	Bypass	\$60,000.00
Structural Solutions, 814 W Pearl St Union City, IN 47390	Marble Return	\$56,550.00

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

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

Signature of Authorized Representative of Bidder  Date 01/31/22  
Boyd Hirtz, President

# BID FORM

## Section 5 – References

Include a minimum of 3 references from similar projects completed within the past 7 years.

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

1)	<u>7th Ward Sewer Rehabilitation</u>	<u>\$7,675,591.93</u>	<u>Completed in 2018</u>
	Project Name	Cost	Date Constructed

<u>City of Decatur, Paul Caswell</u>	<u>217.424.2747</u>
Contact Name	Phone Number

2)	<u>Lower Meramec Watershed I/I Removal</u>	<u>\$5,921,823.38</u>	<u>Completed in 2016</u>
	Project Name	Cost	Date Constructed

<u>Metropolitan St. Louis Sewer District, Steve Weinick</u>	<u>314.678.6200</u>
Contact Name	Phone Number

3)	<u>2019 Sewer Rehabilitation - Phase 1</u>	<u>\$8,330,214.69</u>	<u>Completed in 2020</u>
	Project Name	Cost	Date Constructed

<u>City of Reno, Jon Simpson</u>	<u>775.689.2961</u>
Contact Name	Phone Number

## BID FORM

### Section 6 – Contractor Information and Responsible Contractor Criteria

*Backup documentation may be requested at the sole discretion of the City to validate all of the responses provided herein by bidders. False statements by bidders to any of the criteria provided herein will result in the bid being considered non-responsive and will not be considered for award.*

*Failure to provide responses to all questions may result in being deemed non-responsive.*

*Attach additional pages as needed if space below is insufficient.*

Pursuant to Sec 1:312(20) of the City Code which sets forth requirements of a responsible bidder, Bidder is required to submit the following:

1. Organization Name: SAK Construction, LLC

Social Security or Federal Employer I.D. #: 20-4193988

Address: 864 Hoff Road

City: O'Fallon State: MO Zip: 63366

Type of Organization (circle one below):

Individual

Partnership

Corporation

Joint Venture

Other

If "Other" please provide details on the organization:

Limited Liability Company

Year organization established: 2006

2. Current owners/principals/members/managing members/partners of the organization:

Officers: Tom Kalishman, Jerome Shaw, Jr., Boyd Hirtz, Joe Feuerborn, Roger Archibald and Steve Stulce

3. Assumed Names, "doing business as" d/b/a, and/or former organization names(s), if applicable: N/A

Explanation of any business name changes:

N/A

4. If applicable, please provide a list of all bidder's litigation and arbitrations currently pending and within the past five years, including an explanation of each (parties, court/forum, legal claims, damages sought, and resolution).

None

---

5. Qualifications of management and supervisory personnel to be assigned by the bidder:

Please see attachment labeled "Central Region Letter of Experience"

---

6. List the state and local licenses and license numbers held by the bidder:

Please see attachment labeled "SAK Licensing"

---

7. Will all subcontractors, employees and other individuals working on the construction project maintain current applicable licenses required by law for all licensed occupations and professions?

Yes

No

8. Will contractors, subcontractors, employees, and other individuals working on the construction project be misclassified by bidder as independent contractors in violation of state or federal law?

Yes

No

9. Submit a statement as to what percentage of your work force resides within the City of Ann Arbor, and what percentage resides in Washtenaw County, Michigan, and the same information for any major subcontractors.

0% of SAK's anticipated workforce currently resides in either the City of Ann Arbor or Washtenaw County, MI.

---

10. Submit documentation as to bidder's employee pay rates (e.g., certified payroll without SSN or personal identifying information, or chart of job titles and pay rates, or other evidence). SAK and its subcontractors will pay the appropriate current prevailing wage rates for Washtenaw County, MI per General Decision Number MI20210001.

11. State whether bidder provides health insurance, pension or other retirement benefits, paid leave (vacation, personal time, sick leave, etc), or other benefits to its employees, and if so, state whether each benefit is provided directly to employees, by payments or contributions to a third-party administered plan, in cash (e.g., fringe benefit portion of prevailing wages), or other manner.

SAK provides benefits to all of its employees either directly or through collective bargaining agreements.

12. State whether bidder is an equal opportunity employer and does not discriminate in its hiring on the basis of race, sex, pregnancy, age, religion, national origin, marital status, sexual orientation or gender identity, height, weight, or disability.

Yes

No

13. State whether bidder has Equal Employment Opportunity Programs for minorities, women, veterans, returning citizens, and small businesses, and if so, submit supporting documentation or other evidence of such program(s).

---

14. Has bidder had any violations of state, federal, or local laws or regulations, including OSHA or MIOSHA violations, state or federal prevailing wage laws, wage and hour laws, worker's compensation or unemployment compensation laws, rules or regulations, issued to or against the bidder within the past five years?

Yes

No

If you answered "yes" to the question above, for each violation provide an explanation of the nature of the violation, the agency involved, a violation or reference number, any other individual(s) or party(ies) involved, and the status or outcome and resolution.

15. Does bidder have an existing Fitness for Duty Program (drugs and alcohol testing) of each employee working on the proposed jobsite?

Yes

No

If you answered "Yes", please submit documentation of the Fitness for Duty Program and what it entails. Please see the attached drug and alcohol testing policy from SAK's Safety Manual.

16. Submit documents or evidence of any debarment by any federal, state or local governmental unit and/or findings of non-responsibility or non-compliance with respect to any public or private construction project performed by the bidder.

SAK does not have any debarment or non-compliance to disclose.

17. Proof of insurance, including certificates of insurance, confirming existence and amount of coverage for liability, property damage, workers compensation, and any other insurances required by the proposed contract documents.

Please see attached Certificate of Insurance - For Information Only.

18. Does bidder have an on-going MIOSHA-approved safety-training program for employees to be used on the proposed job site?

Yes

No

If bidder answered "yes" to the question above, submit documentation of your safety-training program. N/A

19. Does bidder have evidence of worker's compensation Experience Modification Rating ("EMR")?

Yes

No

EMR = 0.58

20. Will bidder use masters, journeypersons and apprentices on the project?

Yes

No

If bidder answered "yes" to the question above, provide the ratio of masters and journeypersons to apprentices for this project.

Ratio: 6:0

If bidder answered "no" to the question above, submit documentation regarding the qualifications of each worker who may or will be assigned on the project.

If, yes, Ratio = N/A

21. Can bidder provide documentation that it participates in a Registered Apprenticeship Program (RAP) that is registered with the United States Department of Labor Office of Apprenticeship or by a State Apprenticeship Agency recognized by the Office of Apprenticeship?

Yes

No

If bidder answered "yes" to the question above, please submit a copy of the program document(s) and evidence of its registration. N/A

If bidder answered "no" to the question above, please provide details on how you assess the skills and qualifications of any employees who do not have master or journeyperson certification or status, or are not participants in a Registered Apprenticeship Program. SAK does not have an apprenticeship program, that is provided by unions to their members.

22. Will bidder comply with all applicable state and federal laws and visa requirements regarding the hiring of non-US citizens, and disclosure of any work visas sought or

obtained by the bidder, any of the bidder's subcontractors, or any of the bidder's employees or independent contractors, in order to perform any portion of the project?

Yes

No

23. Submit evidence that bidder has financial resources to start up and follow through on the project and to respond to damages in case of default as shown by written verification of bonding capacity equal to or exceeding the amount of the bidders scope of work on the project. The written verification must be submitted by a licensed surety company rated B+ or better in the current A.M. Best Guide and qualified to do business within the State of Michigan, and the same audited financial information for any subcontractor estimated to be paid more than \$100,000 related to any portion of the project. Please see the attached bonding letter for SAK.

24. Submit evidence of a quality assurance program used by the bidder and the results of same on the bidder's previous projects.

Please see the attached quality assurance program used by SAK.

SAK Construction, LLC (SAK) is a full-service general contractor, construction management firm and construction materials producer. SAK specializes in complex underground infrastructure projects including wastewater, stormwater and combined sewer pipeline rehabilitation, and new tunnel construction of large diameter conveyance pipelines and storage tunnels.

### Company Headquarters

Our approximately 115,000 square-foot headquarters, equipment fabrication, product manufacturing and CIPP wet-out facility are located near St. Louis, Missouri, approximately 20 miles west on I-70 from Lambert St. Louis Airport. The address and contact information is:

SAK Construction, LLC	(636) 385-1000 Telephone
864 Hoff Road	(636)385-1100 Fax
O'Fallon, Missouri 63366	

### Capabilities

- Cured-in-place pipe lining (gravity) – 6" to 108" diameter
- Cured-in-place pipe lining (pressure) – 6" to 48" diameter
- Large Diameter Tunneling – Utilizing TBM up to 24-foot & Hand Mining up to 32-foot arch
- Large Diameter Sliplining – 36" pipe and above
- Large Diameter Geopolymer
- SPR Spiral Wound PVC & PE
- Shotcrete
- Shaft Excavation
- Sewer Bypass, Sewer Cleaning & CCTV Inspection, & Structure Rehabilitation
- Cured-In-Place Pipe (CIPP) Tube Manufacturing

### Management and Key Personnel/Experience

#### **Tom Kalishman – Co Founder and Chairman**

- Co-Founder and Chairman SAK Construction; 2006 to Present
- Board of Directors, Insituform Technologies, Inc. (ITI) from 1998 to 2005.
- President of United Pipeline Systems (ITI subsidiary) in 1998.
- Director of East Regions, ITI 1997 to 1998. Business unit annual revenues exceeding \$150mm.
- General Manager Southeast Region ITI from 1996 to 1997.
- Operations Manager Southeast Region ITI from 1994 to 1996.
- Operations Management Insituform Mid America from 1991 to 1993
- MBA Northwestern University; Evanston, IL.
- B.S. in Economics, Wharton School at the University of Pennsylvania.

#### **Jerry Shaw – Co Founder and President**

- Co-Founder and President SAK Construction; 2006 to Present
  - Over 41 years' experience in the tunnel and pipeline rehabilitation industry.
  - Vice President of Affholder, Inc. (ITI tunneling subsidiary) for 18 years from 1987 to 2005, responsible for the overall operations of the company, which included estimating, field operations, equipment acquisitions and cost projects.
  - Day to day management of \$25mm tunneling business which grew to \$120mm annually.
  - Project manager of various tunnel projects 1983 to 1987.
  - B.S. in Business Administration, Southwest Missouri State University (now Missouri St. Univ.).
-

**Robert Affholder – Vice Chairman**

- Board of Directors and Executive Vice President, Insituform Technologies, Inc. 1995 to 2005.
- Board of Directors and President, Insituform Mid-America from 1986 to 1995.
- Formed Affholder, Inc. in 1968 to compete in the tunneling industry. Purchased first Insituform franchise in 1982, and took the company public as Insituform Mid-America, with Affholder, Inc. and six (6) Insituform franchise territories becoming wholly owned subsidiaries. Company revenues exceeded \$125 million.
- 1996 Trenchless Technology Person-of-the-Year.
- 1995 key facilitator of merger between Insituform Mid-America and Insituform Technologies, Inc., resulting in his being put in charge of all North American contracting for the corporation.
- President of Affholder, Inc. from 1968 to 2002.

**Harry Miller – Safety Director**

- Over 19 years' experience working as a safety consultant and safety manager for firms such as Black & Veatch and The Carpenters District Council of Greater St. Louis & Vicinity, joined SAK as Safety Director in January 2015.
- Division Safety Manager, Black & Veatch Construction Inc. Responsibilities include supervision of safety professionals on projects within the continental US and Alaska.
- Is a Certified Safety Professional (CSP) and Construction Health and Safety Technician (CHST) through the Board of Certified Safety Professionals (BCSP).
- Extensive knowledge of OSHA guidelines has Confined Space Training and Haz-Woper Certification.
- Occupational Safety and Health Administration 500 & 501 trainer.
- Professional Member American Society of Safety Engineers.
- B.A. in Human Resources, Lindenwood University
- MSA in Business, Lindenwood University

**Joe Feuerborn - Vice President and General Manager, CIPP Division**

- Over 24 years' experience in the CIPP industry.
- In 2020, promoted to VP, GM CIPP Division, involved in the overall operations and management of the company's pipeline rehabilitation division nationwide.
- Pacific Region General Manager of SAK from 2011 to 2020, responsible for the management of business development, project management, engineering and operations teams.
- Responsible for all project acquisition and execution for SAK in the Pacific Region.
- Vice President / General Manager of PIPEnology Inc. from 2008 to 2011.
- District Manager of Pacific Region at Insituform Technologies from 2004 to 2006.
- Project Executive for Insituform Technologies, Inc. from 2001 to 2004.
- Lead Project Manager for Insituform Technologies, Inc. from 1999 to 2001.
- Estimator/Project Manager for Insituform Technologies, Inc. from 1996 to 1999.
- B.S. in Civil Engineering, University of Missouri.

**Steve Hirtz – Vice President Rehab Operations**

- Over 30 years' experience in the tunneling and pipeline rehabilitation industry
  - Vice President of Rehab Operations for SAK from May 2009 to present.
  - General Manager for Mid America Pipe Services from November 2007 to May 2009. Responsible for the day to day operations of the pipeline cleaning, CCTV Inspection and Assessment work done by the Company's crews.
  - Director of Field Operations for Insituform Technologies, Inc. from June 2004 to November 2007. Responsible for North American Field Operations of 65 crews producing \$300 million in revenue annually.
-

- Senior Operations Manager for Insituform Technologies West Coast Operations from March 2000 to June 2004. Responsible for day to day field operations for the West Coast based in Benicia CA.
- Operations Manager for Insituform Technologies/Insituform Mid-America from March 1990 to March 2000. Responsible for the day to day field operations for the Midwest based in Chesterfield MO.
- Superintendent for Insituform Mid-America from 1985 to March 1990. Directly managed pipe rehabilitation crews in the Midwest.

#### **Tim Bussen – General Manager - Central Region**

- Over 19 years' experience in the trenchless rehabilitation industry.
- Central Region General Manager of SAK from January 2017 to present, responsible for the management of business development, project management, engineering and operations teams.
- Project Manager for SAK from January 2009 to January 2017, managed individual project size of in excess of \$5 million and combined project size of \$20 million annually.
- Project Engineer for SAK from July 2007 to January 2009 where he took over as Project Manager
- Affholder, Inc., worked in Estimating Department from June 2005 to September 2007, assisted in the bidding of sanitary and storm sewer projects; performed takeoffs; assisted the Project Managers and assisted in bid close outs.
- Insituform Technologies, Inc., Laborer from June 2001 to September 2003.
- B.S. in Construction Management from Missouri State University, Springfield, Missouri.

#### **Cary Shaw – Business Development – Central Region**

- Joined SAK in 2010, is responsible for Business Development in the Central Region and for SAK Spiral Wound Markets.
- 16 years' experience in project management, business management, business development and ownership serving as CEO and CFO of a privately held General Contracting & Land Development Entity providing services to the heavy commercial, multi-family and residential markets.
- 12 years with Cummins Engine Company serving in roles during tenure as Director of Operations, Director of Materials and Plant Controller.
- 5 years in medical products industry serving in roles and performing responsibilities in Cost Accounting, Cost Analysis and as a Business Unit Controller.
- Member of Missouri Water Environment Association (MWEA), Kansas Water Environment Association (KWEA), Engineer's Club of Kansas City and Kansas City Chapter of National Underground Contractors Association (NUCA).
- B.A. in Business Administration, Benedictine College – Atchison, Kansas.

#### **Brent Adams – Project Manager – Central Region**

- Over 9 years' experience in the trenchless rehabilitation industry.
  - Project Manager for SAK from 2018 to present, responsible for managing multiple CIPP projects and maintaining open communication with the clients, inspectors, subcontractors, and residents throughout the life of the project.
  - Business Development Manager for Thompson Pipe Group from 2017 to 2018.
  - Various positions for Sekisui SPR Americas from 2011 to 2017. Positions include: SPR TM Division Manager, SPR Western Sales Manager, and SPR Midwest Sales Manager.
  - Manager – Sales Representative for McIntire Management Group from 2006 to 2011.
  - Tech Support/Customer Service for Raven Lining Systems from 2004 to 2006.
  - B.A. in Business Administration, University of Oklahoma – Norman, OK.
-

**Travis Jerrels – Project Manager – Central Region**

- Over 8 years' experience in the construction industry, over 5 years' experience in the trenchless pipeline rehabilitation industry.
- Project Manager for SAK from February 2018 to present, responsible for managing multiple CIPP projects and maintaining open communication with the clients, inspectors, subcontractors and residents throughout the life of the project.
- Assistant Project Manager for SAK from July 2017 to February 2018.
- Field Engineer for SAK from October 2015 to July 2017.
- Project Engineer for Farnsworth Group, Inc. from 2012 to 2015.
- Foreman for Mike Dover Corporation from 2012 – 2012.
- Laborer for Mike Dover Corporation from 2006 to 2009 and in 2011.
- B.S. in Civil Engineering with a Mathematical Minor, Southern Illinois University Edwardsville.

**Nick Pryor – Project Manager – Central Region**

- Over 9 years' experience in the trenchless pipeline rehabilitation industry.
- Project Manager for SAK from February 2018 to present, responsible for managing multiple CIPP projects and maintaining open communication with the clients, inspectors, subcontractors and residents throughout the life of the project.
- Assistant Project Manager for SAK from July 2017 to February 2018.
- Field Engineer for SAK from June 2012 to July 2017.
- Field Engineer for Mid America Pipe Services, LLC from 2011 to 2012.
- B.S. in Construction Management, Missouri State University, Springfield, Missouri.
- Associates of Arts Degree, Lewis and Clark Community College, Godfrey, IL.

**Chris Vogt – Project Manager – Central Region**

- Over 9 years' experience in the construction industry, over 6 years' experience in the trenchless pipeline rehabilitation industry.
- Project Manager for SAK from February 2018 to present, responsible for managing multiple CIPP projects and maintaining open communication with the clients, inspectors, subcontractors and residents throughout the life of the project.
- Assistant Project Manager for SAK from July 2017 to February 2018.
- Estimator for SAK from October 2014 to July 2017.
- Construction Manager for Jokerst Paving & Contracting from July 2009 to October 2014.
- Project Management Intern for Goodwin Brothers Construction from June 2008 to August 2008.
- Shop Laborer for Goodwin Brothers Construction from June 2007 to August 2007.
- B.S. in Construction Management, Missouri State University, Springfield, Missouri.
- Associates Degree in Business Administration, Meramec Community College, St. Louis, Missouri.

**Jason Laney – General Superintendent – Central Region**

- Over 24 years' experience in the pipeline rehabilitation industry with CIPP.
  - General Superintendent for SAK from November 2007 to present, responsible for all phases of CIPP installation projects, crew management, coordination with subcontractors and General Contractors.
  - Superintendent/Installer for Insituform Technologies, Inc. from 2001 to 2007, responsible for crew's daily operations on projects throughout the Midwest and West Coast.
  - Foreman for Insituform Technologies, Inc. from 1999 to 2001.
  - Crew member for Insituform Technologies, Inc. from 1996 to 1999, duties included TV Technician and Lateral Lining Foreman.
  - Supervisor experience installing 6- to 72-inch diameter CIPP.
  - Foreman/Crew Member on the 2002 Trenchless Technology Project of the Year – Phoenix Salt River Outfall CIPP.
-

**Jeff Hirtz – General Superintendent – Central Region**

- Over 24 years' experience in the pipeline rehabilitation industry with CIPP.
- General Superintendent for SAK from November 2007 to present, responsible for all phases of CIPP installation projects, crew management, coordination with subcontractors and General Contractors.
- Superintendent/Installer for Insituform Technologies, Inc. from 2004 to 2007, responsible for the management of crews on the installation of 6- to 84-inch diameter CIPP projects throughout the Midwest and East Coast.
- Shop/Wet-Out Foreman for Insituform Technologies, Inc. from 1996 to 2004.

**Trenchless Experience**

SAK Key Personnel have installed millions of linear feet of cured-in-place pipe and managed the installation of tens of millions of linear feet of cured-in-place pipe. SAK's personnel are among the most experienced and well-known in the industry. SAK as a Company has installed over 14 million feet of CIPP liner since being formed in 2006.

**CIPP Liner Materials**

SAK provides a CIPP product that is a proven technology. SAK utilizes several proven CIPP materials including Pipenology CIPP Liner, and Applied Felts' AquaCure™.

Pipenology is a registered ISO 9001:2000 company which has produced over 8 million feet of SAK's installed CIPP. Pipenology uses several stringent Quality Control measures to ensure an excellent final product.

AquaCure™- Coated Felt Inversion Liner manufactured by Applied Felts, Inc., who, with its parent company, Rawson Textiles, has provided polymer coated felt tubes for use in the CIPP lining industry for more than twenty (20) years. Applied Felts is a registered ISO 9001:2000 company which has produced CIPP tube installed by more than 300 contractors operating in more than 30 countries. More than 60 million linear feet of Applied Felts product has been installed worldwide, of which 35 million linear feet has been successfully installed in the United States. **Applied Felts was the sole supplier of coated felt materials worldwide until the late 1980s, when Insituform Technologies, Inc. began manufacturing their own coated felt CIPP tubes.**

SAK Construction, LLC is certified by Pipenology and Applied Felts to install their lining materials, follows their recommended installation procedures, and provides engineering support and technical assistance. Accompanying this document is a Qualification & Process License Certification for SAK Construction, LLC, along with literature on these proven liner materials, and a copy of the ISO 9001:2000 Certificates of Registration.

SAK utilizes cured-in-place pipe resins manufactured by AOC and Interplastics, leaders in the CIPP resin industry, and registered ISO 9001:2000 companies. The third-party test results supporting the short-term and long-term performance of the resin products we install are available upon request.

SAK has two permanent wet-out facilities where all of the CIPP liners are wet-out for the United States:

- Headquarters Building – O'Fallon, MO
- West Regional Office – Rocklin, CA

SAK installs cured-in-place pipe in accordance with ASTM F1216 for inversion and curing.

---



# Current Licensing (US)

1/24/2022  
9:52:19 AM

State	State ID #	Contractors License Required?	Contractors License # (if applicable)	Expiration (if applicable)
AL	614-338	Y	42995	2022-06-30
AL	614-338	Y	2205891	2022-09-30
AR	800129324	Y	194570622	2022-06-30
AZ	R14469455	Y	ROC246314	2022-06-30
CA	200610410211	Y		
CO	20071366525	N		
CT	1156175	N		
DC	L00004891790	Y	410515000022	2022-09-30
DE	5179795	Y	2012103724	2024-12-31
FL	M08000002475	Y	CUC1224641	2022-08-31
FL	M08000002475	Y	CUC057252	2022-08-31
FL	M08000002475	Y	CGC023963	2022-08-31
GA	8050191	Y	UC301933	2023-04-30
HI	84541 C6	Y	AC 32345	2022-09-30
IA	360969	Y	C105108	2022-11-21
ID	W 106741	Y	RCE-32529	2022-11-14
ID	W 106741	Y	011157-Unlimited - 1-4	2022-02-28
IL	0231104-6	N		
IN	2007081400195	N		
KS	41059389	N		
KY	669141	N		
LA	36582965 Q	Y	49267	2024-07-03
MA	1147362	N		
MD	Z12963005	Y	30875411	2022-04-30
ME	20150540FC	N		
MI	B9399D	N		
MN	2502729-2	N		
MO	LC0712897	N		
MS	977646	Y	18931-MC	2022-04-14
MT	E055151	Y	163460	2022-05-08
NC	1106765	Y		
ND	41,575	Y	41575	2022-03-01
NE	10105412	Y	37144	2022-06-15
NH	761476	N		
NJ	400690346	N		
NM	4101598	Y	366541	2022-07-30
NV	NV20081155870	Y	71272	2022-06-30
NV	NV20081155870	Y	BPC-16-07-12-0547	2022-06-30
OH	1738520	N		
OK	3712310229	N		
OR	763862-92	Y	193803	2023-05-16
PA	4134438	N		
RI	1046593	N		
SC	80128-0333	Y	G114041	2022-10-31
SD	FL004740	N		
TN	592192	Y	61862	2023-01-31



# Current Licensing (US)

1/24/2022  
9:52:19 AM

TX	800893795	N		
UT	7243566-0161	Y	7280543-5551	2023-11-30
VA	T0389496	Y	2705126032	2022-12-31
VT	304472	N		
WA	UBI: 603040228	Y	SAKCOCL897BK	2023-05-09
WI	S079789	N		
WV	2307-9073	Y	WV055222	2022-07-18
WY	2011000606563	N		
NY	5054159	N		
CA	201501410398	N		

"General Decision Number: MI20210001 10/01/2021

Superseded General Decision Number: MI20200001

State: Michigan

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

Counties: Michigan Statewide.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021
1	03/12/2021
2	05/07/2021
3	06/04/2021
4	06/18/2021
5	07/02/2021
6	07/09/2021
7	07/16/2021
8	07/30/2021
9	08/27/2021
10	09/03/2021
11	10/01/2021

CARP0004-004 06/01/2019

REMAINDER OF STATE

	Rates	Fringes
CARPENTER ( Piledriver).....	\$ 27.62	20.59
-----		
CARP0004-005 06/01/2018		

LIVINGSTON (Townships of Brighton, Deerfield, Genoa, Hartland, Oceola & Tyrone), MACOMB, MONROE, OAKLAND, SANILAC, ST. CLAIR

AND WAYNE COUNTIES

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 30.50	27.28
-----		
ELEC0017-005 06/01/2021		

STATEWIDE

	Rates	Fringes
Line Construction		
Groundman/Driver.....	\$ 29.11	7.20+32%
Journeyman Signal Tech, Communications Tech, Tower Tech & Fiber Optic Splicers.	\$ 42.55	7.20+32%
Journeyman Specialist.....	\$ 48.93	7.20+32%
Operator A.....	\$ 35.96	7.20+32%
Operator B.....	\$ 33.57	7.20+32%

Classifications

Journeyman Specialist: Refers to a crew of only one person working alone.

Operator A: Shall be proficient in operating all power equipment including: Backhoe, Excavator, Directional Bore and Boom/Digger truck.

Operator B: Shall be proficient in operating any 2 of the above mentioned pieces of equipment listed under Operator A.

-----  
ENGI0324-003 06/01/2021

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

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 49.02	24.85
GROUP 3.....	\$ 46.52	24.85
GROUP 4.....	\$ 47.52	24.85
GROUP 5.....	\$ 45.02	24.85
GROUP 6.....	\$ 46.02	24.85
GROUP 7.....	\$ 44.75	24.85
GROUP 8.....	\$ 45.75	24.85
GROUP 9.....	\$ 44.30	24.85
GROUP 10.....	\$ 45.30	24.85
GROUP 11.....	\$ 43.57	24.85
GROUP 12.....	\$ 44.57	24.85
GROUP 13.....	\$ 43.21	24.85
GROUP 14.....	\$ 44.21	24.85
GROUP 15.....	\$ 42.57	24.85
GROUP 16.....	\$ 39.37	24.85
GROUP 17.....	\$ 24.89	12.00

GROUP 18.....\$ 28.38

12.00

FOOTNOTE:

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

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Engineer when operating combination of boom and jib 400' or longer

GROUP 2: Engineer when operating combination of boom and jib 400' or longer on a crane that requires an oiler

GROUP 3: Engineer when operating combination of boom and jib 300' or longer

GROUP 4: Engineer when operating combination of boom and jib 300' or longer on a crane that requires an oiler

GROUP 5: Engineer when operating combination of boom and jib 220' or longer

GROUP 6: Engineer when operating combination of boom and jib 220' or longer on a crane that requires an oiler

GROUP 7: Engineer when operating combination of boom and jib 140' or longer

GROUP 8: Engineer when operating combination of boom and jib 140' or longer on a crane that requires an oiler

GROUP 9: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level)

GROUP 10: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level) on a crane that requires an oiler

GROUP 11: Engineer when operating combination of boom and jib 120' or longer

GROUP 12: Engineer when operating combination of boom and jib 120' or longer on a crane that requires an oiler

GROUP 13: Crane operator; job mechanic and 3 drum hoist and excavator

GROUP 14: Crane operator on a crane that requires an oiler

GROUP 15: Hoisting operator; 2 drum hoist and rubber tired backhoe

GROUP 16: Forklift and 1 drum hoist

GROUP 17: Compressor or welder operator

GROUP 18: Oiler

-----  
ENGI0324-004 06/01/2021

AREA 1: ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, EATON, HILLSDALE, IONIA, KALAMAZOO, KENT, LAKE, MANISTEE, MASON,

MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH, VAN BUREN

AREA 2: ANTRIM, BENZIE, CHARLEVOIX, EMMET, GRAND TRAVERSE, KALKASKA, LEELANAU, MISSAUKEE AND WEXFORD COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
AREA 1		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 44.75	24.85
GROUP 3.....	\$ 43.21	24.85
GROUP 4.....	\$ 39.37	24.85
GROUP 5.....	\$ 24.89	12.00
GROUP 6.....	\$ 28.38	12.00
AREA 2		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 44.75	24.85
GROUP 3.....	\$ 43.21	24.85
GROUP 4.....	\$ 39.37	24.85
GROUP 5.....	\$ 24.89	12.00
GROUP 6.....	\$ 28.38	12.00

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 additional to the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 additional to the group 1 rate.

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

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

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

GROUP 2: Crane Operator with main boom & jib 140' or longer, Tower Crane; Gantry Crane; Whirley Derrick.

GROUP 3: Regular Equipment Operator, Crane, Dozer, Loader, Hoist, Straddle Wagon, Mechanic, Grader and Hydro Excavator.

GROUP 4: Air Tugger (single drum), Material Hoist Pump 6" or over, Elevators, Brokk Concrete Breaker.

GROUP 5: Air Compressor, Welder, Generators, Conveyors

GROUP 6: Oiler and fire tender

-----  
\* ENGI0324-005 09/01/2021

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALLEGAN, ALGER, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,

KWEENAW, LAKE, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment (Underground construction (including sewer))		
AREA 1:		
GROUP 1.....	\$ 37.63	24.85
GROUP 2.....	\$ 32.90	24.85
GROUP 3.....	\$ 32.17	24.85
GROUP 4.....	\$ 31.60	24.85
GROUP 5.....	\$ 23.15	12.05
AREA 2:		
GROUP 1.....	\$ 35.92	24.85
GROUP 2.....	\$ 31.03	24.85
GROUP 3.....	\$ 30.53	24.85
GROUP 4.....	\$ 30.25	24.85
GROUP 5.....	\$ 23.15	12.05

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator; Hydro Excavator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or diesel- powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4 or equivalent); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller); Vac Truck and End dump operator;

GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more-less than 600 cfm); Boom truck (non-swinging, non- powered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum-1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more-4-in. up to 6-in. discharge-gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more-300 amp. or larger - gas or diesel powered)

GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Hydraulic pipe pushing machine; Mulching equipment; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered - excluding submersible pumps); Roller (other than asphalt);

Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); Sweeper (Wayne type); Water wagon and Extend-a boom forklift

Group 5: Fire Person, Oiler

-----  
\* ENGI0324-006 06/01/2021

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

Rates Fringes

Power equipment operators:  
(AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION)

GROUP 1.....	\$ 36.86	24.85
GROUP 2.....	\$ 30.13	24.85
GROUP 3.....	\$ 29.52	24.85
GROUP 4.....	\$ 29.40	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt plant operator; Crane operator (does not include work on bridge construction projects when the crane operator is erecting structural components); Dragline operator; Shovel operator; Locomotive operator; Paver operator (5 bags or more); Elevating grader operator; Pile driving operator; Roller operator (asphalt); Blade grader operator; Trenching machine operator (ladder or wheel type); Auto-grader; Slip form paver; Self-propelled or tractor-drawn scraper; Conveyor loader operator (Euclid type); Endloader operator (1 yd. capacity and over); Bulldozer; Hoisting engineer; Tractor operator; Finishing machine operator (asphalt); Mechanic; Pump operator (6-in. discharge or over, gas, diesel powered or generator of 300 amp. or larger); Shouldering or gravel distributing machine operator (self-propelled); Backhoe (with over 3/8 yd. bucket); Side boom tractor (type D-4 or equivalent or larger); Tube finisher (slip form paving); Gradall (and similar type machine); Asphalt paver (self-propelled); Asphalt planer (self-propelled); Batch plant (concrete-central mix); Slurry machine (asphalt); Concrete pump (3 in. and over); Roto-mill; Swinging boom truck (over 12 ton capacity); Hydro demolisher (water blaster); Farm-type tractor with attached pan; Vacuum truck operator; Batch Plant (concrete dry batch); Concrete Saw Operator (40h.p. or over; Tractor Operator (farm type); Finishing Machine Operator (concrete); Grader Operator (self-propelled fine grade or form (concrete)).

GROUP 2: Screening plant operator; Washing plant operator;

Crusher operator; Backhoe (with 3/8 yd. bucket or less); Side boom tractor (smaller than D-4 type or equivalent); Sweeper (Wayne type and similar equipment); Greese Truck; Air Compressor Operator (600 cu.ft. per min or more); Air Compressor Operator (two or more, less than 600 cfm);

GROUP 3: Boiler fire tender; Tractor operator (farm type with attachment); Concrete Breaker; Wagon Drill Operator;

GROUP 4: Oiler; Fire tender; Trencher (service); Flexplane operator; Cleftplane operator; Boom or winch hoist truck operator; Endloader operator \*under 1 yd. capacity); Roller Operator (other than asphalt); Curing equipment operator (self-propelled); Power bin operator; Plant drier (6 ft. wide or over); Guard post driver operator (power driven); All mulching equipment; Stump remover; Concrete pump (under 3-in.); Mesh installer (self-propelled); End dump; Skid Steer.

-----  
\* ENGI0324-007 05/01/2021

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

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
Compressor, welder and forklift.....	\$ 35.90	24.60
Crane operator, main boom & jib 120' or longer.....	\$ 42.37	24.60
Crane operator, main boom & jib 140' or longer.....	\$ 42.67	24.60
Crane operator, main boom & jib 220' or longer.....	\$ 43.26	24.60
Mechanic with truck and tools.....	\$ 41.50	24.60
Oiler and fireman.....	\$ 34.36	24.60
Regular operator.....	\$ 39.72	24.60

-----  
ENGI0324-008 10/01/2020

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

	Rates	Fringes
OPERATOR: Power Equipment (Sewer Relining)		

GROUP 1.....	\$ 34.62	13.92
GROUP 2.....	\$ 32.83	13.92

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system, including remote in-ground cutter and other equipment used in connection with the CCTV system

GROUP 2: Operation of hot water heaters and circulation systems, water jetters and vacuum and mechanical debris removal systems

-----  
ENGI0325-012 05/01/2021

	Rates	Fringes
Power equipment operators - gas distribution and duct installation work:		
GROUP 1.....	\$ 33.48	24.85
GROUP 2.....	\$ 31.45	24.85
GROUP 3.....	\$ 30.35	24.85

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as ""distribution work,"" starting from the first metering station, connection, similar or related facility, of the main or cross country pipeline and including duct installation.

Group 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd. capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater), boom truck (with powered boom), tractor (wheel type other than backhoe or front endloader). Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service).

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

-----  
IRON0008-007 06/01/2021

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

	Rates	Fringes
Ironworker - pre-engineered metal building erector.....	\$ 23.70	6.95

IRONWORKER

General contracts		
\$10,000,000 or greater.....	\$ 36.45	27.65
General contracts less		
than \$10,000,000.....	\$ 36.45	27.65

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

-----  
IRON0025-002 06/01/2019

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

	Rates	Fringes
Ironworker - pre-engineered metal building erector		
Alcona, Alpena, Arenac, Cheboygan, Clare, Clinton, Crawford, Gladwin, Gratiot, Huron, Ingham, Iosco, Isabella, Jackson, Lapeer, Livingston (west of Burkhardt Road), Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Sanilac, Shiawassee, Tuscola & Washtenaw (west of U.S. 23).	\$ 24.26	22.11
Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University of Michigan, Washtenaw (east of U.S. 23) & Wayne...	\$ 25.48	23.11
IRONWORKER		
Ornamental and Structural...	\$ 36.77	29.03
Reinforcing.....	\$ 30.98	27.99

-----  
IRON0055-005 07/01/2021

LENAWEE AND MONROE COUNTIES:

	Rates	Fringes
IRONWORKER		
Pre-engineered metal buildings.....	\$ 23.59	19.35
All other work.....	\$ 31.25	26.90

-----  
IRON0292-003 06/01/2020

BERRIEN AND CASS COUNTIES:

	Rates	Fringes
IRONWORKER (Including		

pre-engineered metal building  
 erector).....\$ 31.75                      22.84

-----  
 IRON0340-001 06/19/2017

ALLEGAN, ANTRIM, BARRY, BENZIE, BRANCH, CALHOUN, CHARLEVOIX,  
 EATON, EMMET, GRAND TRAVERSE, HILLSDALE, IONIA, KALAMAZOO,  
 KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA,  
 MISSAUKEE, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA,  
 OTTAWA, ST. JOSEPH, VAN BUREN AND WEXFORD COUNTIES:

Rates                      Fringes

IRONWORKER (Including  
 pre-engineered metal building  
 erector).....\$ 24.43                      24.67

-----  
 LAB0005-006 10/01/2020

Rates                      Fringes

Laborers - hazardous waste  
 abatement: (ALCONA, ALPENA,  
 ANTRIM, BENZIE, CHARLEVOIX,  
 CHEBOYGAN, CRAWFORD, EMMET,  
 GRAND TRAVERSE, IOSCO,  
 KALKASKA, LEELANAU,  
 MISSAUKEE, MONTMORENCY,  
 OSCODA, OTSEGO, PRESQUE ISLE  
 AND WEXFORD COUNTIES - Zone  
 10)  
     Levels A, B or C.....\$ 17.45                      12.75  
     class b.....\$ 18.64                      12.90  
     Work performed in  
     conjunction with site  
     preparation not requiring  
     the use of personal  
     protective equipment;  
     Also, Level D.....\$ 16.45                      12.75  
     class a.....\$ 17.64                      12.90

Zone 10

Laborers - hazardous waste  
 abatement: (ALGER, BARAGA,  
 CHIPPEWA, DELTA, DICKINSON,  
 GOGEBIC, HOUGHTON, IRON,  
 KEWEENAW, LUCE, MACKINAC,  
 MARQUETTE, MENOMINEE,  
 ONTONAGON AND SCHOOLCRAFT  
 COUNTIES - Zone 11)  
     Levels A, B or C.....\$ 23.58                      12.90  
     Work performed in  
     conjunction with site  
     preparation not requiring  
     the use of personal  
     protective equipment;  
     Also, Level D.....\$ 22.58                      12.90

Laborers - hazardous waste  
 abatement: (ALLEGAN, BARRY,  
 BERRIEN, BRANCH, CALHOUN,  
 CASS, IONIA COUNTY (except  
 the city of Portland);  
 KALAMAZOO, KENT, LAKE,  
 MANISTEE, MASON, MECOSTA,  
 MONTCALM, MUSKEGON, NEWAYGO,

OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH AND VAN BUREN COUNTIES - Zone 9)

Levels A, B or C.....\$ 21.80	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 20.80	12.90

Laborers - hazardous waste abatement: (ARENAC, BAY, CLARE, GLADWIN, GRATIOT, HURON, ISABELLA, MIDLAND, OGEMAW, ROSCOMMON, SAGINAW AND TUSCOLA COUNTIES - Zone 8)

Levels A, B or C.....\$ 21.39	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 20.80	12.90

Laborers - hazardous waste abatement: (CLINTON, EATON AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); LIVINGSTON COUNTY (west of Oak Grove Rd., including the City of Howell) - Zone 6)

Levels A, B or C.....\$ 25.64	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 24.64	12.90

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

Levels A, B or C.....\$ 24.20	13.80
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 23.20	13.80

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

Levels A, B or C.....\$ 25.17	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 24.17	12.90

Laborers - hazardous waste abatement: (LIVINGSTON COUNTY (east of Oak Grove Rd. and south of M-59, excluding the city of Howell); AND WASHTENAW COUNTY - Zone 3)

Levels A, B or C.....\$ 29.93	14.20
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 28.93	14.20
Laborers - hazardous waste abatement: (MACOMB AND WAYNE COUNTIES - Zone 1)	
Levels A, B or C.....\$ 29.93	16.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 28.93	16.90
Laborers - hazardous waste abatement: (MONROE COUNTY - Zone 4)	
Levels A, B or C.....\$ 31.75	14.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 31.75	14.90
Laborers - hazardous waste abatement: (OAKLAND COUNTY and the Northeast portion of LIVINGSTON COUNTY bordered by Oak Grove Road on the West and M-59 on the South - Zone 2)	
Level A, B, C.....\$ 29.93	16.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 28.93	16.90
Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5)	
Levels A, B or C.....\$ 25.75	16.35
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;	
Also, Level D.....\$ 24.75	16.35

-----  
LAB00259-001 09/01/2018

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

OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW AND WEXFORD COUNTIES

	Rates	Fringes
Laborers - tunnel, shaft and caisson:		
AREA 1		
GROUP 1.....	\$ 22.57	16.80
GROUP 2.....	\$ 22.68	16.80
GROUP 3.....	\$ 22.74	16.80
GROUP 4.....	\$ 22.92	16.80
GROUP 5.....	\$ 23.17	16.80
GROUP 6.....	\$ 23.50	16.80
GROUP 7.....	\$ 16.78	16.80
AREA 2		
GROUP 1.....	\$ 24.10	12.85
GROUP 2.....	\$ 24.19	12.85
GROUP 3.....	\$ 24.29	12.85
GROUP 4.....	\$ 24.45	12.85
GROUP 5.....	\$ 24.71	12.85
GROUP 6.....	\$ 25.02	12.85
GROUP 7.....	\$ 17.29	12.85

SCOPE OF WORK: Tunnel, shaft and caisson work of every type and description and all operations incidental thereto, including, but not limited to, shafts and tunnels for sewers, water, subways, transportation, diversion, sewerage, caverns, shelters, aquifers, reservoirs, missile silos and steel sheeting for underground construction.

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Tunnel, shaft and caisson laborer, dump, shanty, hog house tender, testing (on gas) and watchman

GROUP 2: Manhole, headwall, catch basin builder, bricklayer tender, mortar machine and material mixer

GROUP 3: Air tool operator (jackhammer, bush hammer and grinder), first bottom, second bottom, cage tender, car pusher, carrier, concrete, concrete form, concrete repair, cement invert laborer, cement finisher, concrete shoveler, conveyor, floor, gasoline and electric tool operator, gunite, grout operator, welder, heading dinky person, inside lock tender, pea gravel operator, pump, outside lock tender, scaffold, top signal person, switch person, track, tugger, utility person, vibrator, winch operator, pipe jacking, wagon drill and air track operator and concrete saw operator (under 40 h.p.)

GROUP 4: Tunnel, shaft and caisson mucker, bracer, liner plate, long haul dinky driver and well point

GROUP 5: Tunnel, shaft and caisson miner, drill runner, key board operator, power knife operator, reinforced steel or mesh (e.g. wire mesh, steel mats, dowel bars, etc.)

GROUP 6: Dynamite and powder

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips,

planter boxes, flagstones, etc.

-----  
LAB00334-001 09/01/2018

	Rates	Fringes
Laborers - open cut:		
ZONE 1 - MACOMB, OAKLAND AND WAYNE COUNTIES:		
GROUP 1.....	\$ 22.42	16.80
GROUP 2.....	\$ 22.53	16.80
GROUP 3.....	\$ 22.58	16.80
GROUP 4.....	\$ 22.66	16.80
GROUP 5.....	\$ 22.72	16.80
GROUP 6.....	\$ 20.17	16.80
GROUP 7.....	\$ 16.79	16.80
ZONE 2 - LIVINGSTON COUNTY (east of M-151 (Oak Grove Rd.)); MONROE AND WASHTENAW COUNTIES:		
GROUP 1.....	\$ 23.75	12.85
GROUP 2.....	\$ 23.86	12.85
GROUP 3.....	\$ 23.98	12.85
GROUP 4.....	\$ 24.05	12.85
GROUP 5.....	\$ 24.20	12.85
GROUP 6.....	\$ 21.50	12.85
GROUP 7.....	\$ 18.14	12.85
ZONE 3 - CLINTON, EATON, GENESEE, HILLSDALE AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); JACKSON, LAPEER AND LENAWEE COUNTIES; LIVINGSTON COUNTY (west of M-151 Oak Grove Rd.); SANILAC, ST. CLAIR AND SHIAWASSEE COUNTIES:		
GROUP 1.....	\$ 21.94	12.85
GROUP 2.....	\$ 22.08	12.85
GROUP 3.....	\$ 22.20	12.85
GROUP 4.....	\$ 22.25	12.85
GROUP 5.....	\$ 22.39	12.85
GROUP 6.....	\$ 19.69	12.85
GROUP 7.....	\$ 16.84	12.85
ZONE 4 - ALCONA, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT AND HURON COUNTIES; IONIA COUNTY (EXCEPT THE CITY OF PORTLAND); IOSCO, ISABELLA, KALAMAZOO, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO,		

OTTAWA, PRESQUE ISLE,  
 ROSCOMMON, SAGINAW, ST.  
 JOSEPH, TUSCOLA, VAN BUREN  
 AND WEXFORD COUNTIES:

GROUP 1.....	\$ 20.97	12.85
GROUP 2.....	\$ 21.10	12.85
GROUP 3.....	\$ 21.21	12.85
GROUP 4.....	\$ 21.28	12.85
GROUP 5.....	\$ 21.40	12.85
GROUP 6.....	\$ 18.62	12.85
GROUP 7.....	\$ 16.96	12.85

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

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

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth including industrial, commercial and residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation. For all areas except the Upper Peninsula, open cut construction work shall also be construed to mean waterfront work, piers, docks, seawalls, breakwalls, marinas and all incidental work. Open cut construction work shall not include any structural modifications, alterations, additions and repairs to buildings, or highway work, including roads, streets, bridge construction and parking lots or steel erection work and excavation for the building itself and back filling inside of and within 5 ft. of the building and foundations, footings and piers for the building. Open cut construction work shall not include any work covered under Tunnel, Shaft and Caisson work.

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, headwall, seawall, breakwall and dock builder

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking

and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting man, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

-----  
LAB00465-001 06/01/2020

LABORER: Highway, Bridge and Airport Construction

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALLEGAN, BARRY, BAY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, EATON, GRATIOT, HILLSDALE, HURON, INGHAM, JACKSON, KALAMAZOO, LAPEER, LENAWEE, LIVINGSTON, MIDLAND, MUSKEGON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA AND VAN BUREN COUNTIES

AREA 3: ALCONA, ALPENA, ANTRIM, ARENAC, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, IONIA, IOSCO, ISABELLA, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MONTMORENCY, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON AND WEXFORD COUNTIES

AREA 4: ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES

	Rates	Fringes
LABORER (AREA 1)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90
LABORER (AREA 2)		
GROUP 1.....	\$ 26.92	12.90
GROUP 2.....	\$ 27.12	12.90
GROUP 3.....	\$ 27.36	12.90
GROUP 4.....	\$ 27.71	12.90
GROUP 5.....	\$ 27.58	12.90
GROUP 6.....	\$ 27.92	12.90
LABORER (AREA 3)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90

GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90
LABORER (AREA 4)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90

LABORER CLASSIFICATIONS

GROUP 1: Asphalt shoveler or loader; asphalt plant misc.; burlap person; yard person; dumper (wagon, truck, etc.); joint filling laborer; miscellaneous laborer; unskilled laborer; sprinkler laborer; form setting laborer; form stripper; pavement reinforcing; handling and placing (e.g., wire mesh, steel mats, dowel bars); mason's tender or bricklayer's tender on manholes; manhole builder; headwalls, etc.; waterproofing, (other than buildings) seal coating and slurry mix, shoring, underpinning; pressure grouting; bridge pin and hanger removal; material recycling laborer; horizontal paver laborer (brick, concrete, clay, stone and asphalt); ground stabilization and modification laborer; grouting; waterblasting; top person; railroad track and trestle laborer; carpenters' tender; guard rail builders' tender; earth retention barrier and wall and M.S.E. wall installer's tender; highway and median installer's tender (including sound, retaining, and crash barriers); fence erector's tender; asphalt raker tender; sign installer; remote control operated equipment.

GROUP 2: Mixer operator (less than 5 sacks); air or electric tool operator (jackhammer, etc.); spreader; boxperson (asphalt, stone, gravel); concrete paddler; power chain saw operator; paving batch truck dumper; tunnel mucker (highway work only); concrete saw (under 40 h.p.) and dry pack machine; roto-mill grounds person.

GROUP 3: Tunnel miner (highway work only); finishers tenders; guard rail builders; highway and median barrier installer; earth retention barrier and wall and M.S.E. wall installer's (including sound, retaining and crash barriers); fence erector; bottom person; powder person; wagon drill and air track operator; diamond and core drills; grade checker; certified welders; curb and side rail setter's tender.

GROUP 4: Asphalt raker

GROUP 5: Pipe layers, oxy-gun

GROUP 6: Line-form setter for curb or pavement; asphalt screed checker/screw man on asphalt paving machines.

-----  
LAB01076-005 04/01/2021

MICHIGAN STATEWIDE

Rates	Fringes
-------	---------

LABORER (DISTRIBUTION WORK)

Zone 1.....	\$ 23.92	12.95
Zone 2.....	\$ 22.22	12.95
Zone 3.....	\$ 20.35	12.95
Zone 4.....	\$ 19.77	12.95
Zone 5.....	\$ 19.75	12.95

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

- Zone 1 - Macomb, Oakland and Wayne
- Zone 2 - Monroe and Washtenaw
- Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair
- Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft
- Zone 5 - Remaining Counties in Michigan

-----  
 PAIN0022-002 07/01/2008

HILLSDALE, JACKSON AND LENAWEE COUNTIES; LIVINGSTON COUNTY (east of the eastern city limits of Howell, not including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 25.06	14.75

FOOTNOTES: For all spray work and journeyman rigging for spray work, also blowing off, \$0.80 per hour additional (applies only to workers doing rigging for spray work on off the floor work. Does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment. For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel, \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of fifty (50) feet from the ground or higher, \$0.50 per hour additional. For all preparatorial work and painting performed on open steel under forty (40) feet when no scaffolding is involved, \$0.50 per hour additional. For all swing stage work-window jacks and window belts-exterior and interior, \$0.50 per hour additional. For all spray work and sandblaster work to a scaffold height of forty (40) feet above the floor level, \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height, \$0.50 per hour additional. For all steeplejack work performed where the elevation is forty (40) feet or more, \$1.25 per hour

additional.

-----  
PAIN0312-001 06/01/2018

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

	Rates	Fringes
PAINTER		
Brush and roller.....	\$ 23.74	13.35
Spray, Sandblast, Sign		
Painting.....	\$ 24.94	13.35

-----  
PAIN0845-003 05/10/2018

CLINTON COUNTY; EATON COUNTY (does not include the townships of Bellevue and Olivet); INGHAM COUNTY; IONIA COUNTY (east of Hwy. M 66); LIVINGSTON COUNTY (west of the eastern city limits of Howell, including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); AND SHIAWASSEE COUNTY (Townships of Bennington, Laingsbury and Perry):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

-----  
PAIN0845-015 05/10/2018

MUSKEGON COUNTY; NEWAYGO COUNTY (except the Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OCEANA COUNTY; OTTAWA COUNTY (except the townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

-----  
PAIN0845-018 05/10/2018

ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); IONIA COUNTY (west of Hwy. M-66); KENT, MECOSTA AND MONTCALM COUNTIES; NEWAYGO COUNTY (Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OSCEOLA COUNTY (south of Hwy. #10); OTTAWA COUNTY (Townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

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

-----  
PAIN1011-003 06/02/2021

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

	Rates	Fringes
PAINTER.....	\$ 26.71	14.38

FOOTNOTES: High pay (bridges, overpasses, watertower): 30 to  
80 ft.: \$.65 per hour additional. 80 ft. and over: \$1.30  
per hour additional.

-----  
PAIN1474-002 06/01/2010

HURON COUNTY; LAPEER COUNTY (east of Hwy. M-53); ST. CLAIR,  
SANILAC AND TUSCOLA COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 23.79	12.02

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.  
Work with any hazardous material: \$1.00 per hour  
additional. Sandblasting, steam cleaning and acid cleaning:  
\$1.00 per hour additional. Ladder work at or above 40 ft.,  
scaffold work at or above 40 ft., swing stage, boatswain  
chair, window jacks and all work performed over a falling  
height of 40 ft.: \$1.00 per hour additional. Spray gun  
work, pick pullers and those handling needles, blowing off  
by air pressure, and any person rigging (setting up and  
moving off the ground): \$1.00 per hour additional.  
Steeplejack, tanks, gas holders, stacks, flag poles, radio  
towers and beacons, power line towers, bridges, etc.: \$1.00  
per hour additional, paid from the ground up.

-----  
PAIN1803-003 06/01/2019

ALCONA, ALPENA, ANTRIM, ARENAC, BAY, BENZIE, CHARLEVOIX,  
CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE,  
GRATIOT, IOSCO, ISABELLA, KALKASKA, LAKE, LEELANAU, MANISTEE,  
MASON, MIDLAND, MISSAUKEE, MONTMORENCY AND OGEMAW COUNTIES;  
OSCEOLA COUNTY (north of Hwy. #10); OSCODA, OTSEGO, PRESQUE  
ISLE, ROSCOMMON, SAGINAW AND WEXFORD COUNTIES:

	Rates	Fringes
PAINTER		
Work performed on water, bridges over water or moving traffic, radio and powerline towers, elevated tanks, steeples, smoke stacks over 40 ft. of falling heights, recovery of lead-based paints and any work associated with		

industrial plants, except  
maintenance of industrial

plants.....	\$ 25.39	14.68
All other work, including maintenance of industrial plant.....	\$ 25.39	14.68

FOOTNOTES: Spray painting, sandblasting, blowdown associated with spraying and blasting, water blasting and work involving a swing stage, boatswain chair or spider: \$1.00 per hour additional. All work performed inside tanks, vessels, tank trailers, railroad cars, sewers, smoke stacks, boilers or other spaces having limited egress not including buildings, opentop tanks, pits, etc.: \$1.25 per hour additional.

-----  
PLAS0514-001 06/01/2018

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

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

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
ZONE 1.....	\$ 31.47	13.81
ZONE 2.....	\$ 29.97	13.81

-----  
PLUM0190-003 05/01/2015

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

	Rates	Fringes
Plumber/Pipefitter - gas distribution pipeline: welding in conjunction		

with gas distribution		
pipeline work.....	\$ 33.03	20.19
All other work:.....	\$ 24.19	12.28

-----  
TEAM007-004 06/01/2020

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

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

	Rates	Fringes
TRUCK DRIVER		
AREA 1		
Euclids, double bottoms and lowboys.....	\$ 28.05	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.80	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 27.90	.50 + a+b
AREA 2		
Euclids, double bottomms and lowboys.....	\$ 24.895	.50 + a+b
Euclids, double bottoms and lowboys.....	\$ 28.15	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.90	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 28.00	.50 + a+b

Footnote:  
a. \$47.70 per week  
b. \$68.70 daily

-----  
TEAM0247-004 04/01/2013

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

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

Rates	Fringes
-------	---------

Sign Installer

AREA 1		
GROUP 1.....	\$ 21.78	11.83
GROUP 2.....	\$ 25.27	11.8375
AREA 2		
GROUP 1.....	\$ 22.03	11.83
GROUP 2.....	\$ 25.02	11.8375

FOOTNOTE:

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

SIGN INSTALLER CLASSIFICATIONS:

GROUP 1: performs all necessary labor and uses all tools required to construct and set concrete forms required in the installation of highway and street signs

GROUP 2: performs all miscellaneous labor, uses all hand and power tools, and operates all other equipment, mobile or otherwise, required for the installation of highway and street signs

-----  
TEAM0247-010 04/01/2018

AREA 1: LAPEER AND SHIAWASSEE COUNTIES

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

	Rates	Fringes
TRUCK DRIVER (Underground construction)		
AREA 1		
GROUP 1.....	\$ 23.82	19.04
GROUP 2.....	\$ 23.91	19.04
GROUP 3.....	\$ 24.12	19.04
AREA 2		
GROUP 1.....	\$ 24.12	19.04
GROUP 2.....	\$ 24.26	19.04
GROUP 3.....	\$ 24.45	19.04

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

SCOPE OF WORK: Excavation, site preparation, land balancing, grading, sewers, utilities and improvements; also including but not limited to, tunnels, underground piping, retention, oxidation, flocculation facilities, conduits, general excavation and steel sheeting for underground construction. Underground construction work shall not include any structural modifications, alterations, additions and repairs to buildings or highway work, including roads, streets, bridge construction and parking lots or steel erection.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low

boys, Euclid, double bottom and fuel trucks)

GROUP 2: Truck driver on dump trucks of 8 cubic yards capacity or over, pole trailers, semis and fuel trucks

GROUP 3: Truck driver on low boy, Euclid and double bottom

-----  
SUMI2002-001 05/01/2002

	Rates	Fringes
Flag Person.....	\$ 10.10	0.00
LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)....	\$ 20.30	12.90
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE).....	\$ 18.02	12.90
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 27.07	12.90
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 24.36	12.90
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 24.02	12.90
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 21.62	12.90

WORK CLASSIFICATIONS:

PAVEMENT MARKER GROUP 1: Drives or operates a truck mounted striper, grinder, blaster, groover, or thermoplastic melter for the placement or removal of temporary or permanent pavement markings or markers.

PAVEMENT MARKER GROUP 2: Performs all functions involved for the placement or removal of temporary or permanent pavement markings or markers not covered by the classification of Pavement Marker Group 1 or Line Protector.

LINE PROTECTOR: Performs all operations for the protection or removal of temporary or permanent pavement markings or markers in a moving convoy operation not performed by the classification of Pavement Marker Group 1. A moving convoy operation is comprised of only Pavement Markers Group 1 and

Line Protectors.

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

=====  
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

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

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

Union Rate Identifiers

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

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

### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

### Union Average Rate Identifiers

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

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

---

### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

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

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

Branch of Construction Wage Determinations

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

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

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

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

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

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

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

=====

END OF GENERAL DECISION"



# SAK™

Pipeline Infrastructure. Solved.™

636.385.1000 *tel*  
636.385.1100 *fax*  
864 Hoff Road  
O'Fallon, MO 63366  
www.sakcon.com

## Equal Employment Opportunity & Affirmative Action Policy Statement 41 CFR 60-20.3, 60-50.2

It is the policy of SAK Construction to not discriminate against any employee or applicant for employment because of age, race, religion, color, disability, gender, physical condition, developmental disability, sexual orientation, national origin, genetic information & testing, family & medical leave, gender identity/expression or veteran status and to take affirmative action to employ and to advance in employment all persons regardless of their status, and to base all employment decisions only on valid job requirements.

SAK Construction is committed to applying equal employment opportunity (EEO) policies in order to ensure that its policy of non-discrimination and affirmative action is accomplished. Specifically, SAK Construction does not discriminate on the basis of veteran status or disability status, and will not make any distinctions based on such. Employment decisions will be based on valid job requirements only.

This policy applies to all employment actions, including but not limited to recruitment, hiring, promotion, transfer, demotion, layoff, recall, termination, rates of pay or other forms of compensation and selection for training, including apprenticeship, at all levels of employment. Employees of and applicants to SAK Construction will not be subject to harassment, intimidation, threats, coercion, or discrimination because they have engaged or may engage in filing a complaint, assisting in a review, investigation, or hearing or have otherwise sought to obtain their legal rights related to any federal, state, or local law regarding EEO for qualified individuals with disabilities, or qualified protected veterans.

SAK Construction maintains that it will abide by any collective bargaining agreement by adhering to written conditions of employment set forth therein. Such agreements shall not be inconsistent with the guidelines of this Affirmative Action Plan.

We prohibit Retaliation against individuals who bring forth any complaint, orally or in writing, to the employer or the government, or against any individuals who assist or participate in the investigation of any complaint or otherwise oppose discrimination.

SAK Construction and its President, Jerry Shaw are committed to the principles of Affirmative Action and Equal Employment Opportunity.

This Affirmative Action Program is available for inspection by any employee or applicant for employment upon request, during normal business hours, in the O'Fallon, MO office. Interested persons should contact the appointed EEO Officer, **Angie Hirtz at (636) 385-1020** for assistance.

  
\_\_\_\_\_  
Jerry Shaw, President

10/14/2021  
\_\_\_\_\_  
Date

## SAK OSHA Citation History

### Cal-OSHA Citations:

1. [https://www.osha.gov/pls/imis/establishment.inspection\\_detail?id=1123422.015](https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1123422.015)  
2/4/16 Improper ventilation in tunnel. One of the two ventilation fans had been turned off due to not performing tunnel operations. Gas tester had taken reading at the wrong locations in the shaft/ tunnel entry. Fan was turned back on when discovered and readings were taken properly. Gas tester was retrained on proper testing and discussions were had about fan use. Fine \$185.00 Other than
2. [http://osha.gov/pls/imis/establishment.inspection\\_detail?id=1145861.015](http://osha.gov/pls/imis/establishment.inspection_detail?id=1145861.015)  
5/3/16 (1) Loose chain on floor of loader. Operator had taken a load chain and placed it on the floor of the loader for storage. All operators were retrained on the regulations of equipment and storage. Fine \$280.00 Other than  
(2) Welding lead had a splice within 10' of the stinger. During welding operations, the welding lead developed a bad spot 6' from the stinger the welder taped it up and continued using it. His plan was to report it and have it fixed at a later time. OSHA regs state no repairs with 10' of the singer. All employees were stood down to discuss the inspection results and trained on cord inspections of welding leads as well as temporary wiring. Fine \$280.00 Other than
3. [https://osha.gov/pls/imis/establishment.inspection\\_detail?id=1180719.015](https://osha.gov/pls/imis/establishment.inspection_detail?id=1180719.015)  
10/18/16 Annual crane inspection was found to have not included the Quadrennial Inspection. The crane inspection company inspected the crane and did not perform all of the required tests. Inspection company marked the Quad for 2019. Fine \$160.00 Other than Low.
4. [https://osha.gov/pls/imis/establishment.inspection\\_detail?id=1183994.015](https://osha.gov/pls/imis/establishment.inspection_detail?id=1183994.015)  
10/17/16 During a programed inspection inspector found 1 fire extinguisher without a tag. All extinguishers were re-inspected and tags checked. Fine \$200.00 Other than
5. [https://www.osha.gov/pls/imis/establishment.inspection\\_detail?id=1159731.015](https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1159731.015)  
6/29/16 during a follow up inspection for a recordable incident SAK was accused of not properly training all employees. SAK showed evidence that riding on equipment was prohibited and this was employee miss-conduct. During all new hire training, there was slides about not riding on any equipment. SAK and OSHA came to a formal agreement and submitted with the settlement a letter of Non-Admission. Fine \$485 Medium
6. [https://www.osha.gov/pls/imis/establishment.inspection\\_detail?id=1207920.015](https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1207920.015)  
2/7/17 Welding lead had a splice within 10' of the stinger. During welding operations, the welding lead developed a bad spot 6' from the stinger the welder taped it up and continued using it. His plan was to report it and have it fixed at a later time. OSHA regs state no repairs with 10' of the singer. All employees were stood down to discuss the inspection results and trained on cord inspections of welding leads as well as temporary wiring. Fine \$300.00 Other than
7. [https://www.osha.gov/pls/imis/establishment.inspection\\_detail?id=1215666.015](https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1215666.015)  
3/7/17 Portable eye was station was found to low on pressure. Eye was charged at the time of inspection and crew was re-trained. Fine \$300 other than low.

8. [https://www.osha.gov/pls/imis/establishment.inspection\\_detail?id=1500185.015](https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1500185.015)  
10/29/20 - CAL OSHA responded to an accident report. The investigation resulted in 1 regulatory and 2 general - other than citations:  
Citation 1 - Regulatory: Reported the inpatient hospitalization of an employee after the 8-hour required report time. Fine \$5,000  
Citation 2 - General - IIPP was found "ineffective" due to not identifying the hazard prior to the incident. Other Than citation. Fine \$935  
Citation 3 - General - CA Heat Illness program was not in full compliance. HIP was update and submitted to CAL-OSHA and approved. Crews were retrained on the program Other Than Citation. Fine \$935

Federal OSHA Citations:

1. [https://www.osha.gov/pls/imis/establishment.inspection\\_detail?id=1431185.015](https://www.osha.gov/pls/imis/establishment.inspection_detail?id=1431185.015)  
9/17/19 - SAK had an employee enter a defined crane swing radius zone during crane operations. The employee was not authorized to be in the crane swing zone at that time. SAK was cited with 3 serious citations and after investigation and the informal settlement conference, the citations were evacuated/ dismissed. The event was found to be employee misconduct.



# DOT Substance Abuse and Alcohol Misuse

## Policy and Procedures

Implementing U. S. Department of Transportation (49 CFR Part 40)  
Federal Motor Carrier Safety Administration Regulations (49 CFR Part 382)

Effective Date: January 1, 2009

## Table of Contents

<b>Introduction</b> .....	i
<b>Definitions</b> .....	ii
<b>I General</b>	
A. Policy and Purpose.....	8
B. SAK Construction LLC Responsibilities.....	8
C. Notification .....	9
D. Implementation .....	9
<b>II Requirements</b>	
A. Categories of Drivers Subject to Testing .....	10
B. Participation as a Requirement of Employment .....	10
C. Compliance Workday .....	10
D. Prohibited Behavior .....	10
E. Circumstances that Require Testing .....	12
F. Behavior that Constitutes a Refusal to Submit to a Test .....	13
G. Consequences with an Alcohol Concentration of 0.02 but less than 0.04.	14
H. Consequences of a Positive Test.....	14
<b>III Testing Procedures</b>	
A. Testing Procedures for Alcohol .....	16
B. Testing Procedures for Drugs and Controlled Substances.....	18
<b>IV Record Management, Results Reporting and Confidentiality</b>	
A. Retention of Records.....	22
B. Access to Facilities and Records.....	22
C. Medical Review Officer Notifications.....	22
D. Employee Notification .....	23
<b>V Employee/Supervisor Education and SAP Referral</b>	
A. General Information and Employee Education.....	24
B. Training for Supervisors .....	24
C. SAP Referral, Evaluation and Treatment.....	24

**Exhibit A:** *SAK Construction, LLC Drug Free Workplace and Substance Abuse Policy*

**SAK CONSTRUCTION LLC**  
**DOT Substance Abuse and Alcohol Misuse**  
**Policy and Procedures**

**Introduction**

It is SAK Construction LLC's ("SAK" or the "Company") intention to comply fully with 49 CFR Part 40 et seq. U.S. Department of Transportation Procedures for Transportation Workplace Drug and Alcohol Testing Programs effective August 1, 2001, as well as 49 CFR Part 382 et seq. of the Federal Motor Carrier Safety Administration's Controlled Substances and Alcohol Use and Testing Rule effective August 17, 2001. These Regulations are available on the internet at [www.dot.gov/ost/dapc](http://www.dot.gov/ost/dapc) and [www.fmcsa.dot.gov](http://www.fmcsa.dot.gov). Copies of both regulations will be available for inspection and review by contacting Angie Hirtz, SAK's Designated Employer Representative ("DER") at 636-379-2350, ext. 10.

Regulation 49 CFR Parts 40 and 382, to be implemented together, state the drug and alcohol testing and program requirements for CDL Drivers/operators as explained in the Regulations and in this DOT Policy. When the Department of Transportation's Regulations are amended and official guidance or interpretations are published, this DOT Policy will be considered to be automatically amended to be consistent with those amendments, official guidance/interpretations. SAK reserves the right to apply the amended requirements upon their effective date without giving prior notice to Drivers and/or applicants, unless the notice is required by the Department of Transportation or other applicable law. SAK will maintain records of the required changes and make them available upon request.

The Federal regulations take precedence over state or local law for all designated DOT safety-sensitive employees. State law that applies to criminal conduct is not preempted. If any part of this DOT Policy is inconsistent with federal or state law, such law will control over the policy solely with respect to the inconsistent provision and shall have no effect on the remainder of the policy.

## Definitions

The following definitions apply to terms used in this DOT Policy:

ALCOHOL: “Alcohol” means the intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols including methyl and isopropyl alcohol.

ALCOHOL CONCENTRATIONS or ALCOHOL CONTENT: “Alcohol Concentrations” (or “Alcohol Content:”) means the Alcohol in volume of breath expressed in terms of grams of Alcohol per 210 liters of breath as indicated by an Evidential Breath Test.

ALCOHOL TEST: An “Alcohol Test” is a test conducted by a Breath Alcohol Technician, or any other person approved by the Department of Transportation rules, using an Evidential Breath Testing Device to measure the amount of Alcohol Concentrations in volume of breath, or any other test used to detect the presence of Alcohol that is approved by the Federal Highway Administration.

ALCOHOL USE: “Alcohol Use” means the consumption of any beverage, mixture, or preparation, including any medication, containing Alcohol.

BREATH ALCOHOL TECHNICIAN OR BAT: A “Breath Alcohol Technician” or “BAT” means a trained individual who instructs and assists individuals in the Alcohol Test process and who operates the Evidential Breath Testing Device.

COLLECTION SITE: A “Collection Site” means specific medical facility which have been set up in advance by the Company to have all necessary and required test kits to perform mandated collections.

COMMERCIAL MOTOR VEHICLE OR CMV: “Commercial Motor Vehicle” or “CMV” means a motor vehicle or a combination of motor vehicles used in commerce to transport passengers or property in the motor vehicle:

- a. and a towed unit have a gross combination weight of 26,001 or more pounds inclusive of a towed unit with a gross vehicle weight rating of more than 10,000 pounds; or
- b. has a gross vehicle weight of 26,001 or more pounds; or
- c. is designed to transport 16 or more passengers, including the Driver; or
- d. is of any size and is used in the transportation of materials found to be hazardous for the purposes of the Hazardous Materials Transportation Act and which require the motor vehicle to be placarded under the Hazardous Materials Regulations (49 CFR 172, subpart F); or

- e. is a Company leased vehicle of any kind and made available for personal and business use by a Driver.

**CONFIRMATION TEST:**

- a For the Alcohol Test, a “Confirmation Test” means a second test following a Screening Test with a result of 0.02 or greater, that provides quantitative data of Alcohol Concentration. Confirmation of the Screening Test must be by an Evidential Breath Testing (“EBT”) device listed on the National Highway Traffic Safety Administration (“NHTSA”) Conforming Products List (“CPL”), and must be capable of printing out each test result and air blank, and must sequentially number each test.
- b For the Drug Test or Controlled Substances Test, a “Confirmation Test” means a second analytical procedure to identify the presence of a specific Drug or Drug metabolite which is independent of the screen test and which uses a different technique and chemical principle from that of the screen test in order to ensure reliability and accuracy. Gas Chromatography/Mass Spectrometry (“GC/MS”) is the authorized confirmation method for cocaine, marijuana, opiates, amphetamines, and phencyclidine.

**CONTROLLED SUBSTANCE:** “Controlled Substances” means cocaine, marijuana, opiates, amphetamines, and phencyclidine and any other substance determined by the DOT to be a “Controlled Substance”.

**CONTROLLED SUBSTANCE TEST or DRUG TEST:** “Controlled Substance Test” or “Drug Test” means a method for determining the presence of Controlled Substances or Drugs in a urine sample using a scientifically reliable method performed in accordance with procedures specified in 49 CFR 40.

**DESIGNATED EMPLOYER REPRESENTATIVE or DER:** “Designated Employer Representative” or “DER” means the primary contact person(s) designated by the Company to receive all information and/or reports from the Medical Review Officer, the Breath Alcohol Technician, the Substance Abuse Professional and the laboratories. The DER is also the designated contact person for Driver inquiries regarding this DOT Policy and the Federal Highway Administration (FHWA) regulations.

**DRIVER:** “Driver” means any Employee of the Company required to have and maintain a Commercial Drivers License (“CDL”) and/or who is subject to operating a Commercial Motor Vehicle at the direction of, or with the consent of the Company. The term “Driver” shall also include individuals applying for employment in such a position.

**DRUG:** “Drug” means any drug or substance which is indicated as banned, illegal, unauthorized, illicit or controlled by any lawful authority such as the DOT, or any other federal, state, or local government entity. This can also include any Drug or Substance an

owner of a project may indicate as illegal, banned, unauthorized and use of which is prohibited to those who enter the owner's facility or property.

EMPLOYEE: "Employee" means any Employee of the Company or any of its controlled affiliates and subsidiaries, whether employment status is permanent, full or part-time, temporary or leased but Employees represented by a collective bargaining agent shall be considered "Employees" for purposes of this DOT Policy only to the extent of the terms of any collective bargaining agreement between them and the Company or to the extent mandated by applicable law, regulations or rulings.

EMPLOYEE ASSISTANCE PROGRAM, EAP or EAP TRAINING: "Employee Assistance Program", "EAP" or "EAP Training" means program that provides training for Drivers, Employees, Supervisory Personnel and Company Officials, which addresses the effects and consequences of Drugs, Controlled Substance and Alcohol Use on personal health, safety, and the work environment.

EVIDENTIAL BREATH TESTING DEVICE or EBT: "Evidential Breath Testing Device" or "EBT" means a device approved by the National Highway Traffic Safety Administration ("NHTSA") and placed on the NHTSA's Conforming Products List and is used for the evidential testing of breath.

FOLLOW-UP TEST: "Follow-Up Test" means an Alcohol, Drug and /or Controlled Substances Test administered to a Driver who has violated the prohibitions of this DOT Policy and who has been rehired after completing the procedures for rehire and passing a return-to-duty Alcohol and/or Controlled Substances Test.

MEDICAL REVIEW OFFICER or MRO: "Medical Review Officer" or "MRO" means a licensed physician (medical doctor or doctor of osteopathy) responsible for receiving laboratory results generated by any Alcohol, Drug and/or Controlled Substance Test administered pursuant to this DOT Policy who has knowledge of substance use and abuse disorders and has appropriate medical training to interpret and evaluate an individual's confirmed Positive Result together with his or her medical history and any other relevant biomedical information.

POSITIVE RESULT: "Positive Result" means any confirmed result under an Alcohol, Drug, and/or Controlled Substance Test received from the MRO. A "first" positive is the first Positive Result on record with the Company. A "first" Positive Result will not be expunged or removed from the Driver's personnel drug file, it will always remain on record. A "second" Positive Result is any Positive Result after the "first" which is received by the MRO under any Drug, Controlled Substance or Alcohol Test administered pursuant to the Policy and filed on record with the Company.

POST-ACCIDENT TEST: "Post-Accident Test" means a test for banned, illegal, unauthorized, illicit or Drugs, Controlled Substances and/or Alcohol administered to a Driver following a job related personal injury accident which is covered by Workers' Compensation,

and/or administered to a Driver following an accident involving a Commercial Motor Vehicle and/or any Company owned or leased vehicle under the following circumstances:

- a. the Driver was performing Safety-Sensitive Functions with respect to the vehicle and the accident involved a loss of human life;
- b. the Driver of any Company vehicle receives a citation under federal, state or local law for a moving traffic violation arising from the accident; or
- c. any vehicle involved in the accident has to be towed from the scene;

PRE-EMPLOYMENT TEST: “Pre-employment Test” means a Drug and Controlled Substance Test administered to an individual prior to employment with the Company. Also, a pre-employment test is administered prior to the first time an individual performs a Safety-Sensitive Function after having been laid off for more than thirty (30) days from the Company or a position requiring the individual to hold a Commercial Driver's License or operate any Company vehicles or equipment. A Pre-Access or Pre-Project Test is the same as a Pre-Employment Test in that a Pre-Access/Pre-Project Test is performed before an Driver is permitted to enter or work on a specific project. Some owners require a Pre-Access or Pre-Project Test and a Positive Result for this type of test has the same effect as a Positive Result hereunder.

RANDOM TEST: “Random Test” means an Alcohol, Drug, and/or Controlled Substance Test administered to a Driver who has been randomly selected by a scientifically valid method from among the pool of Company Drivers subject to such tests.

REASONABLE SUSPICION TEST: “Reasonable Suspicion Test” means an Alcohol, Drug, and/or Controlled Substance Test administered to a Driver as a result of a Trained Supervisor's or Trained Company Official's belief that the Driver has violated the Alcohol, Drug, or Controlled Substances prohibitions of this DOT Policy. A Reasonable Suspicion determination must be based on specific, contemporaneous, articulated observations concerning the appearance, behavior, speech or body odors of the Driver. These observations may include indications of the chronic and withdrawal effects of Alcohol, Drugs, and/or Controlled Substances.

REFUSAL TO SUBMIT: “Refusal To Submit” means the refusal by a Driver to submit to any Alcohol, Drug, and/or Controlled Substance Test as well as any of the following circumstances:

- a. a Driver fails to provide adequate breath for testing without a valid medical explanation after he or she has received notice of the requirement for breath testing;
- b. a Driver fails to provide adequate urine for an Alcohol, Drug, and/or Controlled Substances Test without a valid medical explanation after he or she has received notice of the requirements for urine testing;

- c. a Driver engages in conduct that obstructs the testing process;
- d. a Driver fails to be readily available for Post-Accident Testing;
- e. a Driver fails to report to, and undergo Alcohol, Drug, and/or Controlled Substances Test, at a Collection Site as required.

RETURN-TO-DUTY TEST: “Return-To-Duty Test” means an Alcohol, Drug, and/or Controlled Substances Test administered to a Driver who has violated the prohibitions in this DOT Policy prior to the Driver being permitted to return to duty (rehire).

SAFETY-SENSITIVE FUNCTION: “Safety-Sensitive Function” means any work-related task performed which has or could have the potential to cause injury to one’s self or another Employee and/or the operation of a Commercial Motor Vehicle including but not limited to the following related activities:

- a. All time at a carrier or shipper plant, terminal, facility, or other property, or on any public property, waiting to be dispatched, unless the Driver has been relieved from duty by the Company. This includes employees who are “eligible” at work to drive a CMV at any time, including certain salespersons, clerks, secretaries, supervisors.
- b. All time inspecting equipment as required by 49 CFR Part 392.7, “Equipment, Inspection, and Use,” and 49 CFR Part 392.8, “Emergency Equipment and Use,” or otherwise inspecting, servicing, or conditioning any CMV at any time.
- c. All driving time, which is any time spent at the driving controls of a CMV in operation.
- d. All time, other than driving time, in or upon any CMV except time spent resting in a sleeper berth.
- e. All time loading or unloading a vehicle, supervising or assisting in loading or unloading, attending a vehicle being loaded or unloaded, remaining ready to operate the vehicle, or giving or receiving receipts for shipments loaded or unloaded.
- f. All time repairing, obtaining assistance for or remaining with a disabled vehicle.

SCREENING TEST: “Screening Test” means each of the following as well as initial test:

- a. for an Alcohol Test, a “Screening Test” means an analytical procedure to determine whether a Driver may have a prohibited concentration of Alcohol in his or her system;
- b. for the Drug, or Controlled Substances Test, a “Screening Test” means an immunoassay screen (or other DHHS-approved test) to eliminate "negative" urine specimens from further consideration.

SUBSTANCE ABUSE PROFESSIONAL or SAP: “Substance Abuse Professional” or “SAP” means a licensed physician (Medical Doctor or Doctor of Osteopathy), or a licensed or certified psychologist, social worker, Employee assistance professional, or addiction counselor (certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission or by the International Certification Reciprocity Consortium/Alcohol & Other Drug Abuse). All must have knowledge of and clinical experience in the diagnosis and treatment of disorders related to Alcohol, Drug, and/or Controlled Substance use and abuse.

SUPERVISOR: “Supervisor” means a management or supervisory Employee.

TRAINED SUPERVISOR OR TRAINED COMPANY OFFICIAL: “Trained Supervisor” or “Trained Company Official” is any Company Supervisor or any Company management Employee who has received a minimum of 60 minutes of training identifying the signs and symptoms of Alcohol abuse and a minimum of 60 minutes of training identifying the signs and symptoms of Alcohol, Drug, and Controlled Substance use and abuse.

TERMINATION: “Termination” means the termination of employment *for cause* as a result of Positive Results under this DOT Policy, which is a serious violation of Company safety rules. A Termination for a serious violations of safety rules prohibits the re-hire of any individual presently or in the future pursuant to Company Policy.

## I. GENERAL

### A. Policy and Purpose

1. SAK is committed to maintaining the health, safety and job performance of all employees. SAK also has an obligation to its employees, clients, customers and to the general public to provide a safe workplace. The use of controlled substances or the misuse of alcohol by employees is contrary to these high standards. SAK recognizes that the use of illegal drugs, the illegal use of legal drugs, and/or the misuse of alcohol may compromise a person's health and job performance, is a safety hazard for the individual and his/her fellow workers, and may harm the Company's business operations and the public at large.
2. The U. S. Department of Transportation ("DOT") and the U.S. DOT Federal Motor Carrier Safety Administration ("FMCSA") regulations, 49 CFR Part 40 and 49 CFR Part 382 respectively, apply to individuals who perform the Safety-Sensitive Functions defined in the regulations and employed by SAK.

This DOT Policy and program is designed to meet the DOT/FMCSA requirements and to establish the Company's Drug-Free Workplace.

3. Appendix A contains the SAK Construction LLC Drug-Free Workplace Policy as it pertains to all employees. Appendix A also states the disciplinary actions that will be taken when an employee violates the requirements established in the DOT or FMCSA regulations or Company policy.

### B. SAK Construction LLC Responsibilities

1. **Designated Employer Representative ("DER")** – SAK has named Angie Hirtz (636-379-2350, ext. 10) as the person responsible for overall management of this DOT Policy. The DER and other SAK designated individuals will be responsible for the implementation and management of the controlled substance and alcohol use and testing policy and procedures. The DER and the company's third-party program administrator will be responsible for providing oversight of SAK's program to ensure all company and regulatory requirements are met. All program records will be maintained by the DER or her designated representative. Prior to inclusion in the program, all affected employees will be made aware of the provisions of this DOT Policy.
2. **Supervisors, Drivers and SAK Officials** – Responsible SAK supervisors, officials and employees will receive training and education concerning this DOT Policy and the requirements of 49 CFR Part 40 and 49 CFR Part 382 respectively. Supervisors and responsible officials will receive the required training in order to allow them to make reasonable suspicion testing decisions. Drivers will receive the required training on the administration of the program and the health effects of use/misuse of alcohol or controlled substances.

3. **Notice of Test(s)** – Before performing each alcohol or controlled substances test under this DOT Policy, SAK will notify the Driver if the alcohol or controlled substances test is required by the FMCSA Regulations. The Driver will not be required to sign a consent to test statement.
4. **Testing Procedures** – SAK will ensure that all alcohol or controlled substance testing conducted under this DOT Policy is conducted in accordance with 49 CFR Part 40 procedures.

### C. Notification

SAK's DOT Policy and procedures shall be included with the appropriate company material provided to Drivers. SAK's DOT Policy will be posted in prominent locations that are readily accessible to all Drivers. All Drivers will be provided a complete copy of the company's DOT Policy and procedures, and information concerning the effects of alcohol and controlled substances use on an individual's health, work, and personal life; signs and symptoms of an alcohol or a controlled substances problem; and available methods of intervening when an alcohol or a controlled substances problem is suspected, including confrontation, and referral.

### D. Implementation

This DOT Policy will be implemented on January 1, 2009.

## II. REQUIREMENTS

### A. Categories of Drivers Subject to Testing

This DOT Policy applies to every Company Employee who is subject to the Commercial Driver's License requirement, and/or who operates a Company Commercial Motor Vehicle, and includes full time Drivers, casual, intermittent or occasional Drivers and any person applying for a job which may require being a Driver of a Company Commercial Motor Vehicle.

### B. Compliance as a Requirement of Employment

Compliance with this DOT Policy is a requirement for each applicable current Driver and is a condition of employment.

### C. Compliance Workday

Employees included in this program are subject to drug and alcohol testing when they are at work and performing "Safety-Sensitive Functions." Furthermore: A Driver must not consume alcohol while on duty, four hours prior to on duty time, and up to eight hours following an accident or until he/she undergoes a Post-accident test, whichever occurs first.

A Driver shall not report for duty or remain on duty that requires performing Safety-Sensitive Functions when the Driver uses any controlled substance, except when the use is at the instruction of a physician who has advised the Driver that the substance does not adversely affect the ability to safely operate a CMV.

### D. Prohibited Behavior

#### ALCOHOL

1. A Driver is prohibited from reporting for duty or remaining on duty to perform Safety Sensitive Functions while the Driver is under the influence of or impaired by Alcohol.
2. A Driver is prohibited from performing Safety-Sensitive Functions for 24 hours following an Alcohol Test result indicating an Alcohol Concentration of 0.02 or greater but less than 0.04.
3. A Driver is prohibited from reporting or remaining on duty if performing of Safety-Sensitive Function while having an Alcohol Concentration of 0.04 or greater.
4. A Driver is prohibited from being on duty or operating a Commercial Motor Vehicle while the Driver possesses Alcohol unless the Alcohol is manifested, if quantity requires, and/or is transported as part of a shipment. (In addition to the requirements of federal regulations, the Company prohibits Employees

from possessing Alcohol in a Company vehicle or at a work site at any time unless authorized by an Officer of the Company.)

5. A Driver is prohibited from using Alcohol while performing Safety-Sensitive Functions. (In addition to the requirements of federal regulations, the Company prohibits the use of Alcohol by Employees who are required to operate any Company vehicles or power equipment.)
6. A Driver is prohibited from performing Safety-Sensitive Functions within four (4) hours after using any Alcohol.
7. A Driver required to take a post-accident Alcohol test is prohibited from using Alcohol for eight (8) hours following the accident or until he/she undergoes a post-accident Alcohol test, whichever occurs first.
8. A Driver is prohibited from refusing to submit to a post-accident, random, reasonable suspicion, or follow-up Alcohol test. A Driver is prohibited from refusing to submit to a pre-employment, pre-project or return-to-duty Alcohol test if required to do so by the Company.

#### DRUGS AND CONTROLLED SUBSTANCES:

1. A Driver is prohibited from reporting for duty or remaining on duty to perform Safety-Sensitive Functions when the Driver uses any Drug or Controlled Substance, except when the use is pursuant to the instructions of a physician who has advised the Driver that the substance does not adversely affect the Driver's ability to safely perform their assigned tasks and/or operate a Commercial Motor Vehicle. The Driver who is using a Drug or Controlled Substance under the instructions of a physician is to notify his/her immediate Supervisor upon reporting to work after first use of the physician authorized substance.
2. A Driver is prohibited from reporting for duty, remaining on duty, or performing a Safety-Sensitive Function if the Driver has a Positive Result in any Screening test for Drugs or Controlled Substances.
3. A Driver is prohibited from Refusing to Submit to a Post-Accident, Random, Reasonable Suspicion, or Follow-Up Test for Drugs or Controlled Substances. A Driver is prohibited from Refusing to Submit to a Pre-Employment, pre-project or Return-to-Duty Tests if required to do so by the Company.

#### OTHER PROHIBITIONS

1. A Driver is prohibited from refusing to sign a Certification of Receipt for a copy of the Company's DOT Policy with associated materials upon receipt of the DOT Policy and materials.
2. Other prohibited conduct is specified in Appendix A.

3. Company rules not specifically cited in this DOT Policy remain in full force and effect.

#### E. Circumstances that Require Testing

1. **PRE-EMPLOYMENT TESTING.** All applicants for employment on a permanent or temporary basis as Drivers who require CDLs, or current employees who wish to remain Drivers, must be given pre-employment tests for controlled substances. A Pre-employment test is also required each time a Driver returns to work after a layoff period when the Driver has not been subjected to random controlled substances testing for more than 30 days or has been employed by another entity.
2. **REASONABLE SUSPICION TESTING.** FMCSA regulations require testing of a Driver if a trained supervisor has reasonable suspicion that the Driver has used a controlled substance or has misused alcohol. A supervisor's decision to conduct a Reasonable Suspicion Test must be based on specific (an identifiable event/observation), contemporaneous (the event/observation and initiation of the test must be in the same time frame), articulable (must be able to clearly describe the event/observation) observations concerning the appearance, behavior, speech, or body odor of the Driver. Reasonable Suspicion alcohol testing is permissible only if the supervisor's observations are made during, just preceding, or just after the Driver is performing Safety-Sensitive Functions or is attempting to perform Safety-Sensitive Functions. A Driver may be tested for controlled substances under reasonable suspicion based on observations at any time the Driver is on duty.
3. **POST-ACCIDENT TESTING.** The FMCSA regulations require testing in specific accidents that involve a CMV that requires a Driver who holds a CDL. An (DOT reportable) accident is defined as an occurrence involving a CMV operating on a public road that results in:
  - a. A fatality.
  - b. The Driver being issued a citation and:
    - i. There was an injury that resulted in the immediate medical treatment of a participant away from the scene of the accident.
    - ii. As a result of the accident, one or more motor vehicles incurred disabling damage that required a one or both to be transported away from the scene by a tow truck or other vehicle.

Post-accident Tests must be performed as soon as possible. Controlled substances tests must be performed within 32 hours following the accident. Alcohol tests should be performed within two hours and must be performed within 8 hours of the accident. If unable to conduct the alcohol test within 2 hours, a record will be maintained stating the reason a test was not promptly administered. If unable to conduct the

alcohol test within the 8 hour period, no further attempts to administer the test will be undertaken and a record of the reasons the test wasn't administered will be maintained.

Drivers subject to post-accident testing shall remain readily available for such testing or they may be deemed to have refused to submit to testing. Drivers subject to post-accident testing must refrain from using alcohol for 8 hours following the accident or until completing a post-accident alcohol test, whichever comes first.

**TREAT INJURIES FIRST. Accident victims' health and safety are always a higher priority than conducting an alcohol or controlled substances test.**

4. **RANDOM TESTING.** The FMCSA regulations require random testing for all Drivers subject to the CDL requirements. Random testing identifies Drivers who use controlled substances or misuse alcohol who might otherwise escape notice and avoid testing. The random testing is done on different dates and at different times to prevent Drivers from coordinating their controlled substances and alcohol use to the random testing schedule. Random testing is considered to be the strongest deterrent to Drivers' use of drugs and alcohol.
5. **RETURN-TO-DUTY TESTING.** If SAK allows an individual to return to work in a safety-sensitive function following certain prohibited conduct—a verified positive controlled substances test result, an alcohol result of 0.04 or greater, a refusal to submit to a test, or any other activity that violates provisions of the rule—that Driver must first be evaluated by a Substance Abuse Professional, participate in any treatment program prescribed, and pass a controlled substances and/or alcohol Return-to-duty Test. The Driver must have a verified negative controlled substances test result or an alcohol test result of less than 0.02 to return to a Safety-Sensitive Function.
6. **FOLLOW-UP TESTING.** Once allowed to return to duty, a Driver for whom treatment was recommended must be subject to unannounced follow-up testing for at least 12, but not more than 60, months. The frequency and duration of the follow-up testing will be recommended by the SAP as long as a minimum of six tests are performed during the first 12 months after the Driver has returned to duty. Follow-up testing is separate from and in addition to the regular random testing program. Drivers subject to follow-up testing must remain in the standard random pool and must be tested when selected.

F. Behavior that Constitutes a Refusal to Submit to a Test

A refusal to submit to a test includes: refusing to take the test; inability to provide sufficient quantities of breath, saliva, or urine to be tested without a valid medical explanation; tampering with or attempting to adulterate the specimen; interfering with the collection procedure; not immediately reporting to the collection site; failing to remain at the collection site until the collection process is complete; having a test result reported by a Medical Review Officer as adulterated or substituted; or leaving the scene of an accident without a valid reason before the tests have been conducted.

A refusal to test is treated like a positive test and the individual must be immediately removed from his/her safety-sensitive position. Further action will be determined based upon the SAK's policy.

#### G. Consequences for Drivers with an Alcohol Concentration of 0.02 or Greater but Less Than 0.04

No action shall be taken under DOT or FMCSA authority against the Driver based solely on test results of alcohol concentration results of less than 0.02. Alcohol concentrations results of less than 0.02 are considered negative for the purposes of the Company's testing program.

Any Driver who has an alcohol concentration of 0.02 or greater but less than 0.04 shall not perform or continue to perform Safety-Sensitive Functions until 24 hours following the administration of the test. No other action will be taken under FMCSA or DOT authority against the Driver based solely on test results showing an alcohol concentration of less than 0.04. Action based on SAK's policy, consistent with the law, may be taken.

#### H. Consequences of a Positive Test

1. Alcohol. Drivers who engage in prohibited alcohol conduct must be immediately removed from Safety-Sensitive Functions. Drivers who have engaged in alcohol misuse cannot return to Safety-Sensitive Duties until they have been evaluated by a Substance Abuse Professional and complied with any treatment recommendations to assist them with an alcohol problem. To further safeguard transportation safety, Drivers who have any alcohol concentration between 0.02 and 0.39 when tested just before, during or just after performing Safety-Sensitive Functions must also be removed from performing such duties for 24 hours.
2. Drug. A Driver must be removed from Safety-Sensitive Duty if he/she has a positive drug test result. The removal cannot take place until the MRO has interviewed the Driver and determined that the positive drug test resulted from the unauthorized use of a controlled substance. A Driver cannot be returned to Safety-Sensitive Duties until he/she has been evaluated by a Substance Abuse Professional, has complied with recommended rehabilitation, and has a negative result on a Return-to-duty drug test. Follow-up testing to monitor the Driver's continued abstinence from drug use is also required.
3. Reasonable Suspicion. If a supervisor feels there is reasonable suspicions to perform a test and it cannot be done – thus no result is available to use for decision making – the Driver must be removed from performing Safety-Sensitive Duties for at least 24 hours.

4. Discipline. Pursuant to Company Policy (which is employer-mandated, not FMLSA mandated):
- a. No applicant is to be permitted to work until a Negative Test Result of a Pre-Employment Controlled Substance Test is in hand. In the event of a Positive Pre-Employment Test Result the applicant will not be considered for employment presently or in the future. Re-testing for pre-employment due to a Positive Result is prohibited.
  - b. Any Employee who has a Positive Test Result (“first” positive) in any Alcohol, Drug and/or Controlled Substance Test for other than prescription Drugs taken pursuant to the prescription and supervision of the Employee’s personal physician, will be immediately terminated. A terminated individual can reapply for rehire with the Company after thirty (30) days if, at the individual’s expense, he/she has successfully completed rehabilitation acceptable to the Company Substance Abuse Professional and completed a negative return to duty Alcohol, Drug, and/or Controlled Substance Test. The Company is not obligated in any way to rehire such employee. Any employee who was terminated and rehired after a “first” Positive Result as defined in this DOT Policy for the use of any Alcohol, Drugs, and/or Controlled Substances is required, as a pre-condition to being rehired, to consent to unannounced Alcohol, Drug, and/or Controlled Substance Tests for a period of sixty (60) months after rehire to the Company. This will apply to all Employees and/or rehires who have had a “first” Positive Result under any alcohol, Drug, and/or Controlled Substance Test administered pursuant to this DOT Policy even if the Employee had successfully completed rehabilitation.
  - c. Any Employee who has a second Positive Result within sixty (60) months after his/her rehire will result in Termination without the possibility of rehire.
  - d. Nothing contained in this DOT Policy imposes any obligation on the Company to employ, continue the employment, or the rehire, of any person.

### III. TESTING PROCEDURES

Federal regulations require that SAK conduct drug and alcohol testing on covered Drivers. The Company will strictly adhere to all applicable standards of confidentiality. Testing records and results will be released only to those authorized by the FMLSA rules to received such information.

#### A. Testing Procedures for Alcohol

1. Drivers directed to undergo testing shall proceed immediately to the designated Collection Site as instructed.
2. Drivers shall follow all procedures and instructions given by the Breath Alcohol Technician including completing, signing, initialing, and/or dating any required forms or log books. Failure to do so shall be considered a Refusal to Submit except that it shall not be considered a Refusal to Submit when an Driver tests less than 0.02 Alcohol Concentration and the Driver fails to: (1) sign the certification in Step 4 of the breath Alcohol Test form, or (2) fails to initial the log book entry for a test.
3. The Collection Site shall provide visual and aural privacy to the Driver, sufficient to prevent unauthorized persons from seeing or hearing test results. All necessary equipment, personnel and materials for breath testing shall be provided at the location where the testing is conducted.
4. No unauthorized persons shall be permitted access to the testing location when the Evidential Breath Test remains unsecured or, in order to prevent such persons from seeing or hearing test results, at any time when testing is being conducted.
5. In unusual circumstances (e.g., when it is essential to conduct a test outdoors at the scene of an accident), a test may be conducted at a location that does not fully meet the requirements of paragraph 3, above. In such cases, the Driver shall be provided visual and aural privacy to the greatest extent practicable.
6. The BAT shall supervise only one Driver's use of the EBT at a time and shall not leave the Alcohol Test location while the testing procedure for a given Driver is in progress.
7. Upon entering the Collection Site, the Driver shall be required to provide the BAT with positive identification. Positive identification may take the form of a photo I.D. card or identification by a Supervisor or Company official. On request of the Driver, the BAT shall provide positive identification to the Driver.
8. If a Screening Test of a Driver indicates a breath Alcohol Concentration of less than 0.02, no further Alcohol Test of that Driver shall be conducted during this testing event.
9. If the result of a Screening Test of a Driver indicates a breath Alcohol Concentration of less than 0.02 the BAT shall transmit the result to the Company in a confidential manner,

and the Company shall receive and store the information so as to ensure that confidentiality is maintained.

10. If the result of a Screening Test of a Driver indicates a breath Alcohol Concentration of 0.02 or greater, the Driver shall be required to undergo a Confirmation Test.
11. If the Confirmation Test will be conducted by a different BAT, the BAT who conducts the Screening Test shall complete the sign and breath Alcohol Test form and log book entry. The BAT shall provide the Driver with Copy 2 of the form.
12. If the BAT other than the one who conducted the Screening Test is conducting the Confirmation Test, the Driver shall be required to provide positive identification in accordance with paragraph 7, above, to the new BAT and the Driver may request positive identification of the new BAT.
13. The Driver shall not eat, drink, put any object or substance in his or her mouth, and, to the extent possible, not belch during a waiting period before the Confirmation Test. This waiting period begins with the completion of the Screening Test, and shall not be less than 15 minutes.
14. The Confirmation Test shall be conducted within 30 minutes of the completion of the Screening Test.
15. If a BAT other than the one who conducted the Screening Test is conducting the Confirmation Test, the new BAT shall initiate a new breath Alcohol Test form. The Driver shall then complete Step 2 on the form, signing the certification. Refusal of the Driver to sign the certification shall be deemed a Refusal to Submit.
16. Refusal by the Driver to complete and sign the breath Alcohol Test form (Step 2), to provide breath, to provide an adequate amount of breath, or otherwise to cooperate with the testing process in a way that prevents the completion of the test shall be noted by the BAT in the "Remarks" section of the form. The testing process shall be terminated and the BAT shall immediately notify the DER.
17. Refusal by the Driver to complete and sign the breath Alcohol Test Form (Step 2), to provide breath, to provide an adequate amount of breath, or otherwise to cooperate with the testing process in a way that prevents the completion of the test shall be deemed a Refusal to Submit.
18. If a Screening or Confirmation Test cannot be completed, or if an event occurs that would invalidate the test, the BAT shall, if practicable, begin a new Screening or Confirmation Test, as applicable, using a new breath Alcohol Test form with a new sequential test number.

19. If a Driver is unable, or alleges that he or she is unable, to provide an amount of breath sufficient to permit a valid breath test because of a medical condition, the BAT shall again instruct the Driver to attempt to provide an adequate amount of breath.
  - a. If the Driver refuses to make the attempt, the BAT shall immediately inform the DER.
  - b. If the Driver attempts and fails to provide an adequate amount of breath, the BAT shall note in the "Remarks" section of the breath Alcohol form and immediately inform the DER.
  - c. If the Driver attempts and fails to provide an adequate amount of breath, the DER shall direct the Driver to obtain, as soon as practicable after the attempted provision of breath, an evaluation from a licensed physician who is acceptable to the Company concerning the Driver's medical ability to provide an adequate amount of breath.
  - d. If the licensed physician determines, in his or her reasonable medical judgment, that a medical condition has, or with a high degree of probability, could have, precluded the Driver from providing an adequate amount of breath, the Driver's failure to provide an adequate amount of breath shall not be deemed a Refusal to Submit. The physician shall provide to the Company a written statement of the basis for his or her conclusion.
  - e. If the licensed physician, in his or her reasonable medical judgment, is unable to determine that a medical condition has, or with a high degree of probability, could have, precluded the Driver from providing an adequate amount of breath, the Driver's failure to provide an adequate amount of breath shall be deemed a Refusal to Submit. The physician shall provide to the Company a written statement of the basis for his or her conclusion.

#### B. Testing Procedures for Drugs and Controlled Substances

1. Drivers directed to undergo a Drug or Controlled Substances Test shall proceed immediately to the designated Collection Site as instructed.
2. Drivers shall follow all procedures and instructions given by the Collection Site person. Failure to do so shall be considered a refusal to test.
3. The Collection Site person shall collect a urine sample from the Driver in accordance with the Department of Health and Human Services ("DHHS") approved procedures.
4. Drivers shall provide at least 45 ml of urine for testing. Drivers who fail to provide at least 45 ml of urine shall be subject to the provisions of paragraph 19, below.
5. The Collection Site person shall divide the specimen into two containers. One container shall contain at least 30 ml of urine and shall be the primary specimen. The other container shall contain at least 15 ml of urine and shall be the split specimen.

6. Both containers shall be shipped in a single shipping container, together with copies 1 and 2, and the split specimen copy of the chain of custody form, to the laboratory.
7. The laboratory shall log in the split specimen with the split specimen seal remaining intact. The laboratory shall store the split specimen securely in accordance with approved procedures.
8. The primary specimen shall undergo a screening (EIA) test for the presence of Drugs and Controlled Substances. If the Screening Test detects the presence of Drugs and/o Controlled Substances, the primary specimen shall undergo a Confirmation Test using GC/MS.
9. If the result of the test of the primary specimen is negative, the laboratory may discard the split specimen after a period of seven (7) days.
10. The Medical Review Officer shall review all primary specimen results. If the result of the test of the primary specimen is confirmed positive for the presence of Drugs or Controlled Substances, the MRO will interview the Driver to determine whether a legitimate, alternate medical explanation for the presence of the substance exists. The MRO shall also notify the Driver that the Driver has 72 hours in which to request a test of the split specimen if the confirmed Positive Result is verified as positive.

If the result of the test of the primary specimen is negative or unsuitable for testing, the MRO shall have the authority to direct a Driver to undergo a retest for presence of Drugs and/or Controlled Substances if, upon review of those results, the MRO has reason to believe the primary specimen has been adulterated.

11. If the primary specimen tests confirmed a Positive Result for the presence of Drugs and/or Controlled Substances, the Driver may request that the MRO direct in writing that the split specimen be tested in a different DHHS-certified laboratory for presence of the Drug(s), Controlled Substance(s), Drug metabolite(s) or Controlled Substances metabolite(s) for which a Positive Result was obtained in the test of the primary specimen. The MRO shall honor such request if it is made within 72 hours of the Driver having been notified of a verified Positive Result. The Driver shall be responsible for any and all costs associated with having the split specimen tested.
12. If the Driver has not contacted the MRO within 72 hours the Driver may present to the MRO information documenting that serious illness, injury, inability to contact the MRO, lack of actual notice of the verified positive test, or other unavoidable circumstances prevented the Driver contacting the MRO in a timely manner. If the MRO concludes that there is a legitimate explanation for the Employee's or Driver's failure to contact the MRO within 72 hours, the MRO shall direct that the reanalysis of the primary specimen or analysis of the split specimen, as applicable, be performed. The Driver may not request a reanalysis of the primary specimen.

13. If the test of the primary specimen yields a Positive Result, the laboratory shall retain the split specimen in frozen storage for one year from the date on which the laboratory acquires it. Following the end of the one year period, if not informed by the MRO that the Driver has requested a test of the split specimen, the laboratory may discard the split specimen.
14. If the MRO directs the first laboratory in writing to forward the split specimen to a second DHHS-certified laboratory, the second laboratory shall analyze the split specimen by GC/MS to reconfirm the presence of the Drug(s), Controlled Substance(s), Drug metabolite(s) or Controlled Substance metabolite(s) found in the primary specimen. Such GC/MS confirmation shall be conducted without regard to the cutoff levels established by DHHS. The split sample shall be retained in long-term storage for one year by the laboratory conducting the analysis of the split specimen (or longer if litigation concerning the test is pending).
15. The result of the test of the split specimen shall be transmitted by the second laboratory to the MRO.
16. If the analysis of the split specimen fails to reconfirm the presence of the Drug(s), Controlled Substance(s), Drug metabolite(s) or Controlled Substance metabolite(s) found in the primary specimen, or if the split specimen is unavailable, inadequate for testing, the MRO shall cancel the test and report the cancellation and the reasons for it to the DOT, the DER and the Driver.
17. A Driver whose primary specimen tests confirmed a Positive result for the presence of Drugs, Controlled Substances or their metabolites and who requests, in accordance with paragraph 11, above, that the split specimen be tested, shall not be permitted to perform Safety-Sensitive Functions pending the outcome of such test but, and, pursuant to Company Policy, shall be suspended without pay and subject to further disciplinary action. However, if the test of the split specimen does not reconfirm the presence of the Drug(s), Controlled Substance(s), Drug metabolite(s) or Controlled Substance metabolite(s) found in the primary specimen, the Driver shall be paid his/her straight time salary for all regularly-scheduled shifts he or she would have worked had the suspension not occurred.
18. If the result of the test of the split specimen fails to reconfirm the presence of the Drugs, Controlled Substances or their metabolites found in the primary specimen, the MRO shall cancel the test and report the reasons for it to the DOT, the Company and the Driver.
19.
  - a. If the Driver is unable to provide the required 45 ml of urine, the Driver shall be instructed to drink not more than 48 ounces of fluids and, after a period of up to three (3) hours, again attempt to provide a complete sample using a fresh collection container. The original insufficient specimen shall be discarded.
  - b. If the Driver is still unable to provide an adequate specimen, the insufficient specimen shall be discarded, testing discontinued, and the Collection Site shall notify the Company of the Driver's inability to provide an adequate sample.

- c. The MRO will refer the Driver for a medical evaluation to develop pertinent information concerning whether the Driver's inability to provide an adequate specimen is genuine or constitutes a Refusal to Submit. **(In Pre-Employment Test situations, and pursuant to Company Policy, the Company will not hire the individual, and the MRO is not required to make such a referral.)** Upon completion of the examination, the MRO shall report his or her conclusions to the Company in writing.
- d. If the MRO determines that the Driver's inability to provide an adequate sample is not genuine, the Driver shall be deemed to have Refused to Submit.

## **IV. RECORD MANAGEMENT, RESULTS REPORTING, AND CONFIDENTIALITY**

### **A. Retention of Records**

#### **1. General requirements**

- a. SAK shall maintain all alcohol and controlled substances testing information including test results and other appropriate records in a secure location with controlled access.
- b. The DER shall maintain a secured file system that will contain the alcohol and controlled substances testing records. Files shall be maintained as reasonably confidential. Employee files shall be handled on a strict “need to know” basis.

#### **2. Location of records**

All records shall be maintained at the company’s principal place of business and shall be made available for inspection at the company’s principal place of business after a request has been made by an authorized representative of the FMCSA.

### **B. Access to Facilities and Records**

1. Except as provided by law or expressly authorized by DOT and FMCSA regulations, the company shall not release Driver information unless directed by the specific, written consent of a Driver authorizing release of the information to an identified person.
2. Upon written request to the DER, a Driver may obtain copies of any records pertaining to the Driver’s alcohol or controlled substances tests.
3. The Company shall permit access to all facilities and records related to controlled substances and alcohol testing when requested by the Secretary of Transportation, any DOT agency, or any state or local officials with regulatory authority over SAK or any of its Drivers.
4. Records shall be made available to subsequent employers upon receipt of a written request from the Driver.

### **C. Medical Review Officer Notifications**

Medical Review Officers shall report the results of controlled substances tests to SAK in accordance with the requirements of 49 CFR Part 40. Regulation 49 CFR Part 40 is available for review from the DER.

#### D. Employee Notification

1. SAK shall notify a Driver (applicant) of the results of a Pre-employment controlled substance Test if the Driver requests such results in writing within 60 calendar days of being notified of the disposition of the employment applicant.
2. SAK shall notify a Driver of results of Random, Reasonable Suspicion and Post-Accident Tests for controlled substances if the test results are positive. The Company will also inform the Driver which controlled substances were verified as positive.
3. The DER or a designated SAK official shall make reasonable efforts to contact and request each Driver to contact and discuss results of a Controlled Substances Test, if the medical review officer has been unable to contact the Driver.
4. The DER manager or designated SAK official shall immediately notify the Medical Review Officer that the Driver has been notified to contact him or her.

## **V. EMPLOYEE/SUPERVISOR EDUCATION, AND SAP REFERRAL**

### **A. General Information and Employee Education**

1. Prior to the start of alcohol and controlled substances testing under this DOT Policy and procedure, and to each Driver subsequently hired or transferred into a position requiring driving a commercial motor vehicle, a copy of this DOT Policy and procedure and additional educational/informational materials will be provided.
2. Information provided to Drivers will include material concerning the effects of alcohol and controlled substances use on an individual's health, work, and personal life; signs and symptoms of an alcohol or a controlled substances problem; and available methods of intervening when an alcohol or a controlled substances problem is suspected, including confrontation and referral.
3. Supervisors or designated SAK officials shall ensure that each Driver is required to sign a statement certifying that he or she has received a copy of the company's DOT Policy and procedures and related informational materials. The signed statements shall be maintained by the DER.

### **B. Training for Supervisors**

1. All of SAK's supervisors and personnel designated to determine whether Reasonable Suspicion exists to require a Driver to undergo testing for alcohol misuse and/or controlled substances use shall receive at least 60 minutes of training on alcohol misuse and receive at least 60 minutes of training on controlled substances use.
2. Training shall cover the physical, behavioral, speech, and performance indicators of probable alcohol misuse and use of controlled substances. Recurrent training for supervisory personnel is not required.

### **C. SAP Referral, Evaluation and Treatment**

1. The Company will advise each Driver who has engaged in prohibited conduct under this DOT Policy of resources available to the Driver in evaluating and resolving problems associated with the misuse of alcohol and use of controlled substances, including the names, addresses, and telephone numbers of Substance Abuse Professionals and counseling and treatment programs.
2. If the Company elects to retain a Driver who has engaged in prohibited conduct under this DOT Policy, the Driver will not return to duty in a Safety-Sensitive Function until he/she undergoes a Return-To-Duty Alcohol Test with a result indicating an alcohol concentration of less than 0.02 if the conduct involved alcohol, or a controlled substances test with a verified negative result if the conduct involved a controlled substance.

In addition, each Driver shall be evaluated a second time by an SAP to determine that rehabilitation prescribed has been properly followed, and shall be subject to unannounced follow-up alcohol and controlled substances testing as directed by the SAP and consistent with this DOT Policy.

3. SAK or its designated agent will provide to each Driver (including an applicant or new employee) who violates a DOT drug and alcohol regulation a listing of SAPs readily available to the Driver with names, addresses, and telephone numbers.
4. SAK will comply with all requirements of 49 CFR Part 40 Subpart regarding Substance Abuse Professionals and the Return-to-Duty Process. Regulation 49 CFR Part 40 is available for review from the DER.

## EXHIBIT A

### **SAK CONSTRUCTION, LLC DRUG FREE WORKPLACE AND SUBSTANCE ABUSE POLICY**

#### **I. Purpose**

SAK Construction, LLC (“SAK” or “Company”) shares a nationwide concern over the growth of substance abuse within our society. Because of the nature of our business, we have been and continue to be firmly committed to a program of safety with a special concern in the areas of drug and alcohol use and/or abuse. Being under the influence of drugs or alcohol on the job poses safety and health risks, not only to the user but to all those who work with the user.

SAK recognizes that its own economic interests and future are dependent upon the well-being of its employees. In addition, under the Federal Drug-Free workplace Act of 1988 and the Omnibus Transportation Employee Testing Act of 1991, SAK must maintain a drug-free workplace. Accordingly, it is the intent of the Company to maintain, through drug testing and education, a safe, healthful, and drug-free working environment for all of our employees and to protect Company property, equipment, and operations. With these basic objectives in mind, we have reaffirmed our commitment to this Drug-Free WorkPlace and Substance Abuse Policy (“Policy” or “policy”). This Policy applies to all applicants and employees of the Company. In addition, CDL Drivers and certain other employees are also subject to the SAK Construction, LLC DOT Substance Abuse and Alcohol Misuse Policy (the “DOT Policy”).<sup>1</sup> You will be notified if the DOT Policy applies to you. Employees should contact Angie Hirtz if they have any questions regarding this policy.

#### **II. Policy**

In order to ensure a safe and efficient work environment, the following policy has been adopted to supplement existing personnel policies, practices, and procedures. This Policy does not prohibit the legitimate use or possession of medication or a controlled chemical substance which is prescribed or authorized by a licensed health care practitioner, provided that the use is consistent with the safe performance of the employee’s duties, as determined by Company management, and the medication or substance is used at the prescribed or authorized dosage. Employees should report prescribed medication to Company management prior to using it while working if the employee has concerns regarding the impact of the medication on safety or the employee’s performance of his/her duties.

---

<sup>1</sup> This Policy and the DOT Policy are separate and distinct policies. Nothing in this Policy does or shall be construed to diminish any aspect of the DOT Policy.

**A. Unlawful Distribution, Dispensation, Possession, or Use Prohibited.**

The distribution, sale, dispensation, concealment, possession, or use of any illegal or unauthorized drugs, alcohol, or any form of alcoholic beverage in the workplace or on Company property is prohibited and may result in immediate discharge and/or criminal prosecution. In addition, an employee who is involved in off-the-job illegal drug use or who is arrested for off-the-job drug activity may be considered to be in violation of this policy to the extent that, in the sole opinion of the Company, it may impair the employee's ability to perform the job or may threaten or impair the reputation, integrity, or morale of the Company.

**B. Reporting for Duty Under the Influence.**

Off-the-job alcohol or illegal drug use could adversely affect an employee's job performance and jeopardize the safety of other employees and the public. Employees are prohibited from reporting for duty or remaining on duty after having used or ingested illegal or unauthorized drugs or alcohol, or while under the influence of such drugs or alcohol. A positive test result based on testing under this policy shall be considered as reporting for duty under the influence. A violation of this Policy, or the Policy's spirit or intent while working, while on Company property, or while on Company business, is grounds for discipline, up to and including dismissal.

**C. Notification and Maintaining a Drug Free Workplace**

The Drug Free Workplace Act of 1988 requires employees to report controlled substance related convictions for conduct that occurs outside of the workplace, including pleas of nolo contendere (i.e., no contest), to the employer within 5 days of the conviction. A plea of guilty or bargaining for a suspended imposition or reduction of sentence is considered a conviction for the purpose of this policy.

Every employee who observes or has knowledge of an employee (including themselves) who has violated this policy must immediately report such violation to a supervisor or manager. In addition, every employee who observes or has knowledge of an employee (including themselves) using unauthorized drugs or alcohol (or who observes or has knowledge of an employee in an impaired condition which either affects the impaired employee's ability to perform his or her job duties or poses a hazard to the safety and welfare of the employee or others), must immediately report the incident to a supervisor or manager. Employees should immediately contact Angie Hirtz if they have any questions regarding this policy.

A limited exception to this policy exists for client entertainment and Company-sponsored social events. In business situations involving entertainment of customers or potential customers, alcohol may be offered as part of hosting a meeting or event. Consuming alcohol in such business settings shall not constitute a violation of this policy, so long as only modest amounts of alcohol are consumed and the judgment and behavior of the employee is not impacted. Similarly, alcohol may be served at Company functions, such as a holiday function, and, in such circumstances, consumption of alcohol in moderation shall not constitute a violation of this policy, with the understanding that employee are expected to conduct themselves in an appropriate and

professional manner at all times. Failure to abide by these limited exceptions shall constitute a violation of this policy and will subject the employee to disciplinary action.

#### **D. Illegal and Unauthorized Drugs**

The term “illegal drugs” includes, but is not limited to, marijuana, narcotics (such as heroin, opium, morphine and codeine), stimulants (such as cocaine, amphetamines, methamphetamines), depressants (such as barbiturates and minor tranquilizers), and hallucinogens (such as drugs known as PCP, mescaline, peyote, and LSD), other controlled substances (as set forth in Schedule I or Schedule II of the Federal Controlled Substances Act, 21 U.S.C. §801-12 and as defined in 21 C.F.R. Part 1308) and any other drugs, chemicals or abnormal substances which may affect the employee’s senses, motor functions or alter the individual’s perceptions while working.

“Unauthorized Drugs” includes prescription or over-the-counter drugs which have not been specifically prescribed to that person by a licensed physician or are not being used for the purpose or in the manner prescribed or medically intended.

#### **E. Testing**

This Policy establishes the following types of testing for alcohol or illegal or unauthorized drugs:

1. Post-offer/pre-employment screening;
2. Random testing;
3. Return to work following recall from layoff and following leaves of absence where the employee has been off work more than sixty (60) calendar days;
4. Reasonable suspicion testing;
5. Accident or unsafe practice testing; and
6. Follow-up testing.

#### **Post-Offer/Pre-Employment Testing -- Return to Work Testing**

All prospective employees must produce a negative result to a drug screen prior to starting work for the Company. Failure to submit to the drug screening process when requested or any positive test will result in a withdrawal of the conditional offer of employment.

All employees returning to work following a layoff or leave of absence lasting more than sixty (60) calendar days will be required to pass a drug screen prior to returning to work. A returning employee who receives a confirmed positive test result will be subject to disciplinary action, up to and including dismissal. The drug screen must be taken as soon after notification of return to work as possible, and no later than forty-eight (48) hours after notice of such testing.

### Random testing

Even in the absence of the existence of reasonable suspicion to believe an employee may be under the influence of, or impaired by, alcohol or drugs, the Company may require employees to undergo random, unannounced testing. All employees are subject to random, unannounced testing, which could result in testing of any employee, in any department, on any shift.

### Reasonable Suspicion Testing

Employees who are suspected of drug or alcohol use in violation of this policy, whether based on conduct, appearance, statements or other factors reasonably suggesting that the employee has used an unauthorized substance in violation of this policy, may be required to immediately report for drug and alcohol testing.

The criteria for requiring testing may include, but is not limited to, observations of appearance, conduct, behavior, speech, odors, statements by the employee, or if the employee is involved in or causes an accident or on-the-job injury or engages in conduct so that management has a reasonable basis to question the condition of the employee. Employees undergoing a reasonable suspicion testing process will be relieved of duties pending the drug/alcohol test results.

All employees should immediately report to a supervisor or manager any conduct or behavior by an employee which causes the employee to reasonably suspect a violation of this policy.

### Accident or Unsafe Practice Testing

Employees involved in an accident involving injury requiring medical attention (other than minor first aid type treatment) or significant property damage will be tested for the presence of illegal or unauthorized drugs and/or alcohol. Employees who engage in unsafe conduct or activities posing a danger to themselves, to others or to the overall operation of the Company, will likewise be subject to testing. These provisions are in addition to, and not a limitation of, the provisions for testing based on reasonable suspicion.

### Follow-up Testing

If an employee who voluntarily submits to an approved drug and/or alcohol program is permitted to return to work after violation of this policy, such as pursuant to a 'Last Chance Agreement,' the employee will be subject to random testing for twenty four months after their return to work, or longer as deemed necessary by any program guidelines. The reference in this policy to the possibility of a return to work or follow-up testing does not in any way limit the discretion of the Company to discharge an employee for violation of this policy.

## **F. Privacy**

The Company will use its reasonable efforts to maintain the result of any drug screening in confidence and employees should do the same. The Company recognizes that persons who do not

violate this Policy may be subject to some inconvenience. However, this policy is intended to protect the Company and the safety of all employees, as well as comply with the law, and the Company will make reasonable efforts to minimize any inconvenience.

### **G. Investigation and Discipline**

The Company reserves the right, at all times while an employee is working and/or is on Company property or Company business, to have management and/or authorized personnel conduct unannounced searches and inspections of employees and their effects, including searches of desks, lockers, briefcases, cases, clothing (including purses), vehicles, and other areas for the purpose of determining if any such person is possessing, using, concealing or distributing any illegal or unauthorized drug and/or alcohol. Nothing herein is intended to limit the rights of the Company to conduct searches to searches for drugs or alcohol.

Employees are required to fully cooperate with such searches and investigation and the refusal or failure to fully cooperate may result in disciplinary action up to and including discharge.

No testing or screening will be conducted without the written consent of the person to be tested. The Company may discipline, up to and including discharge, an employee (or refuse to consider or withdraw the conditional offer of an applicant) who refuses to consent or submit to testing under this policy or who attempts to circumvent or evade accurate test results. The Company may also discipline employees who test positive for the use of prohibited drugs or alcohol in violation of this policy, up to and including discharge, or may require the employee to submit to other conditions, including, but not limited to, referral to an authorized program at the discretion of the Company. However, nothing herein requires the Company to permit an employee who violates this policy to participate in a treatment program or follow-up plan. Any violation of this policy may result in disciplinary action up to and including discharge, even for a first offense.

### **III. Testing**

Testing under this policy will be conducted by an independent facility selected by the Company that conforms to those standards of specimen collection as established by the U.S. Department of Transportation's Procedures for Transportation Workplace Drug Testing ("DOT Procedures").

Drug and/or alcohol testing may be through urine, blood, breath sample, or other analysis to determine the presence of any illegal or unauthorized drug(s) and/or alcohol. A urinalysis drug screen may be used as the standard drug testing method and an evidential breath test as the standard alcohol testing method, although other means of testing may be employed. Consent to collect the sample and perform testing will be obtained and chain of custody collection procedures will be used. Refusal by an applicant/employee to submit to testing under this policy, or attempting to circumvent or evade accurate test results, may result in the applicant/employee's immediate discharge.

The Company will pay all actual costs for drug and/or alcohol testing required by the Company. Employees tested under this policy will be allowed to return to work, pending test results, unless the employee has been tested based on reasonable suspicion (as discussed above).

Employees will remain on the clock and be paid for all time spent while being tested. Employees will not be paid for time away from work as the result of being sent home based on reasonable suspicion or for time away from work following a positive test.

A proper chain of custody will be maintained on all samples, including that the employee will sign the sealed sample. At the employee's written request within 72 hours of the test result, a portion of the original sample, known as a split sample, may be analyzed at a different facility; however, the employee will pay all expenses for such additional analysis and the employee is not permitted to submit a different sample for analysis. The employee may make a written request to obtain a copy of test results.

Employees may not independently submit samples for testing or submit test results for testing that the employee caused to be performed outside this policy. Separate test results obtained by the employee, except for the split sample allowed under this policy, will not be considered by the Company.

#### **IV. Test Results**

Initial test results for the presence of drugs or alcohol will be classified as either positive or negative. With respect to drug testing, it is anticipated that the initial testing technique to be used for urine samples will be an immunoassay screen. If the immunoassay screen registers a positive result, a gas chromatography/mass spectrometry confirmatory test will be performed to confirm the presence and to identify the drugs in the employee's systems. The levels for determining a positive test result for the presence of drugs will be in accordance with the standards established by the approved and certified testing facility. A specimen will be treated as negative if the result of the initial test or the confirmatory test is negative. All urine samples will be "split samples" so that if the original specimen test is positive, the employee may request the retained sample be tested. This request must be received by the Company in writing within seventy-two (72) hours of the employee's notice of a positive result. The split sample will be tested at a different NIDA certified laboratory, at the employee's expense. If the second test is negative, the test will be deemed to be negative.

With respect to alcohol testing, it is anticipated that the initial testing will be done by using Evidential Breath Testing Devices (EBT). Breath alcohol testing requires the individual to provide a breath sample. A blood alcohol concentration of .04 or greater will constitute a positive result. Initial positive test results will be verified through additional analysis prior to any reporting of a positive result.<sup>2</sup>

The person being tested may request in writing, within twenty-four hours of the test results, the opportunity to provide information concerning any drugs or medication recently used that may have affected test results.

Verified positive test results will be kept confidential between those persons at the Company with a need to know the results, the medical facility/laboratory, and the employee.

---

<sup>2</sup> The blood alcohol concentration in this Policy is based on the needs of this Policy. The blood alcohol concentration of the DOT Policy is based on the needs of the DOT Policy.

However, the Company reserves the right to refer to the results at any hearing, arbitration, or other proceeding, including litigation, initiated regarding the employee.

Confirmed positive test results for drugs and/or alcohol under this policy will be considered as reporting for duty under the influence under this policy.

**V. Last Chance Agreements**

Employees who violate this policy may request that the Company consider a “Last Chance.” Whether the Company will allow such a “Last Chance” Agreement is based on the particular circumstances and such decision is at the sole discretion of the Company.

As noted above, the Company is vitally concerned with safety. Any “Last Chance” Agreement will require, but is not limited to, that the employee recognize a violation of this policy and that the Company could properly discharge the employee; that *eligibility* (not a promise) to return/continue to work requires that the employee satisfactorily participate in and complete, at the employee’s expense, a Company approved program suitable to the individual circumstances; that the employee screen negative on a Company-directed drug and alcohol test; that the employee submit to ongoing testing for twenty four months after their return to work (or longer as deemed necessary by the treatment program); and agreement that any failure to comply with any Company policy for a period of twenty-four months may result in immediate discharge.

**VI. Additional Provisions Applicable to CDL/Safety Sensitive Employees**

All employees defined as “Driver” as that term is defined in the DOT Policy (including employees required to hold CDLs and/or who may drive a Commercial Motor Vehicle) will also be subject to the DOT Policy.

Policy Approved:

Signature on File: Jerome Shaw

Date: December 8, 2008



**ACKNOWLEDGEMENT OF DRUG-FREE WORKPLACE AND SUBSTANCE ABUSE POLICY AND CONSENT TO SEARCH OR INSPECTION IN ACCORDANCE WITH POLICY**

It is the policy of SAK Construction, LLC to absolutely prohibit the use, possession, concealment, sale or distribution or being under the influence of illegal or unauthorized drugs and/or alcohol while entering, on or departing Company property, work areas, work locations or while in the course and scope of employment as a Company employee.

For your protection and for the protection of other employees (and in compliance with law), you are required upon request to submit your person, personal effects, vehicle, belongings and all items to a search or inspection in accordance with the Company’s Drug-Free WorkPlace and Substance Abuse Policy. If any items prohibited on Company property are found or if you refuse to submit to an inspection or search of yourself and/or your effects, you will be denied access to Company property. The Company will also undertake such disciplinary action as set forth in its Drug-Free WorkPlace and Substance Abuse Policy.

The Company’s Drug-Free WorkPlace and Substance Abuse Policy is posted at various locations and you should carefully read and understand the Policy prior to signing this Consent Form. Contact Angie Hirtz if you have not reviewed the Drug-Free WorkPlace and Substance Abuse Policy.

\*\*\*\*\*

**I acknowledge that I have been provided the SAK Construction, LLC Drug-Free WorkPlace and Substance Abuse Policy. I have read and understand the Policy, and I agree to fully abide by the Policy.**

**Also, I agree and consent to any search and inspection of my person, personal effects and property, including my vehicle and its contents, under the Policy. I further agree to hold the Company, its agents, directors, officers and employees harmless from any liability in connection with any search or inspection pursuant to the Company’s Drug-Free WorkPlace and Substance Abuse Policy.**

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date



## **DOT Substance Abuse and Alcohol Misuse Policy and Procedures**

### Acknowledgement of Receipt and Understanding

I HEREBY ACKNOWLEDGE that I have received, read, and understand SAK Construction LLC's *DOT Substance Abuse and Alcohol Misuse Policy and Procedures* ("DOT Policy") and understand that I must abide by the terms as a condition of employment. I understand that, based on Department of Transportation regulations and the requirements established by SAK Construction LLC, I am subject to drug and alcohol testing.

I understand that refusal to submit to a drug or alcohol test is a violation of Department of Transportation regulations and SAK Construction LLC policies, and may result in disciplinary action, including suspension (with or without pay) or termination from my job. I also understand that I may be provided with information concerning the health effects, the use/misuse and consequences of illegal/controlled substances and alcohol.

I understand and acknowledge that the aforementioned testing policy and procedures are a part of the terms and conditions of my employment. I agree to abide by them.

MY SIGNATURE BELOW DEMONSTRATES THAT I HAVE RECEIVED, READ AND UNDERSTAND THE REQUIREMENTS STATED ABOVE.

\_\_\_\_\_  
Signature of Employee/Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Social Security Number



## DOT Substance Abuse and Alcohol Misuse Policy and Procedures

### Acknowledgement of Receipt and Understanding

I HEREBY ACKNOWLEDGE that I have received, read, and understand SAK Construction LLC's *DOT Substance Abuse and Alcohol Misuse Policy and Procedures* ("DOT Policy") and understand that I must abide by the terms as a condition of employment. I understand that, based on Department of Transportation regulations and the requirements established by SAK Construction LLC, I am subject to drug and alcohol testing.

I understand that refusal to submit to a drug or alcohol test is a violation of Department of Transportation regulations and SAK Construction LLC policies, and may result in disciplinary action, including suspension (with or without pay) or termination from my job. I also understand that I may be provided with information concerning the health effects, the use/misuse and consequences of illegal/controlled substances and alcohol.

I understand and acknowledge that the aforementioned testing policy and procedures are a part of the terms and conditions of my employment. I agree to abide by them.

MY SIGNATURE BELOW DEMONSTRATES THAT I HAVE RECEIVED, READ AND UNDERSTAND THE REQUIREMENTS STATED ABOVE.

\_\_\_\_\_  
Signature of Employee/Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Social Security Number



## **DRUG FREE WORKPLACE AND SUBSTANCE ABUSE POLICY**

### **I. Purpose**

SAK Construction, LLC (“SAK” or “Company”) shares a nationwide concern over the growth of substance abuse within our society. Because of the nature of our business, we have been and continue to be firmly committed to a program of safety with a special concern in the areas of drug and alcohol use and/or abuse. Being under the influence of drugs or alcohol on the job poses safety and health risks, not only to the user but to all those who work with the user.

SAK recognizes that its own economic interests and future are dependent upon the wellbeing of its employees. In addition, under the Federal Drug-Free Workplace Act of 1988 and the Omnibus Transportation Employee Testing Act of 1991, SAK must maintain a drug-free workplace. Accordingly, it is the intent of the Company to maintain, through drug testing and education, a safe, healthful, and drug-free working environment for all of our employees and to protect Company property, equipment, and operations. With these basic objectives in mind, we have reaffirmed our commitment to this Drug-Free Workplace and Substance Abuse Policy (“Policy” or “policy”). This Policy applies to all applicants and employees of the Company. In addition, CDL Drivers and certain other employees are also subject to the SAK Construction, LLC DOT Substance Abuse and Alcohol Misuse Policy (the “DOT Policy”).<sup>1</sup> You will be notified if the DOT Policy applies to you. Employees should contact Angie Hirtz if they have any questions regarding this policy.

### **II. Policy**

In order to ensure a safe and efficient work environment, the following policy has been adopted to supplement existing personnel policies, practices, and procedures. This Policy does not prohibit the legitimate use or possession of medication or a controlled chemical substance which is prescribed or authorized by a licensed health care practitioner, provided that the use is consistent with the safe performance of the employee’s duties, as determined by Company management, and the medication or substance is used at the prescribed or authorized dosage. Employees should report prescribed medication to Company management prior to using it while working if the employee has concerns regarding the impact of the medication on safety or the employee’s performance of his/her duties.

<sup>1</sup> This Policy and the DOT Policy are separate and distinct policies. Nothing in this Policy does or shall be construed to diminish any aspect of the DOT Policy.

---

---

**A. Unlawful Distribution, Dispensation, Possession, or Use Prohibited.**

The distribution, sale, dispensation, concealment, possession, or use of any illegal or unauthorized drugs, alcohol, or any form of alcoholic beverage in the workplace or on Company property is prohibited and may result in immediate discharge and/or criminal prosecution. In addition, an employee who is involved in off-the-job illegal drug use or who is arrested for off the-job drug activity may be considered to be in violation of this policy to the extent that, in the sole opinion of the Company, it may impair the employee's ability to perform the job or may threaten or impair the reputation, integrity, or morale of the Company.

**B. Reporting for Duty Under the Influence.**

Off-the-job alcohol or illegal drug use could adversely affect an employee's job performance and jeopardize the safety of other employees and the public. Employees are prohibited from reporting for duty or remaining on duty after having used or ingested illegal or unauthorized drugs or alcohol, or while under the influence of such drugs or alcohol. A positive test result based on testing under this policy shall be considered as reporting for duty under the influence. A violation of this Policy, or the Policy's spirit or intent while working, while on Company property, or while on Company business, is grounds for discipline, up to and including dismissal.

**C. Notification and Maintaining a Drug Free Workplace**

The Drug Free Workplace Act of 1988 requires employees to report controlled substance related convictions for conduct that occurs outside of the workplace, including pleas of nolo contendere (i.e., no contest), to the employer within 5 days of the conviction. A plea of guilty or bargaining for a suspended imposition or reduction of sentence is considered a conviction for the purpose of this policy.

Every employee who observes or has knowledge of an employee (including themselves) who has violated this policy must immediately report such violation to a supervisor or manager. In addition, every employee who observes or has knowledge of an employee (including themselves) using unauthorized drugs or alcohol (or who observes or has knowledge of an employee in an impaired condition which either affects the impaired employee's ability to perform his or her job duties or poses a hazard to the safety and welfare of the employee or others), must immediately report the incident to a supervisor or manager. Employees should immediately contact Angie Hirtz if they have any questions regarding this policy.

A limited exception to this policy exists for client entertainment and Company-sponsored social events. In business situations involving entertainment of customers or potential customers, alcohol may be offered as part of hosting a meeting or event. Consuming

---

alcohol in such business settings shall not constitute a violation of this policy, so long as only modest amounts of alcohol are consumed and the judgment and behavior of the employee is not impacted. Similarly, alcohol may be served at Company functions, such as a holiday function, and, in such circumstances, consumption of alcohol in moderation shall not constitute a violation of this policy, with the understanding that employees are expected to conduct themselves in an appropriate and professional manner at all times. Failure to abide by these limited exceptions shall constitute a violation of this policy and will subject the employee to disciplinary action.

#### **D. Illegal and Unauthorized Drugs**

The term "illegal drugs" includes, but is not limited to, marijuana, narcotics (such as heroin, opium, morphine and codeine), stimulants (such as cocaine, amphetamines, methamphetamines), depressants (such as barbiturates and minor tranquilizers), and hallucinogens (such as drugs known as PCP, mescaline, peyote, and LSD), other controlled substances (as set forth in Schedule I or Schedule II of the Federal Controlled Substances Act, 21 U.S.C. §801-12 and as defined in 21 C.F.R. Part 1308) and any other drugs, chemicals or abnormal substances which may affect the employee's senses, motor functions or alter the individual's perceptions while working.

"Unauthorized Drugs" includes prescription or over-the-counter drugs which have not been specifically prescribed to that person by a licensed physician or are not being used for the purpose or in the manner prescribed or medically intended.

#### **E. Testing**

This Policy establishes the following types of testing for alcohol or illegal or unauthorized drugs:

1. Post-offer/pre-employment screening;
2. Random testing;
3. Return to work following recall from layoff and following leaves of absence where the employee has been off work more than sixty (60) calendar days;
4. Reasonable suspicion testing;
5. Accident or unsafe practice testing; and
6. Follow-up testing.

---

---

### Post-Offer/Pre-Employment Testing -- Return to Work Testing

All prospective employees must produce a negative result to a drug screen prior to starting work for the Company. Failure to submit to the drug screening process when requested or any positive test will result in a withdrawal of the conditional offer of employment.

All employees returning to work following a layoff or leave of absence lasting more than sixty (60) calendar days will be required to pass a drug screen prior to returning to work. A returning employee who receives a confirmed positive test result will be subject to disciplinary action, up to and including dismissal. The drug screen must be taken as soon after notification of return to work as possible, and no later than forty-eight (48) hours after notice of such testing.

### Random Testing

Even in the absence of the existence of reasonable suspicion to believe an employee may be under the influence of, or impaired by, alcohol or drugs, the Company may require employees to undergo random, unannounced testing. All employees are subject to random, unannounced testing, which could result in testing of any employee, in any department, on any shift.

### Reasonable Suspicion Testing

Employees who are suspected of drug or alcohol use in violation of this policy, whether based on conduct, appearance, statements or other factors reasonably suggesting that the employee has used an unauthorized substance in violation of this policy, may be required to immediately report for drug and alcohol testing.

The criteria for requiring testing may include, but is not limited to, observations of appearance, conduct, behavior, speech, odors, statements by the employee, or if the employee is involved in or causes an accident or on-the-job injury or engages in conduct so that management has a reasonable basis to question the condition of the employee. Employees undergoing a reasonable suspicion testing process will be relieved of duties pending the drug/alcohol test results.

All employees should immediately report to a supervisor or manager any conduct or behavior by an employee which causes the employee to reasonably suspect a violation of this policy.

---

---

### Accident or Unsafe Practice Testing

Employees involved in an accident involving injury requiring medical attention (other than minor first aid type treatment) or significant property damage will be tested for the presence of illegal or unauthorized drugs and/or alcohol. Employees who engage in unsafe conduct or activities posing a danger to themselves, to others or to the overall operation of the Company, will likewise be subject to testing. These provisions are in addition to, and not a limitation of, the provisions for testing based on reasonable suspicion.

### Follow-up Testing

If an employee who voluntarily submits to an approved drug and/or alcohol program is permitted to return to work after violation of this policy, such as pursuant to a 'Last Chance Agreement,' the employee will be subject to random testing for twenty-four months after their return to work, or longer as deemed necessary by any program guidelines. The reference in this policy to the possibility of a return to work or follow-up testing does not in any way limit the discretion of the Company to discharge an employee for violation of this policy.

## **F. Privacy**

The Company will use its reasonable efforts to maintain the result of any drug screening in confidence and employees should do the same. The Company recognizes that persons who do not violate this Policy may be subject to some inconvenience. However, this policy is intended to protect the Company and the safety of all employees, as well as comply with the law, and the Company will make reasonable efforts to minimize any inconvenience.

## **G. Investigation and Discipline**

The Company reserves the right, at all times while an employee is working and/or is on Company property or Company business, to have management and/or authorized personnel conduct unannounced searches and inspections of employees and their effects, including searches of desks, lockers, briefcases, cases, clothing (including purses), vehicles, and other areas for the purpose of determining if any such person is possessing, using, concealing or distributing any illegal or unauthorized drug and/or alcohol. Nothing herein is intended to limit the rights of the Company to conduct searches to searches for drugs or alcohol.

Employees are required to fully cooperate with such searches and investigation and the refusal or failure to fully cooperate may result in disciplinary action up to and including discharge.

No testing or screening will be conducted without the written consent of the person to be tested. The Company may discipline, up to and including discharge, an employee (or refuse to consider or withdraw the conditional offer of an applicant) who refuses to consent or submit to testing under this policy or who attempts to circumvent or evade accurate test results. The Company may also discipline employees who test positive for the use of prohibited drugs or alcohol in violation of this policy, up to and including discharge, or may require the employee to submit to other conditions, including, but not limited to, referral to an authorized program at the discretion of the Company. However, nothing herein requires the Company to permit an employee who violates this policy to participate in a treatment program or follow-up plan. Any violation of this policy may result in disciplinary action up to and including discharge, even for a first offense.

### **III. Testing**

Testing under this policy will be conducted by an independent facility selected by the Company that conforms to those standards of specimen collection as established by the U.S. Department of Transportation's Procedures for Transportation Workplace Drug Testing ("DOT Procedures").

Drug and/or alcohol testing may be through urine, blood, breath sample, or other analysis to determine the presence of any illegal or unauthorized drug(s) and/or alcohol. A urinalysis drug screen may be used as the standard drug testing method and an evidential breath test as the standard alcohol testing method, although other means of testing may be employed. Consent to collect the sample and perform testing will be obtained and chain of custody collection procedures will be used. Refusal by an applicant/employee to submit to testing under this policy, or attempting to circumvent or evade accurate test results, may result in the applicant/employee's immediate discharge.

The Company will pay all actual costs for drug and/or alcohol testing required by the Company. Employees tested under this policy will be allowed to return to work, pending test results, unless the employee has been tested based on reasonable suspicion (as discussed above). Employees will remain on the clock and be paid for all time spent while being tested. Employees will not be paid for time away from work as the result of being sent home based on reasonable suspicion or for time away from work following a positive test.

A proper chain of custody will be maintained on all samples, including that the employee will sign the sealed sample. At the employee's written request within 72 hours of the test result, a portion of the original sample, known as a split sample, may be analyzed at a different facility; however, the employee will pay all expenses for such additional analysis and the employee is not permitted to submit a different sample for analysis. The employee may make a written request to obtain a copy of test results.

---

Employees may not independently submit samples for testing or submit test results for testing that the employee caused to be performed outside this policy. Separate test results obtained by the employee, except for the split sample allowed under this policy, will not be considered by the Company.

#### **IV. Test Results**

Initial test results for the presence of drugs or alcohol will be classified as either positive or negative. With respect to drug testing, it is anticipated that the initial testing technique to be used for urine samples will be an immunoassay screen. If the immunoassay screen registers a positive result, a gas chromatography/mass spectrometry confirmatory test will be performed to confirm the presence and to identify the drugs in the employee's systems. The levels for determining a positive test result for the presence of drugs will be in accordance with the standards established by the approved and certified testing facility. A specimen will be treated as negative if the result of the initial test or the confirmatory test is negative. All urine samples will be "split samples" so that if the original specimen test is positive, the employee may request the retained sample be tested. This request must be received by the Company in writing within seventy-two (72) hours of the employee's notice of a positive result. The split sample will be tested at a different NIDA certified laboratory, at the employee's expense. If the second test is negative, the test will be deemed to be negative.

With respect to alcohol testing, it is anticipated that the initial testing will be done by using Evidential Breath Testing Devices (EBT). Breath alcohol testing requires the individual to provide a breath sample. A blood alcohol concentration of .04 or greater will constitute a positive result. Initial positive test results will be verified through additional analysis prior to any reporting of a positive result.<sup>2</sup>

The person being tested may request in writing, within twenty-four hours of the test results, the opportunity to provide information concerning any drugs or medication recently used that may have affected test results.

Verified positive test results will be kept confidential between those persons at the Company with a need to know the results, the medical facility/laboratory, and the employee. However, the Company reserves the right to refer to the results at any hearing, arbitration, or other proceeding, including litigation, initiated regarding the employee.

Confirmed positive test results for drugs and/or alcohol under this policy will be considered as reporting for duty under the influence under this policy.

---

---

## V. Last Chance Agreements

Employees who violate this policy may request that the Company consider a “Last Chance.” Whether the Company will allow such a “Last Chance” Agreement is based on the particular circumstances and such decision is at the sole discretion of the Company.

As noted above, the Company is vitally concerned with safety. Any “Last Chance” Agreement will require, but is not limited to, that the employee recognize a violation of this policy and that the Company could properly discharge the employee; that *eligibility* (not a promise) to return/continue to work requires that the employee satisfactorily participate in and complete, at the employee’s expense, a Company approved program suitable to the individual circumstances; that the employee screen negative on a Company-directed drug and alcohol test; that the employee submit to ongoing testing for twenty four months after their return to work (or longer as deemed necessary by the treatment program); and agreement that any failure to comply with any Company policy for a period of twenty-four months may result in immediate discharge.

<sup>2</sup> The blood alcohol concentration in this Policy is based on the needs of this Policy. The blood alcohol concentration of the DOT Policy is based on the needs of the DOT Policy.

---

---

## **VI. Additional Provisions Applicable to CDL/Safety Sensitive Employees**

All employees defined as "Driver" as that term is defined in the DOT Policy (including employees required to hold CDLs and/or who may drive a Commercial Motor Vehicle) will also be subject to the DOT Policy.

Policy Approved:

Signature on File: Jerome P Shaw, Jr.

Date: December 8, 2008



**ACKNOWLEDGEMENT OF DRUG-FREE WORKPLACE AND SUBSTANCE ABUSE POLICY AND CONSENT TO SEARCH OR INSPECTION IN ACCORDANCE WITH POLICY.**

It is the policy of SAK Construction, LLC to absolutely prohibit the use, possession, concealment, sale or distribution or being under the influence of illegal or unauthorized drugs and/or alcohol while entering, on or departing Company property, work areas, work locations or while in the course and scope of employment as a Company employee.

For your protection and for the protection of other employees (and in compliance with law), you are required upon request to submit your person, personal effects, vehicle, belongings and all items to a search or inspection in accordance with the Company's Drug-Free Workplace and Substance Abuse Policy. If any items prohibited on Company property are found or if you refuse to submit to an inspection or search of yourself and/or your effects, you will be denied access to Company property. The Company will also undertake such disciplinary action as set forth in its Drug-Free Workplace and Substance Abuse Policy.

The Company's Drug-Free Workplace and Substance Abuse Policy is posted at various locations and you should carefully read and understand the Policy prior to signing this Consent Form. Contact Angie Hirtz if you have not reviewed the Drug-Free Workplace and Substance Abuse Policy.

\*\*\*\*\*

**I acknowledge that I have been provided the SAK Construction, LLC Drug-Free Workplace and Substance Abuse Policy. I have read and understand the Policy, and I agree to fully abide by the Policy.**

**Also, I agree and consent to any search and inspection of my person, personal effects and property, including my vehicle and its contents, under the Policy. I further agree to hold the Company, its agents, directors, officers and employees harmless from any liability in connection with any search or inspection pursuant to the Company's Drug-Free Workplace and Substance Abuse Policy.**

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date





# J.W.TERRILL

a Marsh & McLennan Agency LLC company

April 1, 2021

**RE: SAK Construction, LLC**

## **Insurance, Benefits & Risk Management**

Suite 200  
825 Maryville Centre Drive  
St. Louis, MO 63017

314-594-2700

[www.jwterrill.com](http://www.jwterrill.com)

To Whom It May Concern:

SAK Construction, LLC is a valued Travelers Casualty and Surety Company of America surety customer. Travelers Casualty and Surety Company of America is one of the most financially sound insurance companies in the United States and enjoys a Best Rating of A++ with financial strength category of XV. The address for Travelers is One Tower Square, Hartford, CT 06183.

Due to SAK Construction, LLC's reputation, technical expertise, financial strength, quality equipment and experienced labor force, J.W. Terrill is prepared to consider performance and payment bonds for single jobs in the \$300,000,000 range with an aggregate work program of \$700,000,000.

Any bonds are subject to acceptable review of the contract terms and conditions, bond forms, confirmation of financing, and any other underwriting considerations at the time of the request. It should be understood that any arrangement for bonds is strictly a matter between SAK Construction, LLC and Travelers Casualty and Surety Company of America. We assume no liability to third parties or to you if for any reason we do not execute said bonds.

Over the course of J.W. Terrill's relationship with SAK Construction, LLC, we have never had a complaint as respects any of their workmanship or a question as to their ability to perform on any project. Additionally, SAK Construction, LLC's pro-active approach to a safe worksite and a safe labor force enables owners to rest assured that a safe work environment will be provided.

Please feel free to contact me if you have any specific questions regarding SAK Construction, LLC or their surety bond program.

Sincerely,

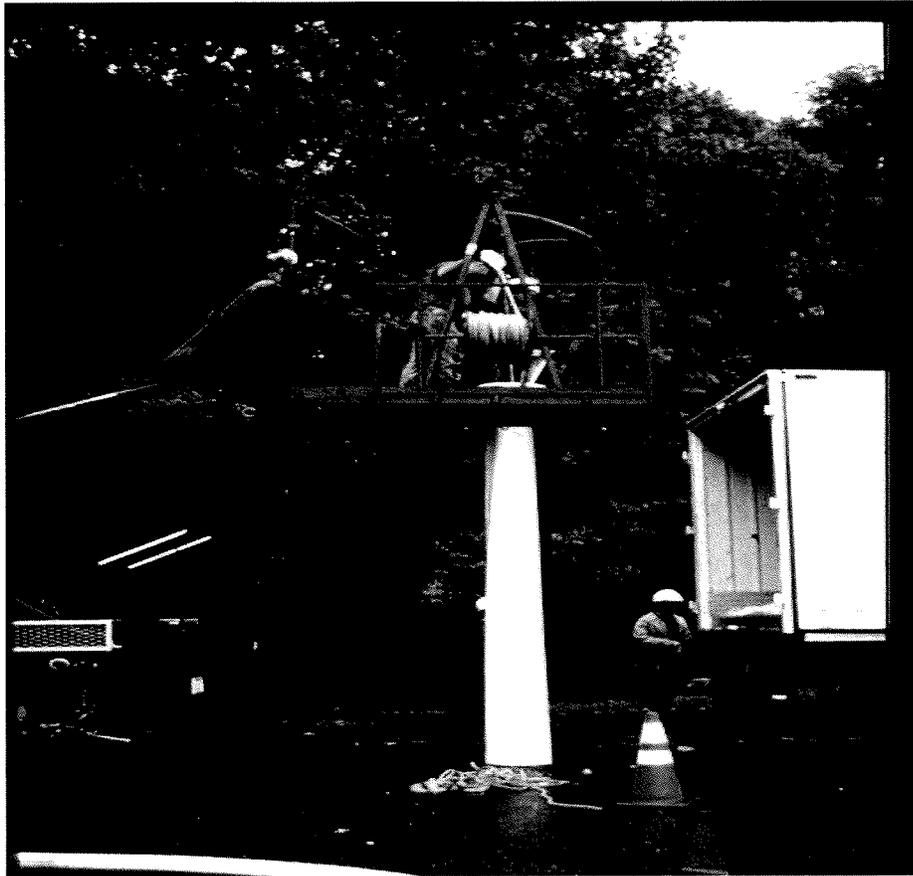


Andrew P. Thome,  
President

**CONFIDENTIAL**

# Quality Management System Manual

SAK Construction, LLC  
CIPP Division  
O'Fallon, MO

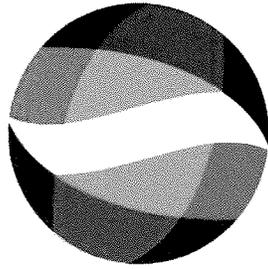


SAK Construction, LLC, CIPP Division  
Quality Management System Manual

## TABLE OF CONTENTS

<b>1. Introduction.....</b>	<b>7</b>
<b>2. Description and Approval.....</b>	<b>7</b>
<b>3. Quality Policy and Objectives.....</b>	<b>8</b>
<b>4. Quality Management System .....</b>	<b>9</b>
<b>4.1 General Requirements.....</b>	<b>9</b>
__ 4.2 Documentation Requirements .....	9
__ 4.3 Control of Documents.....	10
__ 4.4 Control of Records .....	11
<b>5. Management Responsibility .....</b>	<b>11</b>
__ 5.1 Management Commitment .....	11
__ 5.2 Customer Focus.....	11
__ 5.3 Quality Policy .....	11
__ 5.4 Quality Objectives.....	12
__ 5.5 Quality Management System Planning.....	12
__ 5.6 Responsibility and Authority .....	12
__ 5.7 Management Representative.....	12
__ 5.8 Internal Communication .....	13
__ 5.9 Management Review.....	13
__ 5.9.1 Review Input (Management Review Agenda Items) .....	13
__ 5.9.2 Review Output (Management Review Action Items) .....	13
<b>6. Resource Management .....</b>	<b>14</b>
__ 6.1 Provision of Resources.....	14
__ 6.2 Human Resources .....	14
__ 6.2.1 Competence, Awareness, and Training .....	14
__ 6.3 Infrastructure.....	14
__ 6.4 Work Environment.....	14
<b>7. Production Services Realization .....</b>	<b>15</b>
__ 7.1 Planning of Production Services.....	15
__ 7.2 Customer-Related Processes .....	15
__ 7.2.1 Review of Requirements Related to Product.....	15
__ 7.2.2 Customer Communication .....	16
__ 7.3 Design and Development .....	16
__ 7.4 Purchasing .....	16
__ 7.5 Production and Service.....	17
__ 7.5.1 Control of Production and Service.....	17
__ 7.5.2 Validation of Processes for Production and Service Provision.....	17

**7.5.3 Identification and Traceability ..... 17**  
**7.5.4 Customer Property ..... 18**  
**7.5.5 Preservation of Product..... 18**  
**7.6 Control of Monitoring and Measuring Devices..... 18**  
**8.Measurement, Analysis and Improvement.....19**  
**\_ 8.1 General..... 19**  
**\_ 8.2 Monitoring and Measurement ..... 19**  
**\_ 8.3 Internal Audit..... 19**  
**\_ 8.4 Monitoring and Measurement of Processes ..... 20**  
**\_ 8.5 Monitoring and Measurement of Product ..... 20**  
**\_ 8.6 Control of Nonconforming Product ..... 20**  
**\_ 8.7 Analysis of Data..... 21**  
**\_ 8.8 Continual Improvement ..... 21**  
**\_ 8.9 Corrective Action ..... 22**  
**\_ 8.10 Preventive Action ..... 22**  
**9. QMS Process Model.....23**



**SAK**<sup>TM</sup>

*Pipeline Infrastructure. Solved.<sup>TM</sup>*

## **QA/QC Plan and Work Instructions For CIPP Installation and Services**

Reference: Quality Management System Manual  
Section 7.5.1 Control of Production and Service



# SAK™

*Pipeline Infrastructure. Solved.™*

636.385.1000 *tel*  
636.385.1100 *fax*  
864 Hoff Road  
O'Fallon, MO 63366  
[www.sakcon.com](http://www.sakcon.com)

## **Introduction and Table of Contents**

### **Introduction:**

These guidelines and work instructions are provided to assure that CIPP installations are performed according to ASTM procedures, manufacturer's recommendations, and contract specifications.

### **Table of Contents:**

- 1.0 Contract Specifications and Engineering Application
  - 1.1 Design Calculations
- 2.0 Project Management and Planning
- 3.0 CIPP Installation Outline, Planning, and Instructions
- 4.0 Pre-Installation Cleaning and Video Requirements
- 5.0 Processing CIPP with Steam
- 6.0 CIPP Inversion with Water
- 7.0 Cure Procedure for Polyester Resin in CIPP Applications
- 8.0 Post-Installation Video Requirements
- 9.0 CIPP Sampling Procedures
- 10.0 CIPP Testing Procedures

The information provided from the Quality Management System Manual, including the QA/QC Plan and Work Instructions for CIPP Installation and Services are proprietary and have been reduced to the Table of Contents for Confidentiality Reasons. If additional information is requested it can be discussed or provided (if necessary) at a later time.

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**1 of 8**

**a. General.-** As detailed elsewhere in the Contract Documents and Drawings the work of this project is to be performed in a sensitive, valuable, natural area within the City of Ann Arbor (City). This Detailed Specification sets forth criteria that will be used by the City in determining if the Contractor has the necessary personnel, equipment, and experience to perform the work of this project.

**b. Documentation to be provided.-** The Contractor Qualifications detailed in this specification apply to the following items:

- Sewer Televising and Cleaning
- Cured-In-Place Pipe (CIPP) Lining
- Onsite Superintendent/Foreman

Contractor to complete the attached Reference Form and submit it as part of the bid submittal. **Not filling out the form or providing past experience may result in disqualification of the bid.** If subcontractors are to be used for any of the above items, they are to fill out a separate form.

The projects and total footage claimed to have been performed by the Contractor shall be supported by owner references. The Contractor shall submit information to document their experience.

1. **Sewer Televising and Cleaning.-** The Contractor performing the sewer televising and cleaning shall be fully qualified, experienced, and equipped to complete this work as shown on the Drawings and as indicated in the specifications. The Contractor shall have cleaned and televised a minimum of 100,000 lineal feet of sanitary sewers equal to or greater than 36 inches in diameter with lengths of the individual segments over 1,000 feet each in the past 7 years. The Contractor shall also have cleaned and televised at least 3 sanitary siphon sewers equal to or greater than 24 inches in diameter in the past 7 years. The Contractor shall have also worked a minimum of three projects in similar environmentally sensitive areas in the past 7 years. The Contractor shall provide detailed description of these environmentally sensitive projects and methods used to mitigate the work upon request of the Engineer.

2. **Sewer CIPP Lining.-** The Contractor performing the CIPP lining work shall be fully qualified, experienced, and equipped to complete this work expeditiously and in a satisfactory manner and shall be certified and/or licensed as an installer by the CIPP manufacturer. The Contractor shall have installed a minimum of 10,000 lineal feet of CIPP in sanitary sewers equal to or greater than 36 inches in diameter in the past 7 years and over 1,000,000 feet of lining in general over the past 7 years. Installations must have been in northern states and/or Canada. Contractor must also provide safety record for the past 7 years.

3. **Onsite Superintendent/Foreman.-** The full-time, onsite superintendent/ foreman shall be responsible for supervising all the work onsite, including but not limited to, the diversion of sanitary flow, bypass pumping, sewer televising and cleaning, and sewer CIPP lining, shall have supervised a minimum of 3 projects of this complexity in the past 7 years and shall have installed a minimum of 10,000 lineal feet of CIPP in sanitary sewers greater than 24 inches in diameter in the past 7 years.

DS- 1

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

2 of 8

**1. Sewer Televising and Cleaning References**  
(Must be completed and submitted with Bid for consideration)

List sewer cleaning and televising projects of sewers equal to or greater than 36 inches in size that total (together) over 100,000 lineal feet with the lengths of the individual segments over 1,000 feet in the past 7 years and provide references. Also, list a minimum of 3 projects that include the cleaning and televising of the sanitary siphon sewers equal to or greater than 24 inches in size in the past 7 years and provide references. The Contractor shall have also worked a minimum of three projects in similar environmentally sensitive areas in the past 7 years.

Firm's Name: Doetsch Environmental Services

Role on Project: Sewer cleaning and cctv sub-contractor

1.1. Client's Name: City of Ann Arbor

Address: 301 E. Huron St. Ann Arbor MI

Contact Name: Mike Nearing Contact Phone: ext 43635

Type of Work: Arboretum – 36" Pipe lining project

Sewer cleaning, siphon cleaning, manhole inspection,, Environmentally sensitive area

Year Work Performed: 2017 Work Amount (\$): \$200,000.00

1.2. Client's Name: Macomb County Public Works

Address: 21777 Dunham Rd. Clinton Twp. MI

Contact Name: Vincent Astorino Contact Phone: \_\_\_\_\_

Type of Work: 2017 Sinkhole project, clean and inspect 8' to 11' pipe. Continue on as needed basis to clean and inspect as required.

Year Work Performed: 2017+ Work Amount (\$): \$2,000,000.00

1.3. Client's Name: Oakland County Resource Commission

DS- 2

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

3 of 8

Address: One Public Works Drive Waterford MI

Contact Name: Rich Cook Contact Phone: 248.858.4939

Type of Work: Cleaned 7 siphons under i-696, cleaned 8,500' of 78" interceptor in environmentally sensitive area along the Clinton River

Year Work Performed: 2014+ Work Amount (\$): 2,000,000.00

1.4. Client's Name: New Castle County Delaware

Address: 121 Continental Drive Newark DE

Contact Name: John Simon (JMT) Contact Phone: 3022669600

Type of Work: Clean and inspect 25,000' of 30"-42" pipe along the powerline easement, environmentally sensitive area and remote access

Year Work Performed: 2014-2018 Work Amount (\$): \$1,500,000.00

1.5. Client's Name: Macomb County Public Works

Address: 21777 Dunham Rd. Clinton Twp. MI

Contact Name: Maria Sedki (FTCH) Contact Phone: \_\_\_\_\_

Type of Work: Outfall inspection Bulkhead at Lake St. Clair, dewater, clean as needed, inspect 36"-10'x10' pipe (100,000 ft), environmentally sensitive area

Year Work Performed: 2017 Work Amount (\$): \$1,600,000.00

1.6. Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

DS- 3

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

4 of 8

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

1.7. Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**5 of 8**

**2. Sewer CIPP Lining References**

(Must be completed and submitted with Bid for consideration)

**List sewer CIPP lining projects of sewers equal to or greater than 36 inches in diameter that total (together) over 10,000 lineal feet in northern states and/or Canada in the past 7 years and over 1,000,000 feet of lining in general over the past 7 years, and provide references. Also, provide safety record for the past 7 years as an attachment.**

Firm's Name: SAK Construction, LLC

Role on Project: Sewer CIPP Lining Contractor

**2.1.** Client's Name: City of Reno

Address: 1 East 1st Street, 8th Floor, Reno, NV 89505

Contact Name: Jon Simpson Contact Phone: 775.689.2961

Type of Work: Project consisted of the rehabilitation of 24,907 linear feet of sewer lines varying in size ranging from 8-inch to 60-inch in diameter utilizing the CIPP method. Approximately 18,034 linear feet of sewer lines were 36-inch to 60-inch in diameter. Project also included pipeline cleaning & CCTV inspection, manhole rehabilitation/installation, excavation work, traffic control, and sewage bypass pumping. Project Name: 2019 Sewer Rehabilitation - Phase I

Year Work Performed: 2020 (Completed) Work Amount (\$): \$8,330,214.69

**2.2.** Client's Name: Town of Griffith

Address: 111 North Broad Street, Griffith, IN 46319

Contact Name: Rob Konopasek Contact Phone: 219.924.3838

Type of Work: Project consisted of the rehabilitation of 13,090 linear feet of 36-inch & 42-inch diameter sewer lines utilizing the CIPP method.

Project Name: Sanitary Interceptor Sewer Improvements

Year Work Performed: 2019 (Completed) Work Amount (\$): \$3,992,949.25

**2.3.** Client's Name: City of Davenport

Address: 226 West Fourth Street, Davenport, IA 52801

Contact Name: Brad Guy Contact Phone: 563.327.5105

DS- 5

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**6 of 8**

Type of Work: Project consisted of the rehabilitation of 23,052 linear feet of sewer lines varying in size ranging from 24-inch to 48-inch in diameter utilizing the CIPP method. Of that 23,052 linear feet, 9,380 linear feet ranged from 36-inch to 48-inch in diameter. Project Name: Duck Creek South Interceptor Rehabilitation Project

Year Work Performed: 2019 (Completed) Work Amount (\$): \$4,399,619.94

2.4. Client's Name: City of Decatur

Address: 1 Gary K Anderson Plaza, Decatur, IL 62523

Contact Name: Paul Caswell Contact Phone: 217.424.2747

Type of Work: Project consisted of the rehabilitation of 23,288 linear feet of 18-inch to 84-inch diameter sewers utilizing the CIPP method. Of that 23,288 linear feet, 21,940 linear feet consisted of 37-inch to 84-inch diameter sewers. Project Name: 7th Ward Sewer Rehabilitation

Year Work Performed: 2018 (Completed) Work Amount (\$): \$7,675,591.93

Please see attachment labeled "Northern States Completed Project List Last 7 Years" for a list of more projects that fit the requirements.

DS- 6

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

IP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor	Project Manager	Type	Completed Date	Completion Amount	Percent Complete	Finalize Complete	Remarks
1300	Linn County, IA 2013 Linn County Wastewater Collection	Steve Klocke	City of Linn Grove	P 515 964 2020		1351 Iowa Schaefer Ct Newell, IA 50208	Jeff Hitz	Trevi Jones	CIPP - IA	11/15/16	\$343,824.06	100%	9020	6", 8"
1307	Colfax, IA - 2013 Wastewater Collection System Rehab	Steve Klocke	City of Colfax	P 515 962 2020		15 E Howard Street Colfax, IA 50504	Jeff Hitz	Don Swadzak	CIPP - IA	4/24/15	\$423,369.91	100%	9337	6", 8", 10", 12"
13156	Wendell County, KS 6/04/2013 Firebirds Sewer Repair	Jared Leiber	United Government of Wyandotte County	P 913 971 1303		One McPherson Plaza 101 W 1st St Kansas City, KS 66101	Danny Brown	Randy Mather	CIPP - KS	1/1/15	\$564,683.91	100%	16021	6", 10", 12", 15", 18", 21", 24"
14035	Johnson County, KS CNSD Contract No. 19, Term 2014-2015	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	10/29/16	\$1,648,107.45	100%	6372	6", 10", 12", 15", 18", 21", 24"
14035 02	Johnson County, KS CNSD Contract No. 19, Term 2014-2015, Auth 2	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	11/16/16	\$1,616,386.00	100%	6244	6", 10", 12", 15"
14035 03	Johnson County, KS CNSD Contract No. 19, Term 2015-2016, Auth 1	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	12/12/16	\$1,634,467.00	100%	7184	6", 10", 12", 15", 18"
14035 05	Johnson County, KS CNSD Contract No. 19, Term 2016-2017, Auth 5	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	8/30/17	\$1,793,169.50	100%	7472	6", 10", 12", 15", 18", 30"
14035 07	Johnson County, KS CNSD Contract No. 19, Term 2016-2017, Auth 7	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	6/1/16	\$2,071,165.65	100%	82774	6", 10", 12", 15", 18", 21", 24", 30"
14035 08	Johnson County, KS CNSD Contract No. 19, Term 2016-2017, Auth 8	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	9/19/18	\$1,124,069.10	100%	43794	6", 10", 12", 15", 18", 30"
14035 09	Johnson County, KS CNSD Contract No. 19, Term 2017-2018, Auth 9	Joseph Barnes	Johnson County Wastewater	P 913 715 8684		11811 S. Sunset Drive #2500 Olathe, KS 66061	Danny Brown	Randy Mather	CIPP - KS	2/20/20	\$1,363,822.95	100%	55849	6", 10", 12", 15", 18", 30"
14035 11	Johnson County, KS CNSD Contract No. 19, Auth 11	Brandon Morris	Johnson County Wastewater	P 913 715 8684	Brandon.Morris@jcw.org	4800 Hill Avenue Mission, KS 66202	Danny Brown	Brent Adams	CIPP - KS	13/19/19	\$1,948,775.90	100%	55972	6", 10", 12", 15"
14000	Kansas City, MO Downtown Streetcar Sewer Rehab	Sub to Rodriguez Mechanical Contractors	Sub to Rodriguez Mechanical Contractors, Inc	P 913 281 1814		544 S. 11th Street Kansas City, KS 66105	Danny Brown	Randy Mather	CIPP - KS	4/20/15	\$1,226,275.50	100%	8885	10", 12", 15", 18", 21", 24", 30", 36", 60"
14056	Chicago, IL 12-657-35, North Shore Interceptor Sewer 2	Dennis Blak	Metropolitan Water Reclamation District of Greater Chicago	P 312 751 5000		100 East Erie Street Chicago, IL 60611	Brad Schenning	Dan Swadzak	CIPP - IL	11/4/15	\$4,690,910.00	100%	5925	27", 30"
14056	St. Paul, MN ANS Contract #86026, Seneca Area	Don Nordin	Metropolitan Council	P 651 602 1000		390 Robert Street North Saint Paul, MN 55101	Jason Lancy/Billy Gies	Dan Swadzak	CIPP - MN	8/13/15	\$4,629,285.09	100%	12481	18", 30", 36"
14084	Tish Grove, IL 2012-2015, Sanitary Sewer Improvement	Green EDA, P E	Village of Tish Grove	P 309 758 5071		1114 Midwest Oaks Square PO Box 156 Tish Grove, IL 61482	Jeff Hitz	Don Swadzak	CIPP - IL	2/26/15	\$383,144.70	100%	10386	8", 10"
14098	Stear City, IA 2014 Sewer Lining Project	Green EDA, P E	City of Stear City	P 712 279 6330		435 5th Street Stear City, IA 51102	Danny Brown	Randy Mather	CIPP - IA	4/23/15	\$227,857.40	100%	563	24", 30"
14103	Alton, IL Sewer Lining 2014	Nathans Hoy, P E	City of Alton	P 765 652 1882	nhoj@awerences.org	2700 W. Main Street Alton, IL 61231	Jeff Hitz	Dan Swadzak	CIPP - IL	2/4/15	\$225,525.03	100%	6652	6", 8", 10", 24", 36"
14113	Lawrence, KS 2014 Annual Lining Project	Christopher Cross	City of Lawrence	P 785 838 8039	director@citylinc.com	411 Main Street PO Box 456 Wellington, KS 66092	Danny Brown	Randy Mather	CIPP - KS	8/20/15	\$1,056,912.85	100%	40715	6", 8", 10", 12", 15", 18", 21", 24", 30", 36"
14129	Wetzelville, KS 2014 Sanitary Sewer Rehabilitation	Mike Rodgers	Village of Wetzelville	P 618 392 0736	charlesonengineering@cox.net	PO Box 397 Wetzelville, KS 67450	Jeff Hitz	Tim Busen	CIPP - IL	7/17/15	\$61,238.70	100%	1971	6", 12"
14135	City of City, IL 6th Street Sanitary Sewer Lining	Mike Rodgers	Village of City City	P 618 392 0736		PO Box 397 City, IL 67450	Jeff Hitz	Tim Busen	CIPP - IL	7/17/15	\$61,238.70	100%	1971	6"
14136	Topoka, KS Emergency Repair for WPC Project 14095A, Event #752	Tim McCormick	City of Topoka	P 785 368 2409	lincosmic@cox.net	630 SE Mission Topoka, KS 66667	Danny Brown	Randy Mather	CIPP - KS	18/15	\$48,878.00	100%	464	18"
14144	Decatur, IL 2014 Sewer Rehabilitation Project	Don Miller	Sanitary District of Decatur	P 217 422 8931 ext 216	DanMiller@sddecatur.org	501 Dupper Lane Decatur, IL 62522	Jason Lancy	Dan Swadzak	CIPP - IL	11/25/15	\$2,135,784.53	100%	13182	18", 21", 42", 60"
15005	Wyandotte County, KS 2014 Firebirds Sewer Rehabilitation, Contract #2	John Meinhaus, P E	United Government of Wyandotte County	P 913 573 5700	meinhaus@wyandotte.org	One McDowell Plaza Seward, KS 66101	Danny Brown	Randy Mather	CIPP - KS	6/11/16	\$1,462,341.00	100%	28102	6", 10", 12", 15", 18", 21", 24", 30", 36", 38"

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor	Project Manager	Type	Completed Date	Contract Amount	Percent Complete	Resident Complete	Diameter
15016	<b>Lewes, KS</b> 2015 Sewer PUMP Mill & Overlay	Roger Voerman	Sub to MoJany Construction, Inc	P 913.631.5440	roger@mojanconstruction.com	15300 Melwood Drive Shawnee, KS 66217	Danny Brown	Randy Mather	CIPP - AS	7/20/15	\$22,841.50	100%	1662	15", 16", 24", 30"
15027	<b>Flintney, KS</b> Abraxis CIPP	Greg Phillips	Sub to Philizer Construction, LLC		gphillips@philliz.com	9709 NW Melwood, Terrace Parkway, MO 64152	Danny Brown	Randy Mather	CIPP - AS	5/30/15	\$6,370.00	100%	60	6"
15033	<b>Lewes, KS</b> Pump/Inverts CIPP Repair	Spencer Foster	Sub to Leavenworth Construction, Co	P 913.351.3474	spencer@leavenworth.com	719 E Gilman Road Lawrence, KS 66043	Danny Brown	Randy Mather	CIPP - AS	7/2/15	\$40,618.00	100%	102	30", 36"
15035	<b>Lawrence, KS</b> 15th Street Reconstruction	Leigh Myers, P.E	RC Design & Construction Management	P 785.864.5551	lmyers@rcd.com	1515 St. Andrews Dr Lawrence, KS 66045	Danny Brown	Randy Mather	CIPP - AS	7/2/15	\$34,538.00	100%	594	6"
15047	<b>Lombard, IL</b> P 2015 Storm Drain	Ray Hooring	Village of Lombard	P 630.670.3598	hooring@magdoconstruction.com	1057 Hawthornwood Ave. Lombard, IL 60148	Jeff Hirtz	Dan Swadzak	CIPP - IL	12/4/15	\$149,717.50	100%	2424	6", 10", 18"
15048	<b>Valley, NE</b> 69 Gage/Wood Road Emergency CIPP Repair	Jason Lutz	Valley Corporation	P 402.359.2578	jlutz@valley.com	28071 Ice Circle Valley, NE 68664	Danny Brown	Randy Mather	CIPP - NE	6/12/15	\$16,115.00	100%	120	6"
15053	<b>Salina, KS</b> Sanitary Sewer Rehabilitation	Daniel Lutz, P.E	City of Salina	P 785.825.7305 ext. 213	daniel.lutz@salina.org	Utility Department 1000 West 1st Street Salina, KS 67401	Danny Brown	Randy Mather	CIPP - KS	12/30/15	\$89,120.00	100%	1876	6", 10", 12", 15"
15058	<b>Lawrence, KS</b> Spruce and 5th Street 18" CIPP	Tim Gualardo	City of Leavenworth	P 913.882.1090	tgualardo@cityofleavenworth.org	1800 S 2nd St Leavenworth, KS 66048	Danny Brown	Randy Mather	CIPP - KS	7/10/15	\$13,450.00	100%	212	10"
15065	<b>Decatur, IL</b> 2015 Trenchless Using Using Repairs	Byron Bowman	City of Decatur	P 217.424.2747	bbowman@decaturil.gov	1000 K Alexander Plaza Decatur, IL 62523-1104	Jeff Hirtz	Dan Swadzak	CIPP - IL	11/22/15	\$25,175.15	100%	978	6", 10", 12", 15", 21"
15068	<b>Wichita, KS</b> 2015 Sanitary Sewer Rehabilitation Phase D	Jeff Terrence	City of Wichita	P 316.268.4046	jeff.terrence@cityofwichita.gov	1601 South McCain Wichita, KS 67213	Danny Brown	Leo Chahoso	CIPP - KS	10/23/15	\$315,128.25	100%	14217	6"
15069	<b>Central City, IL</b> 2015 Sewer Repair Project: Theobald, Sanitary Sewer Rehabilitation	Edward Czech	Sub to Hank's Excavating & Landscaping, Inc	P 618.398.5556	edward@hanksexcavating.com	5823 W Shaw Rd, 161 Belen, IL 62223	Jeff Hirtz	Dan Swadzak	CIPP - IL	10/9/15	\$31,098.50	100%	987	6"
15074	<b>St. Jacob, IL</b> Sewer Rehabilitation	Edward Czech	Sub to Hank's Excavating & Landscaping, Inc	P 618.398.5556	edward@hanksexcavating.com	5823 W Shaw Rd, 161 Belen, IL 62223	Jeff Hirtz	Dan Swadzak	CIPP - IL	11/22/15	\$20,850.00	100%	500	6"
15075	<b>Des Moines, IA</b> 2015 Sewer Lining Program	Matt Rademacher	City of Des Moines	P 515.283.4076	mrademacher@dm.org	400 Robert D Ray Drive Des Moines, IA 50309	Danny Brown	Randy Mather	CIPP - IA	2/26/16	\$2,837,501.79	100%	7413	15", 17", 18", 24", 30", 36", 48", 54", 60"
15107	<b>Ovada Park, KS</b> Chalk, 11/16/15-1/2/16	Mary Conroy	Sub to Conley Street & Utilities	P 785.838.4646	mconroy@cityofovada.com	P O Box 250 1200 S 1st Street Linwood, KS 66052	Danny Brown	Randy Mather	CIPP - KS	11/15/16	\$21,590.00	100%	425	6"
15108	<b>El Dorado, KS</b> 55 Nelson Repair & Rehab	Alan Blough	Sub to Nowak Construction Company	P 316.734.8898	alan@nowakconstruction.com	PO Box 218 200 South Goodover Rd Goodover, Kansas 67025	Danny Brown	Randy Mather	CIPP - KS	5/20/16	\$13,317.00	100%	386	6"
15111	<b>Chicago, IL</b> Glebebrook Sanitary Sewer Rehabilitation, USA Contract 14 091-35	Fred HUI	Metropolitan Water Reclamation District of Greater Chicago	P 312.751.4025	Fredrick.Wu@metwd.org	100 East Erie Street Chicago, Illinois 60611	Jeff Hirtz	Dan Swadzak	CIPP - IL	2/26/17	\$1,025,742.00	100%	4387	18", 21"
15114	<b>Lawrence, NJ</b> Pinecroft Park Sewer Lining	William P. Hill	Empire Lawrence Sewerage Authority	P 609.587.4061	william@empirelawrence.com	600 Whitehall Rd Lawrenceville, NJ 08648	Chris Ruster	Matthew Rhoads	CIPP - NJ	4/21/16	\$262,827.00	100%	1733	18"
15118	<b>Columbia, IL</b> 2015 2016 Sanitary Sewer Rehabilitation Project	Tim Ahrens	City of Columbia	P 618.281.4264	tim@cityofcolumbia.com	110 West State Bank Bldg Columbia, Illinois 62236	Jeff Hirtz	Dan Swadzak	CIPP - IL	4/1/16	\$47,700.00	100%	1884	6"
15119	<b>Rantoul, IL</b> 2015 Sewer Lining Project	Peter Passarelli	Rantoul	P 217.892.6526	passarelli@cityofrantoul.com	200 W Green Ave Rantoul, IL 61879	Jeff Hirtz	Dan Swadzak	CIPP - IL	3/29/16	\$126,514.85	100%	4317	6", 10", 12"
16003.01	<b>Lawrence, KS</b> UT1509 2015 S.S. Rehabilitation CIPP Project	Nathan Hoff, P.E	City of Lawrence	P 785.832.1862	nhoff@lawrenceks.org	P O Box 708 Lawrence, KS 66046	Danny Brown	Randy Mather	CIPP - KS	4/13/17	\$1,455,370.00	100%	44649	6", 10", 12", 15", 21", 24", 30", 36"
16008	<b>Wynndotte County, KS</b> 2015 Sanitary Sewer Rehabilitation & Repair - Contract 7 Project 1.D. 5182	Kris Finger	Unified Government of Wynndotte County	P 913.373.5422	krfinger@unifiedks.org	701 N 7th St, Rm 712 Kansas City, KS 66101	Danny Brown	Randy Mather	CIPP - KS	8/30/17	\$1,745,716.81	100%	29079	6", 10", 12", 15", 18", 24", 30", 36"
16012	<b>Lawrence, KS</b> 2015 1st and Overly	Eric Voerman	Sub to MoJany Construction, Inc	P 913.631.5440	eric@mojanconstruction.com	15300 Melwood Drive Shawnee, KS 66217	Danny Brown	Randy Mather	CIPP - KS	2/14/17	\$202,161.00	100%	1093	18", 21", 24", 30", 36", 48"
16015	<b>Lyon, KS</b> Municipal Sewer Line Project 2016	Chris Walsh	The City of Lyons	P 620.237.3254	chrisw@cityoflyons.org	701 West Main P O Box 688 Lyons, KS 67554	Danny Brown	Randy Mather	CIPP - KS	9/7/16	\$34,856.40	100%	1104	6"

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor	Project Manager	Type	Completed Date	Completed Amount	Percent Complete	Position Complete	Manpower
16016	Dubuque IA 2115 CIPP Sanitary Sewer Lining Project	Dana King	The City of Dubuque	P 563.588.4270	dking@ci.dubuque.org	50 W. 13th S Dubuque, IA 52001	Jeff Hitz	Dan Swadzak	CIPP - IA	6/25/16	\$440,344.00	100%	12/54	8', 10', 18'
16021	Ed Dorado, KS 15' Sanitary Sewer CIPP on Skelly St.	Gray Taylor	City of El Dorado	P 316.323.5621	grayt@ci.dorado.com	220 E 1st Avenue El Dorado, KS 67042	Danny Brown	Randy Mather	CIPP - KS	5/20/16	\$41,888.00	100%	816	15'
16022	Lansdowne, KS 2015 Sanitary Sewer Rehabilitation and Replacement.	Spencer Foster	Sub to Unwaver Construction	P 913.351.3474	spencer@unwaver.com	718 Clara Rd. Lansdowne, KS 66243	Danny Brown	Randy Mather	CIPP - KS	6/27/17	\$126,444.25	100%	2424	7', 15', 18'
16025	St. Paul, MN Non Rehabilitation - Phase 1D Collect Number 151383	Richard Hight	Metropolitan Council	P 612.328.2680		320 Robert Street Saint Paul, MN 55101	Jeff Hitz	Dan Swadzak	CIPP - MN	7/20/16	\$3,266,210.02	100%	3714	36', 42'
16027	Mission Woods, KS Storm Sewer Lining - Rainbow Ave	John Sullivan	City of Mission Woods	P 914.421.1520	john.sullivan@missionwoods.org	4700 Rainbow Blvd Shawnee Mission, Kansas 66205	Danny Brown	Randy Mather	CIPP - KS	5/10/16	\$27,109.30	100%	321	18'
16028	Lansas, KS Port, O&M, Drainage Improvements	Bill Reno	Sub to KC Heavy	P 913.842.2121	bill.reno@kchavyon.com	18425 State Avenue Tonganoxie, KS 66886	Danny Brown	Randy Mather	CIPP - KS	8/20/17	\$336,547.00	100%	4216	12', 15', 18', 21', 24', 30', 36'
16033	Whiting, IL 2015 Sewer Lining Project - Contract	Lana Rudnik	Village of Whiting	P 847.279.6912	lana@vwhiting.org	7 Cornwell Road Whiting, IL 62090	Jeff Hitz	Dan Swadzak	CIPP - IL	6/7/16	\$145,800.50	100%	5294	6', 10'
16037	Brooklyn Park, MN 2016 Large Sanitary Sewer Lining Project	Jon Watson	City of Brooklyn Park	P 763.493.8009	jon.watson@brooklynpark.org	5200 56th Ave N Brooklyn Park, MN 55443	Danny Brown	Randy Mather	CIPP - MN	7/8/16	\$892,450.00	100%	5435	24', 27'
16038	Shawnee, KS 2015 Stormwater Pipe Repair	Abert Sleeman	Sub to Amco Brothers Co., Inc	P 913.324.2330	ab@amcobro.com	910 New Drive Kansas City, KS 66111	Danny Brown	Randy Mather	CIPP - KS	7/20/16	\$38,864.00	100%	265	12', 15', 18'
16042	Newton, KS SS Mainline Project 2	Alan Blough	Sub to Nowek Construction	P 316.794.8898	alan@nowekconstruction.com	200 South Goodard Rd Goodard, KS 67052	Danny Brown	Randy Mather	CIPP - KS	10/17	\$57,571.70	100%	2568	6', 8'
16045	Urbana & Champaign Sanitary District (IL) 3317 Collection System Upgrade Project	Mark Sab	Urbana & Champaign Sanitary District (IL)	P 217.367.3409 ext. 1222	mark@ucsd.com	1103 E. University Ave Urbana, IL 61802	Jeff Hitz	Dan Swadzak	CIPP - IL	4/7/17	\$802,140.46	100%	4320	6', 12', 21', 30'
16046	Manhattan, KS 2016 CIPP Sewer Lining SS 1807	Norm Francis	City of Manhattan	P 785.597.4263	norm@ci.manhattan.com	1101 Poyner Ave Manhattan, KS 66502	Danny Brown	Randy Mather	CIPP - KS	8/18/16	\$440,338.20	100%	20189	8'
16047	North Newton, KS CIPP	Alan Blough	Sub to Nowek Construction Company	P 316.794.8898	alan@nowekconstruction.com	200 South Goodard Rd Goodard, KS 67052	Danny Brown	Randy Mather	CIPP - KS	8/25/16	\$19,200.00	100%	677	8', 10'
16048	Johnson, IA Crmp Odors, Sanitary Sewer Vertical Repair - Phase 1	Jamie Crubaugh	Sub to J & K Contracting	P 515.233.5500 ext 12	jcruhaugh@jandkcontracting.com	1301 East Lincoln Way Ames, IA 50010	Danny Brown	Randy Mather	CIPP - IA	1/20/17	\$97,246.00	100%	1566	8', 12'
16049	Davenport, IA F.Y. 2017 Sewer Lining Program	Sandy Dean	City of Davenport	P 563.326.7758	sdean@ci.davenport.us	228 West Taylor St Davenport, IA 52801	Jeff Hitz	Dan Swadzak	CIPP - IA	4/7/17	\$1,542,679.70	100%	52489	8', 10', 12', 15', 18', 18', 24'
16058	Hawthorn, KS Sanitary Sewer Rehab - Phase II	Alan Blough	Sub to Nowek Construction	P 316.794.8898	alan@nowekconstruction.com	200 S Goodard Road Goodard, KS 67052	Danny Brown	Randy Mather	CIPP - KS	1/20/17	\$148,773.05	100%	4884	8', 10'
16061	Maline, IL 2015 Sanitary Sewer Lining, Project #1720	Daniel Preston	City of Maline	306.524.2205	conston@maline.il.us	Dept of Public Works 1000 N. Main St Maline, IL 61765	Jeff Hitz	Dan Swadzak	CIPP - IL	12/29/16	\$92,897.00	100%	3023	8', 10', 12'
16062	Shawnee, KS Quinn Rd 1626, 3410	Roger Vaganan	Sub to McAnany Construction	P 913.927.6650	roger@mcananyconstruction.com	15303 Mulford Dr Shawnee, KS 66217	Danny Brown	Randy Mather	CIPP - KS	3/27/17	\$24,989.00	100%	327	15', 18'
16063	Lawrence, KS 63 Municipal Drive	Dave Bluck	Sub to Kaseck Construction Co., Inc	P 816.363.3530	dabuck@kaseckco.com	6131 Indiana Ave Kansas City, MO 64132	Danny Brown	Randy Mather	CIPP - KS	6/15/16	\$13,500.00	100%	182	8'
16065	Newton, KS Millstream Mainline	Kira Woods	Sub to Millennium Machine and Tool, Inc	P 316.262.0884	kw@mmtic.net	1801 Mill Valley S Newton, KS 67215	Danny Brown	Randy Mather	CIPP - KS	6/30/16	\$14,870.00	100%	220	8'
16068	Lansas, KS Luttrellwood CIPP Repair	Neil Gubio	Sub to Kansas Heavy Construction, LLC	913.842.2121	neilgubio@kchavyon.com	18145 Rock Avenue Tonganoxie, KS 66886	Danny Brown	Randy Mather	CIPP - KS	1/23/17	\$130,187.00	100%	741	15', 42', 48'
16074	Decatur, IL 2016 Forwardness Long Lining Repair, City Project 2016-18	Dave Preston	City of Maline	306.524.2255	conston@maline.il.us	#1 Gary A. Anshewen Plaza Decatur, IL 62523	Jeff Hitz	Dan Swadzak	CIPP - IL	11/20/16	\$447,747.10	100%	18654	8', 10', 12', 15'
16075	Goodfry, IL Phillips St Wood River Refinery	Contact Name	Sub to Widman Construction			740 Wood River Refinery Phillips St Goodfry, IL 62033	Neil Hitz	Tim Burstein	CIPP - IL	10/20/16	\$272,415.00	100%	500	24'

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor/Agent	Project Manager	Type	Completed Date	Contract Amount	Percent Complete	Project Complete	Diameter
16085	Bethesda, IL Main Sanitary Sewer 2016 Sanitary Sewer Lining	Ron Shuckert	St. Clair Township	618 234 8688	ron.shuckert@stcc.com	15 East Winchester Bethesda, IL 62220	Jeff Hirtz	Dan Swedak	CIPP - IL	11/29/16	\$7,975.00	100%	3115	6"
16088	Geneva, IL 2016 Sanitary Sewer Lining Project	Bob Van Gorpghem	City of Geneva	630 232 1551	brvngpghem@geneva.il.us	1800 South Street Geneva, IL 60134	Jeff Hirtz	Dan Swedak	CIPP - IL	12/15/16	\$211,661.00	100%	4676	8", 12", 15", 24"
16089	St. Charles, IL 2016 Sanitary Sewer Lining Project	Tim Wilump Sitton	City of St. Charles	P. 630 377 4265	tim.wilump@stcharles.gov	Two East Main Street St. Charles, IL 60174	Jeff Hirtz	Dan Swedak	CIPP - IL	11/18/16	\$438,670.00	100%	4387	12", 18", 24", 36", 42", 48"
16090	Bethesda, IL 2016 Sanitary Sewer Lining Project	Tim Grimm	City of Bethesda	630 454 2750	tgimm@cityofbethesda.net	200 N. Railroad Rd. Bethesda, IL 60510	Jeff Hirtz	Dan Swedak	CIPP - IL	11/28/16	\$192,038.00	100%	5068	8", 10", 12", 15"
16093	Shawnee, KS Lakeridge Drive & Johnson Street Emergency Pipe Repair	Cynthia Mueller/Krass	City of Shawnee	P. 913 742 8236	cmuellerkrass@cityofshawnee.kansas.us	11115 Johnson Court Shawnee, KS 66203	Danny Brown	Randy Mather	CIPP - KS	11/28/16	\$161,510.75	100%	130	54"
16094	Burlington, IL 2016 Sanitary Sewer Lining Project	Kyle Johnson	Village of Burlington Grove	847 459 2523	kyjohnson@villageofbg.com	58 Ridge Blvd Burlington Grove, IL 60089	Jeff Hirtz	Dan Swedak	CIPP - IL	11/16/16	\$218,416.25	100%	8931	8", 10", 12", 15"
16095	Bonner Springs, KS Wastewater CIP 2015	Ron Wyatt	City of Bonner Springs	P. 913 422 8117	ron.wyatt@bonnersprings.org	PO Box 38 205 West 1st St Bonner Springs, KS 66012	Danny Brown	Randy Mather	CIPP - KS	2/17/17	\$60,927.70	100%	2658	6"
16097	Fox Lake, IL 2016 Sanitary Sewer Lining & Lining	Aaron Berry	Village of Fox Lake	630 367 0470	a.berry@foxlake.com	68 Travis Dr. Village of Fox Lake, IL 60020	Jeff Hirtz	Dan Swedak	CIPP - IL	11/29/16	\$82,731.50	100%	2825	6"
16106	Meriden, CT Rehabilitation of the Rocky Hill/Daniel and Rocky Hill Interceptor Contract Number: P16168-01	Thomas Robbins, P.E.	The Metropolitan District	860 278 7580 x. 2381	trobbins@metdc.com	555 Main Street Hartford, CT 06103	Bill Siebert	Matthew Rhoads	CIPP - CT	11/17/16	\$3,172,456.00	100%	627	36", 30"
16110	Jacksonville, IL Iron Block at Wisconsin and Madison Drive - Western End 2016 Sanitary Sewer Lining	Timothy Paulson	City of Jacksonville	217 240 4146	tpaulson@jacksonville.com	200 West Douglas Avenue Jacksonville, IL 62650	Jeff Hirtz	Dan Swedak	CIPP - IL	11/22/16	\$32,125.00	100%	515	8", 15"
16122	Northbrook, IL Point Street Storm Sewer Rehab	Jeff May	Village of Montgomery	P. 630 466 6700	jeff.may@northbrook.il.gov	200 N. River St. Montgomery, IL 60538	Jeff Hirtz	Dan Swedak	CIPP - IL	6/20/17	\$131,614.00	100%	1294	24"
16126	Overland Park, KS Discount Fire CIP Lining of Sanitary Sewer	Rock Kruttschack	City of Overland Park	P. 913 223 8231	rock@cityofop.com	2123 NW 11th St 515 222 8231 Overland Park, KS 66205	Danny Brown	Randy Mather	CIPP - KS	4/17/17	\$84,382.31	100%	4610	6"
16147	Pittsburg, KS Sanitary Sewer Rehab P1616, Madison Addition	Matt Bloom	City of Pittsburg	P. 620 340 5138	matt.bloom@pittsburg.org	201 W. 4th St. Pittsburg, KS 66762	Danny Brown	Randy Mather	CIPP - KS	5/24/17	\$18,350.00	100%	370	6"
16151	Omaha, NE Omaha Airport Authority - Sparks Pipe Repair	Trevor Tomingas	Omaha Airport Authority	P. 402 661 8018	trevor.tomingas@oaa.com	4501 Abbott Drive, Suite 2300 Eppley Airfield Omaha, NE 68110	Danny Brown	Randy Mather	CIPP - NE	2/28/17	\$34,975.00	100%	70	18"
17003	Udell, KS Water Distribution Phase III	Jeff Murphy	Sub In Nowak Construction Co., Inc	P. 318 794 8688	jeff@nowakconstruction.com	200 S. Gower Road Gosport, KS 67502	Danny Brown	Randy Mather	CIPP - KS	7/14/17	\$20,736.00	100%	384	6"
17006	Decatur, IL 7th Ward Sewer Rehabilitation City Project: 2015-07	Paul Caswell	City of Decatur	P. 217 424 2147	pcaswell@decatur.gov	1 Gary K Anderson Plaza Decatur, IL 62523-1198	John Lueck Jeff Caswell Gina Speaks	Dan Swedak	CIPP - IL	3/15/18	\$7,675,581.93	100%	2288	18", 20", 24", 30", 36", 42", 48", 54", 60", 66", 72", 84"
17020	Lower Merion, PA 2017 Sewer Lining	Joe Dinau	Lower Merion Township Sewer Division	P. 610 642 0435	jdinau@lowermerion.org	25 04 Clough Rd Wynnedow, PA 19386	Joel Greb	Trevor Ewing	CIPP - PA	6/19/17	\$208,927.20	100%	4688	6", 10"
17022	Mascoutah, IL Sanitary & Pipe Rehab	Tom Quirk	City of Mascoutah	P. 618 566 2964	tom@mascoutah.com	3 West Main Street Mascoutah, IL 62558	Jeff Hirtz	Chris Vogt	CIPP - IL	4/20/17	\$115,010.00	100%	974	8", 10"
17024	Marion, MS 2017 Sanitary Sewer CIP	Ron Francis	City of Marion	P. 762 987 4653	francis@cityofmarion.com	1101 Poplar Ave Marion, MS 38502	Danny Brown	Randy Mather	CIPP - MS	10/17/17	\$483,605.00	100%	2183	6"
17025 01	Indianapolis, IN 921100126 Water Street CCS Phase 3 Rehab	Sean Foster	City of Indianapolis	P. 317 429 3962	seanfoster@cityofindianapolis.com	2020 N. Meridian St Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	10/28/17	\$1,449,684.18	100%	1498	15", 24", 36", 48"
17025 02	Indianapolis, IN 921602160 Water Street CCS Phase 1 & 1338	Sean Foster	City of Indianapolis	P. 317 429 3962	seanfoster@cityofindianapolis.com	2020 N. Meridian St Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	10/28/17	\$1,669,669.76	100%	2874	24", 30", 36", 42", 48", 54", 60"
17025 04	Indianapolis, IN 921602164 Water Street CCS Phase 2 & 1338	Sean Foster	City of Indianapolis	P. 317 429 3962	seanfoster@cityofindianapolis.com	2020 N. Meridian St Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	6/9/19	\$3,775,181.47	100%	1566	42", 48"

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor	Project Manager	Type	Completed Date	Contract Amount	Percent Complete	Resident Complete	Duration
17025-05	Indianapolis, IN 9438/2605 West 81st Street	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$165,453.00	100%	1032	15'
17025-06	Indianapolis, IN N320/603 South Kentucky	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$416,680.87	100%	1005	24', 20'
17025-07	Indianapolis, IN 9438/2605 East Raymond St.	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$258,686.75	100%	1365	30', 36'
17025-08	Indianapolis, IN Suzette Ct.	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$1,740,972.80	100%	2942	30', 36'
17025-09	Indianapolis, IN West River Court	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$641,929.46	100%	1030	15', 36', 54'
17025-10	Indianapolis, IN Fall Creek	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	3/21/18	\$778,215.44	100%	716	42', 48'
17025-11	Indianapolis, IN Lower Projects	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	9/27/19	\$3,638,545.99	100%	4196	36', 48', 66', 72'
17025-13	Indianapolis, IN North Side	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	4/26/19	\$1,354,680.15	100%	3555	15', 18', 21', 30', 24', 24', 36', 36', 36', 36', 36', 48', 36', 36', 48', 15', 48'
17025-14	Indianapolis, IN Purd State Storage	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$1,042,871.70	100%	1824	48'
17025-15	Indianapolis, IN 53017 Area Street Rehab	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$970,630.42	100%	5403	12', 15', 20', 24', 30'
17025-16	Indianapolis, IN Snyder's Chapel Storm Sewer	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/29/17	\$28,010.00	100%	170	24'
17025-18	Indianapolis, IN C/O CCS 4824b	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	11/7/16	\$865,388.57	100%	3025	24', 21', 30', 36', 42'
17025-19	Indianapolis, IN Riverview Run	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	6/9/19	\$1,120,453.41	100%	1651	12', 15', 36', 48', 54', 54'
17025-20	Indianapolis, IN Emergency CCTV	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	9/19/18	\$137,661.00	100%	185	36'
17025-21	Indianapolis, IN East 32th Street	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	6/14/19	\$1,188,514.46	100%	653	72'
17025-23	Indianapolis, IN East Pro-Cam	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	8/6/19	\$1,311,618.98	100%	3601	20', 24', 20', 30', 30', 42', 48'
17025-25	Indianapolis, IN Chen Park	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	3/25/20	\$4,111,530.01	100%	5615	24', 30', 36', 54'
17025-29	Indianapolis, IN 145 Grand and North	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	7/6/20	\$538,477.05	100%	2397	20', 24', 30'
17025-30	Indianapolis, IN Lockwood and Energy	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	7/1/20	\$597,071.71	100%	2438	24'
17025-31	Indianapolis, IN Tobacco	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	10/16/19	\$127,754.01	100%	491	15'
17025-32	Indianapolis, IN Morgan & Columbus	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/6/19	\$48,382.00	100%	496	6', 15'
17025-33	Indianapolis, IN Springfield Rd	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	12/6/19	\$28,637.00	100%	572	6'
17025-34	Indianapolis, IN 50th & Graham	Shan Foster	Citizens Energy Group	P 317 429 3982	sfoster@CitizensEnergyGroup.com	2020 N. Meridian St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP - IN	2/26/20	\$96,110.00	100%	1209	12'

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Significant	Project Manager	Type	Completed Date	Completed Amount	Percent Complete	Percent Complete	Drawings
17025-25	Indianapolis, IN Rita & Pat Creek	Shari Foster	Citizens Energy Group	P 317 429 3982	sfoster@citizensenergygroup.com	2020 N. Mendota St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP -IN	12/8/19	\$69,371.00	100%	383	10'
17025-36	Indianapolis, IN 4100 Burnside Drive	Shari Foster	Citizens Energy Group	P 317 429 3982	sfoster@citizensenergygroup.com	2020 N. Mendota St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP -IN	12/8/19	\$20,343.00	100%	160	12'
17025-38	Indianapolis, IN 1-10 Burnside Street Reproduction	Shari Foster	Citizens Energy Group	P 317 429 3982	sfoster@citizensenergygroup.com	2020 N. Mendota St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP -IN	5/8/20	\$7,103,381.30	100%	889	15', 18', 48'
17025-40	Indianapolis, IN Pleasant Sun Division Rehab	Shari Foster	Citizens Energy Group	P 317 429 3982	sfoster@citizensenergygroup.com	2020 N. Mendota St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP -IN	9/30/20	\$5,187,641.90	100%	3880	10', 15', 30', 45', 54', 57', 58', 67', 68'
17025-41	Indianapolis, IN Newland Ave Energy Project	Shari Foster	Citizens Energy Group	P 317 429 3982	sfoster@citizensenergygroup.com	2020 N. Mendota St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP -IN	8/30/20	\$179,145.00	100%	425	24'
17025-43	Indianapolis, IN Coburn Energy & 11-2	Shari Foster	Citizens Energy Group	P 317 429 3982	sfoster@citizensenergygroup.com	2020 N. Mendota St. Indianapolis, IN 46202	Bill Siebert	Chris Vogt	CIPP -IN	3/15/21	\$50,001.60	100%	426	10'
17028	Owensland Park, KS The View, CIPP Lining	Bill Reinhold	Sub to McClan Construction	913 887 2850	bill@mcclanconstruction.com	McClan Construction, LLC PO Box 387 Shawnee, KS 66206	Danny Brown	Randy Mather	CIPP -KS	8/31/17	\$34,078.40	100%	1121	8'
17034	Owensland Park, KS YRC Surface Parking Expansion	Rein Reinhold	Sub to Titan Built LLC	913 782 6700	reinman@titanbuilt.com	11865 S. County Rd Cabin, KS 66001	Danny Brown	Randy Mather	CIPP -KS	12/7/18	\$8,150.00	100%	186	8'
17046	Tomball, OH Muller's Brewery Paper Lining Project in Tomball, OH	Mike Shamblin	Sub to Vortex Industrial Solutions, LLC	P 652 252 2259	mike@vortexind.com	9145 Walsville Rd Houston, TX 77029	Chad Ruber/ Jean Gote	Bob Dauterbach	CIPP -OH	2/26/18	\$54,907.55	100%	1752	4', 6', 10', 12', 15'
17048	Kansas City, KS 15' Stormwater Infiltration	Aaron Carter	Sub to Emery Sharp & Sons, Inc	816 221 3500	Aaron.Carter@emerysharp.com	140 Walnut Street Kansas City, MO 64106	Danny Brown	Randy Mather	CIPP -KS	9/30/17	\$17,000.00	100%	104	15'
17054	Whitaker, IA 55 Cellulose System Rehab - Phase 3	Tom Royer	City of Whitaker	P 515 978 7920	royer@whitaker.org	200 W. Jackson Road Whitaker, IA	Jeff Hirtz	Nick Pryor	CIPP -IA	4/7/18	\$30,322.25	100%	542	10', 12', 16', 21', 24'
17025	Lawrence, KS 2017 S5 Rehab	Nicholas Hoy, P.E	City of Lawrence - Utilities Department	P 785 832 7882	nhoy@lawrenceks.org	6 East 8th St Lawrence, KS	Danny Brown	Randy Mather	CIPP -KS	7/6/18	\$1,309,658.08	100%	46581	8', 10', 12', 15', 18', 24'
17059-01	Kalamazoo, MI Bridges Repair	Stephanie Knight	Sub to AECOM Technical Services, Inc	P 919 481 1209	Stephanie.knight@atsec.com	515 South Flower St, Suite 1050 Los Angeles, CA 90071	Jeff Hirtz	Cory Street	CIPP -MI	12/1/18	\$480,975.00	100%	650	12', 42'
17061	Davenport, IA Duck Creek South Infiltration Rehabilitation Project	Brad Guy	City of Davenport	P 563 327 5105	BradGuy@ci-davenport.org	155 West Duane St Davenport, IA 52801	Brod Scherwing	Cory Street	CIPP -IA	3/1/19	\$4,389,619.94	100%	2362	24', 30', 37', 47', 48'
17074	Southport, IN Drought Storm Sewer Rehab	Bill Lober	Weslar Engineering	P 317 788 4551	bill@weslarenge.com	6901 Dempshire Rd Southport, IN 46227	Bill Siebert	Chris Vogt	CIPP -IN	11/22/17	\$83,894.00	100%	620	17', 15'
17076	Chester, PA SR 174-C, Vermont Run Sanitary	Joe Cestone	(DELOCO) Delaware County Regional Water Quality Control Authority	P 610 621 5141	cestone@delco.com	P O Box 969 Chester, PA 19316 0969	Chad Ruber	Trevor Ewing	CIPP -PA	3/1/18	\$80,282.00	100%	707	10'
17079	Decatur, IL 2017-28, 2017 Infiltration Long Line Repair	Paul Caswell	City of Decatur	P 217 424 2747	pcaswell@decatur.gov	#1 City K Avenue Plaza Decatur, IL 62523	Jeff Hirtz	Nick Pryor	CIPP -IL	4/30/19	\$680,779.93	100%	18229	8', 10', 12', 15', 30'
17081	Lawrence, KS Business Plaza Storm Sewer	Tom Jacobs	City of Lawrence	P 913 477 7644	tpjacob@lawrence.com	1250 W. 17th St, New Lawrence, KS 66015	Danny Brown	Randy Mather	CIPP -KS	6/25/18	\$1,110,356.50	100%	6280	15', 18', 18'21', 24', 28'20', 30', 36', 39'24', 42', 44', 44'
17090	Burl, NE Sanitary Sewer & Storm Sewer Paper Lining	Allen Shoemaker	Sub to HydricChem/SC	P 402 426 4151	ashoemaker@hydricchem.com	218 S 16th St Burl, NE 68808	Danny Brown	Randy Mather	CIPP -NE	5/22/18	\$5,168.00	100%	437	18'
17096	Rockford, IL Municipal Infiltration	Alan Lake	Sub to HydricChem/SC	P 618 553 9155	alan.lake@hydricchem.com	PO Box 7801 Springfield, OH 45501	Jeff Hirtz	Nick Pryor	CIPP -IL	10/1/18	\$103,750.00	100%	89	24'
17103	Bonner Springs, KS CIPP 2017	Laura Munro	City of Bonner Springs	P 913 422 7510	lmunro@bonnersprings.org	204 E 7th St Bonner Springs, KS 66012	Jeff Hirtz	Nick Pryor	CIPP -KS	3/12/19	\$136,319.00	100%	4474	8', 24'
17106	Wyanoke County, KS 2017 Sanitary Sewer Rehab #1	Kate Finger	Unified Government of Wyandotte County	P 913 573 5422	Kfinger@wyocok.org	701 North 7th St Kansas City, MO 64101	Jeff Hirtz	Nick Pryor	CIPP -KS	3/31/20	\$1,250,023.50	100%	2286	8', 10', 12', 15', 18', 21', 24', 24', 36', 48'
17108	Augusta, KS Sanitary Sewer Rehabilitation Basin #2	Eric Blums	City of Augusta	P 316 775 4555	erblums@augustakg.org	113 E 6th Ave Augusta, KS 67010	Jeff Hirtz	Nick Pryor	CIPP -KS	1/23/19	\$1,780,874.45	100%	3185	6', 8', 12'

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor/Contact	Project Manager	Type	Completed Date	Completed Amount	Percent Complete	Estimate Complete	Dimensions
18001	Decker, IL 2017 SE 30' Sewer Rehab	Don Miller	Sanitary District of Decker	P 217 422 6931	DonM@sdccsanitary.org	501 Decker Lane Decker, IL 62522	Jason Loney	Nick Pryor	CIPP - KS	8/30/18	\$1,179,813.00	100%	6864	36" x 48"
18002	Kansas City, MO Blue River South Head (KS 3) Rehabilitation Project - Phase 1	John Dougherty	Sub to Kessick Construction Co., Inc	P 816 363 5530	jdougherty@ksscico.com	8131 Indiana Ave Kansas City, MO 64132	Danny Brown	Randy Mather	CIPP - KS	1/22/19	\$67,108.45	100%	29791	8" 10" 12"
18004	Rose Hill, KS 2017 Sanitary Sewer Rehab	Jeff Murphy	Sub to Nowack Construction Co., Inc	P 316 734 8888	jeff@nowackconstruction.com	700 S. Cochrane Rd P.O. Box 218 Coaldale, KS 67027	Jeff Hitz	Nick Pryor	CIPP - KS	5/31/18	\$34,437.00	100%	1164	8"
18008	Owland Park, KS Iron, 17 1/8" 60" Corrugated Metal	John Dougherty	Sub to Kessick Construction Company	P 816 363 5530	jdougherty@ksscico.com	8131 Indiana Ave Kansas City, MO 64132	Danny Brown	Randy Mather	CIPP - KS	5/14/18	\$8,150.00	100%	210	8"
18011	Wray, MO 2018 Collection System CIP	Anthony Price	Upper Moreland-Kalton Joint Sewer Authority	P 214 368 3375	aprice@jems-nc.com	2835 Lincoln Road Wray, MO 64690	Joan Grate	Travis Ewing	CIPP - PA	8/5/18	\$105,846.95	100%	4530	8"
18013	Lyons, KS Municipal Sewer Line Project 2018	Chris Vlach	City of Lyons	P 620 227 3654	vlachc@cityoflyons.com	201 West Main Lyons, KS 67054	Jeff Hitz	Nick Pryor	CIPP - KS	6/30/18	\$38,500.00	100%	700	8"
18018	Hutchinson, KS Storm Sewer	Jeff Shaw	Sub to JAPAC	P 620 662 2112	jeffshaw@japac.com	1800 N. Lorraine, Suite 100 Hutchinson, KS 67501	Jeff Hitz	Nick Pryor	CIPP - KS	7/31/18	\$70,976.10	100%	858	18"
18022	Griffin, IN Sanitary Inseparable Sewer Improvements	Rock Kosowatz	Town of Griffin	P 219 924 3838	rock.kosowatz@griffin.in.gov	111 North Broad St Griffin, IN 46319	Bill Seibert	Chris Vogt	CIPP - IN	8/1/19	\$3,992,949.25	100%	13000	36" x 42"
18023	Fairfield, IA 2018 Sanitary Sewer CIP Lining	Melanie Culpump Simon	City of Fairfield	P 641 472 8193	mcamp@fairfieldiowa.gov	118 South Main St Fairfield, IA 52556	Jeff Hitz	Cory Street	CIPP - IA	7/22/18	\$135,250.00	100%	3984	8" 12" 16"
18025	Manhattan, KS S1801, 2018 CIP Sanitary Sewer	Norm Francis	City of Manhattan	P 785 581 4583	francis@cityofmanhattan.com	1101 Poyraz Ave Manhattan, KS 66502	Jeff Hitz	Nick Pryor	CIPP - KS	7/31/18	\$485,307.10	100%	2137	8" 10"
18029	Bonner Springs, KS 2018 Pipe Lining	Rein Warr	City of Bonner Springs	P 913 422 8117	rwarr@bonnersprings.org	450 3rd St Bonner Springs, KS 66012	Jeff Hitz	Nick Pryor	CIPP - KS	2/29/19	\$83,484.50	100%	3781	8"
18033	Sioux Falls, SD 2018 CIP Sewer Lining & Manhole Rehab	John Oman	City of Sioux Falls	P 605 368 8640	john.oman@siouxfalls.sd.gov	234 West 10th Street Sioux Falls, SD 57117-1402	Jason Loney	Cory Street	CIPP - SD	8/1/18	\$1,942,537.55	100%	5884	6" 10" 18" 24" 36"
18034	Lawrence, KS Storm Drainage Repair, Monrovia St., Boulder Cr., Hudson St.	Jim Walker	Sub to Blue Miles	P 816 505 3302	jim.walker@blue-miles.com	501 S. 2nd St Birmingham, MO 64161	Danny Brown	Randy Mather	CIPP - KS	7/19/18	\$189,986.00	100%	1023	18" 24" 30" 36" 42" 48"
18038	St Paul, MN Metropolitan Council Contract Number 17P030, Project Number 497/030	Kim Sanders	Metropolitan Council	P 651 692 4616	kimberly.sanders@metc.state.mn.us	300 Robert Street North Saint Paul, MN 55101	Jason Loney	Cory Street	CIPP - MN	4/1/19	\$2,501,744.27	100%	3543	36" x 42"
18044	Kansas City, KS Linnecy Abatement Association	Janet Weiser	Sub to Rodriguez Mechanical Contractors, Inc	P 913 281 1814	janet@rmdc.com	541 South 11th Street Kansas City, MO 66105	Danny Brown	Randy Mather	CIPP - KS	11/14/18	\$24,980.00	100%	462	8" 10"
18045	Philadelphia, PA Contract: 183119, Trembly's Sewer Rehabilitation Lining of the S in Cobbs Creek	Devendra N Pradya	City of Philadelphia	215-886-6332	devendra.p@phila.gov	1501 - 6th Boulevard Philadelphia, PA 19102	Chad Rueter	Bob Quadenhuth	CIPP - PA	6/6/20	\$630,561.72	100%	16930	10" 12" 15" 18" 24" 30"
18054	Lawrence, KS 2018 Sanitary Sewer Rehab	Nicholas Hoyt	City of Lawrence, Utilities Dept	P 317 356 6666	nhoyt@lawrenceks.gov	1 East Sun St Lawrence, KS 66044	Danny Brown	Randy Mather	CIPP - KS	12/19/19	\$1,668,087.05	100%	64467	6" 10" 12" 15"
18055	Indianapolis, IN CEG PROJ: PINKNET Run 1318023	Alex Dale	Sub to Bowen Engineering Corporation	P 317 356 6666	alex@bowenengineering.com	8802 North Meridian St Indianapolis, IN 46260	Bill Seibert	Chris Vogt	CIPP - IN	7/29/18	\$228,187.44	100%	285	33"
18059	Fort Lawrence, KS 2018 Sewer Rehabilitation	Kevin Black	Sub to Rodriguez Mechanical Contractors, Inc	P 816 363 5530	kevin@ksscico.com	541 South 11th Street Kansas City, MO 66105	Danny Brown	Randy Mather	CIPP - KS	8/31/18	\$12,000.00	100%	213	6"
18062	Lawrence, KS Sanitary Sewer Rehab 14	Justin Pinnoff	Sub to Kessick Construction Co., Inc	P 712 279 6315	jpinnoff@ksscico.com	8131 Indiana Ave Kansas City, MO 64132	Danny Brown	Nick Pryor	CIPP - KS	1/15/19	\$65,101.75	100%	868	6" 8"
18065	Sioux City, IA 2018 Annual Utility Lining	Tom Jacobs	City of Sioux City	P 515 477 7644	tomjacobs@sioux-city.org	426 6th Street Sioux City, IA 51102	Jeff Hitz	Nick Pryor	CIPP - IA	10/9/18	\$13,218.00	100%	4000	8" 12"
18066	Lawrence, KS Breakdown Pike Phase 1 Storm Drainage Improvements	Tom Jacobs	City of Lawrence	P 712 279 6315	tomjacobs@sioux-city.org	17101 W 67th St Lawrence, KS 66219	Danny Brown	Nick Pryor	CIPP - KS	7/1/19	\$1,115,616.23	100%	4529	15" 18" 24" 30" 36" 42" 48" 54" 60" 66" 72"
18067	Wichita Hills, KS Purdum Hill Sanitary Sewer Rehab	Matt Rohrmeier	Sub to Kessick Construction Co., Inc	616 363 5530	mrohrmeier@ksscico.com	8131 Indiana Ave Kansas City, MO 64132	Danny Brown	Randy Mather	CIPP - KS	4/15/19	\$108,800.00	100%	120	48"

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

IP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Supervisor/Staff	Project Manager	Type	Completed Date	Completed Amount	Percent Complete	Number of Connections	Diameter
18074	Fort Riley, KS FR051805CECFX	Greg Roaman	Fort Riley Utility Services, Inc	P 785-802-7023	Gregory.Roaman@tusinc.com	8152 1st Division Road Fort Riley, KS 64642	Jeff Hitz	Nick Pryor	CIPP - AS	5/31/19	\$1,970,000.50	100%	34710	8", 8", 10", 12", 15", 21"
18074-01	Fort Riley, KS FR051805CECFX, CIP Phase 1	Ingrid Kuszniewski	ASUS	P 785 784 2444	ingrid.kuszniewski@tusinc.com	8152 1st Division Road Fort Riley, KS 64642	Danny Brown	Nick Pryor	CIPP - AS	8/29/19	\$1,970,000.50	100%	30000	8", 8", 10", 12", 15", 21", 24"
18074-02	Fort Riley, KS FR051805CECFX, CIP Phase 2	Ingrid Kuszniewski	ASUS	P 785 784 2444	ingrid.kuszniewski@tusinc.com	8152 1st Division Road Fort Riley, KS 64642	Danny Brown	Nick Pryor	CIPP - AS	8/29/19	\$1,711,038.00	100%	36284	8", 8"
18074-03	Fort Riley, KS FR051805CECFX, CIP Phase 3	Greg Roaman	Fort Riley Utility Services, Inc	P 785-802-7023	Gregory.Roaman@tusinc.com	8152 1st Division Road Fort Riley, KS 64642	Jeff Hitz	Nick Pryor	CIPP - AS	10/30/19	\$1,038,237.75	100%	22221	8", 10", 12", 15", 18", 21", 24"
18074-04	Fort Riley, KS FR051805CECFX, CIP Phase 4	Greg Roaman	Fort Riley Utility Services, Inc	P 785-802-7023	Gregory.Roaman@tusinc.com	8152 1st Division Road Fort Riley, KS 64642	Jeff Hitz	Nick Pryor	CIPP - AS	12/15/20	\$1,332,194.00	100%	30034	8", 10", 12", 21", 24"
18096	Fairmont City, IL Covision 55 Rehabilitation	Chad Ross	Village of Fairmont City	P 314 241 6300		2601 North 41st St Fairmont City, IL 62701	Alan Shubatz	Travis Jernets	CIPP - IL	1/17/19	\$55,771.00	100%	339	24"
18101	Cowley Springs, KS 2018 Sanitary Sewer Rehabilitation Project	Annie Jones	Sub to SB Weyer Connecting, Inc	P 816 322 8557	sbwetter@connecting.com	1807 S State RY Belen, MO 64012	Jeff Hitz	Nick Pryor	CIPP - AS	12/31/18	\$2,712.00	100%	236	8"
18112	Shawnee, KS 2018 Stormwater Pipe Repair	Jerry Wiedemann	Sub to Wiedemann, Inc	P 816 322 1125	jerry@wiedemanninc.com	560 N Scott Belen, MO 64012	Jeff Hitz	Nick Pryor	CIPP - AS	3/29/19	\$347,760.00	100%	3981	15", 18", 21", 24", 27", 30", 36"
18113	Trenton, OH MillerCoors Brewery 2018	Patrick LeClair	Sub to Hydrus Industrial Solutions, LLC	816-502-2507	patrick@hydrusindustrial.com	10200 US Hwy 92 E, Tampa, FL 33610	Joah Grate	Bob Quisenberry	CIPP - OH	9/11/19	\$127,614.70	100%	2159	8", 12", 15", 18", 24"
18117	Wichita County, KS 2018 Sanitary Sewer Rehabilitation Project	Joe Barnes	Unified Government of Wyandotte	P 913 573 1353	jbarnes@wyandotte.org	50 Market Street Kansas City, KS 66118	Jeff Hitz	Nick Pryor	CIPP - AS	1/21/20	\$1,130,649.00	100%	28588	8", 10", 12", 15", 18", 24", 48"
19005	Owensboro Park, KS Stormwater Upgrade	Brandon Morns	Johnson County Westwater	P 913 267 5234	Brandon.Morns@jcw.org	4800 Neil Avenue Mission, KS 66202	Danny Brown	Brent Adams	CIPP - AS	6/3/19	\$7,815.00	100%	90	8"
19007	Wichita, KS 2019 Sanitary Sewer Rehab	Jeff Tenure	City of Wichita	P 316 268 4046	tenure@wichta.gov	455 South Main St Wichita, KS 67202	Jeff Hitz	Nick Pryor	CIPP - AS	9/24/19	\$270,448.00	100%	14026	8", 10", 15", 18", 36"
19008	Wendell, MA 2018-01-2019 Sanitary Sewer	Maxwell Silva	Sub to A & W Maintenance, Inc	P 508 847 8539	max@awmaintenance.com	137 Pine Street Wendell, MA 02746	Chad Risher	Travis Ewing	CIPP - MA	1/6/21	\$1,282,396.00	100%	8508	18", 21"
19011	Wichita, KS 2018 WaterCops Blocker Pipe Lining Project	Patrick LeClair	Sub to Venter Industrial Solutions, LLC	P 816 502 2507	patrick@venterindustrial.com	3939 W Highland Blvd Milwaukee, WI 53201	Brad Schramm	Chris Vogt	CIPP - WI	7/31/19	\$150,703.80	100%	459	8", 10", 18", 24"
19012	Granite City, IL 49179-180-0014	Randy Jenkins	Sub to ARCL, Inc	P 618 731 4761	renjen@arclinc.com	490 Jackson Drive Mount Vernon, IL	Jason Lacey	Travis Jernets	CIPP - IL	11/6/20	\$646,460.83	100%	1160	48", 24", 54", 31.5"
19024	Lenexa, KS Cedar's Storm Drainage	Scott Wilcox	Sub to WF Anderson Builders, LLC	P 816 935 8802	scott@wf-ab.com	1101 Pryor Ave Manhattan, KS 66502	Jeff Hitz	Rick Pryor	CIPP - KS	11/7/20	\$88,894.25	100%	7925	15", 18", 21", 24", 30", 36", 42"
19033	Manhattan, KS SR1901, 2019 Sanitary Sewer	Norm Francis	City of Manhattan	P 785 587 6830	francis@cityofmanhattan.com		Jeff Hitz	Nick Pryor	CIPP - AS	8/28/19	\$382,159.40	100%	16204	8"
19039	Fair Authority, PA Vanguard Road Rehabilitation	John H Ryba	Township of Fullum Sun Authority	P 215 946 6002	john@fair-pa.com	507 Lincoln Highway Fairless Hill, PA 19003	Nel Soriano	Ken Spaw	CIPP - PA	12/1/19	\$273,025.00	100%	3105	8"
19041	West Manchester Township, PA 2019 Sewer Relining #1	Steve Contino	Dawood Engineering, Inc	P 717 732 4576	sccontino@dawood.com	390 East Berlin Road, York, PA 17408	Chad Risher	Travis Ewing	CIPP - PA	1/22/19	\$251,291.00	100%	5880	8"
19067	Fairmont City, IL C1902 FY19 Covision Rehabilitation	Chad Ross	Village of Fairmont City	P 314 241 6300	cross@vms-inc.com	660 Covision Oak View, Suite 1 Fairmont, IL 62702	Alan Shubatz	Travis Jernets	CIPP - IL	9/18/20	\$59,303.00	100%	440	15", 24"
19069	Hubbard, IA Phase 2 Sanitary Sewer Lining	Robert Inland	City of Hubbard	P 841 864 3187	inland@cityofhubbard.com	303 E Maple St Hubbard, IA 50122	Alan Shubatz	Chris Vogt	CIPP - IA	12/2/19	\$302,480.00	100%	7060	8"
19082	Fort Riley, KS 630 Connection Contract	Brian Peterson	Sub to Ogden Diversified Services	P 785 784 1944	bpeterson@ogden.com	1801A N Street Fort Riley, KS 64642	Jeff Hitz	Nick Pryor	CIPP - KS	8/6/19	\$48,560.00	100%	330	24"
19088	Marion, IA 2019 Sanitary Sewer Relining	Jacob Hahn	City of Marion	P 319 743 6340	jhahn@cityofmarion.org	1225 8th Avenue, Suite 200 Marion, IA 52302	Alan Shubatz	Chris Vogt	CIPP - IA	11/7/19	\$186,500.65	100%	7701	8", 10"

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

IP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Superintendent	Project Manager	Type	Completed Date	Completed Amount	Percent Complete	Volume Complete	Diameter
19073	Lawrence, KS Sanitary Sewer Rehabilitation City Project 2017-21, 17-15468	Luke Poffert	Sub to Keadick Construction Co., Inc	P 816-369-5930	lpoffert@keadick.com	8101 Indiana Ave Kansas City, MO 64132	Jeff Hitz	Nick Pryor	CIPP - KS	4/13/20	\$15,741.25	100%	245	8"
19076	Chaska, IL Sanitary Sewer Rehabilitation City Project 2017-21, 17-15468	Rory Morgan	Village of Chaska	P 618 301 2160	morgan@chaskaindia.com	201 W 4th St Chaska, IL 60206	Alan Shuhaltz	Trevi Jernis	CIPP - IL	11/17/20	\$68,573.45	100%	561	8" - 15"
19078	Lawrence, KS Lawrence Storm Drainage	Marcus Lineweaver	Sub to Lineweaver	P 913-351-3474	marcus@lineweaver.com	719 E Gilman Rd Lansing KS 68603	Jeff Hitz	Nick Pryor	CIPP - KS	1/18/21	\$324,629.50	100%	1943	15", 18", 24", 30", 36", 42", 48", 54", 60", 66", 72", 78", 84", 90"
19087	Mission Hill Linn, KS Erosion Control and Storm Drainage	Dennis Langley	Sub to Langley Muehler Concrete Construction	P 913 371 1070	dennis@lmc.com	54 N 10th Street Kansas City, KS 66102	Danny Brown	Brent Adams	CIPP - KS	8/18/19	\$23,620.00	100%	55	24"
19090	Decatur, IL Downtown Sewer Rehabilitation City Project 2017-21, 17-15468	Paul Caldwell	City of Decatur	P 217-424-2147	pcaldwell@decatur.gov	1000 N. Jackson Plaza Decatur, IL 62523-1186	Jason Laney	Nick Pryor	CIPP - IL	11/17/20	\$5,286,444.96	100%	11976	34", 36", 42", 48", 54", 60", 66", 72"
19091	Hoys, KS Sanitary Sewer CIPP Lining 2019-01	John Bruhn	City of Hoys	P 785-623-0880	Conrad Enbal	1007 Vine Street Hoys, KS 67601	Danny Brown	Brent Adams	CIPP - KS	10/28/19	\$391,411.50	100%	18333	8" - 10"
19092	Fort Lawrence, KS Lawrence Area Sewer	Pat Wheeler	Sub to Rodriguez Mechanical Contractors	P 913-281-1814	pat@rmdc.com	541 S. T. St. Kansas City, KS 66105	Jeff Hitz	Nick Pryor	CIPP - KS	11/1/19	\$68,610.00	100%	1626	6" - 8"
19094	Dover, PA Delaware, Maryland, Virginia SPP Project Lining	Jeffrey Spangler	Dover Borough	P 717-846-4373	jspangler@jibaly.com	66 Sycamore Court Dover, PA 17315	Joeh Grete	Trevi Ewing	CIPP - PA	10/1/20	\$32,276.00	100%	1042	8"
19096	Lawrence, KS 2019 Storm Sewer Lining Project	Tom Jacobs	City of Lawrence	P 913-477-7500	ljacobs@lawrence.com	17101 W 67th St, Lawrence KS 66219	Jeff Hitz	Nick Pryor	CIPP - KS	5/14/20	\$970,646.40	100%	6968	15"
19101	Missile Woods, KS KS - 2019 CIPP	John Sullivan	City of Mission Woods	P 913 327 1214	john.sullivan@missionwoods.org	2545 W 47th St Wichita, KS 67205	Danny Brown	Brent Adams	CIPP - KS	12/2/19	\$76,373.00	100%	364	12", 18", 30"
19107	Red Wing, MN 2019 Sewer Rehabilitation Project	Bob Stark	City of Red Wing	P 651-385-5112	bob.stark@redwingmn.us	229 Tyler Road North Red Wing, MN 55066	Jason Laney	Nick Pryor	CIPP - MN	3/9/20	\$465,860.00	100%	2740	30"
19123	Cicero, IN Cicero 1 & 2 Rehabilitation	Jeff Toebehood	Sub to 3D Company	P 765-988-3338	jefftoe@3dcompany.com	2695 East 350 North Muncie, IN 47303	Alan Shuhaltz	Chris Vogt	CIPP - IN	6/26/20	\$333,266.25	100%	10512	6" - 8", 10", 12"
19123-01	Cicero, IN 3rd Storm Sewer	Terry Cooper	Town of Cicero	P 317-4-984-4833	terrycooper@ci.cicero.in.us	1159 Stringham Rd Cicero, IN 46004	Alan Shuhaltz	Chris Vogt	CIPP - IN	6/30/20	\$47,775.00	100%	325	24"
19130	Channahon, IL 2019 Sewer Rehabilitation Project	Randy LePere	Township of Channahon	P 815 632 2414	randyleper@channahon.org	1 Ecology Dr Ofallon, IL 62459	Alan Shuhaltz	Trevi Jernis	CIPP - IL	4/27/20	\$383,227.00	100%	9480	8"
19133	Indianola, IA Sewer Main & Lateral Rehabilitation	Rust Graves	City of Indianola	P 515-862-5384	rgaves@indianolawva.gov	11879 Monks St Indianola, IA 50125	Alan Shuhaltz	Chris Vogt	CIPP - IA	5/4/20	\$66,640.00	100%	2380	8"
20065	Wayne County, KS 2019 Storm Sewer	Jason Adams	Sub to Blue Hole Contractors, Inc	P 816 656 6070	jaadams@blueholecontractors.com	601 Spaulley St Birmingham, IL 629161	Danny Brown	Brent Adams	CIPP - KS	7/22/20	\$725,400.00	100%	1850	36"
20066	Shawnee, KS 2020 Storm Water	Dan Forbes	Sub to Weidemann, Inc	P 816 327 1125	dforbes@weidemann.com	566 N Scott Belen, NM 86017	Danny Brown	Brent Adams	CIPP - KS	12/15/20	\$318,155.00	100%	2871	15", 18", 21", 24", 30"
20023	Madison, MS CIPP & Lateral Rehabilitation	Jessica Love	City of Hutchinson	P 620 694 3646	Jessica.Love@hutchinson.com	1500 South Plum Hutchinson, KS 67501	Danny Brown	Brent Adams	CIPP - MS	5/26/20	\$906,286.00	100%	4588	27"
20025	Carmel, IN 2019 Sewer Lining, Contract 97	John Duffy	City of Carmel	831 620 2070	john.duffy@ci.carmel.in.us	One Chest Drive Carmel, IN 46032	Bill Seibert	Chris Vogt	CIPP - IN	11/30/20	\$736,673.80	100%	2433	8", 10", 12"
20027	Polk County, IN Old South Haven Stormwater	Michael Nowaczyk	Polk County Dept of Development & Storm Water Right	P 219-465-5307	mnowaczyk@polkcountync.org	155 Indiana Ave Wayzata, MN 55393	Brent Schenning	Chris Vogt	CIPP - IN	6/7/21	\$4,000,354.37	100%	14500	12", 18", 24", 30", 36", 42", 48", 54", 60"
20028	Albion, NE Winkler Water Treatment Plant	Brad Miller	City of Albion	P 402-387-2494	bradmiller@albionne.net	608 E. 4th St, Albion, NE 68910	Jeff Hitz	Nick Pryor	CIPP - NE	8/26/20	\$564,119.38	100%	18445	8", 10", 12"
20030	Wayzata, MN 2020 Storm Sewer Rehabilitation	Jennifer Schumann	City of Wayzata	(652)404-5371	jcschumann@wayzata.org	299 Wayzata Blvd, WI Wayzata, MN 55391	Alan Shuhaltz	Karl Bales	CIPP - MN	12/15/20	\$710,844.38	100%	9338	8"
20032	Holbrook, KS 2021 Gasation System Rehab - CIPP	Denny Adair	City of Holton	P 785-384-1973	dair@ci.holtonks.org	403 Pennsylvania Avenue Holton, KS 66536	Danny Brown	Brent Adams	CIPP - KS	6/16/20	\$400,340.00	100%	9636	8", 10", 12"

NORTHERN STATES COMPLETED PROJECT LIST LAST 7 YEARS

VP Job #	Project Name	Contact Name	Owner Name	Phone Number	Email Address	Address	Superintendent	Project Manager	Type	Completed Date	Completed Amount	Percent Complete	Scope Complete	Diameter
20036	Hanson, IA 2009 Sanitary CIPP Rehab	Jacob Hahn	City of Marion	P 315-743-8340	hahn@cityofmarion.org	1235 So. Archer, Suite 200 Marion, IA 52240	Alan Stuhlietz	Chris Vogt	CIPP-A	7/13/20	\$113,676.00	100%	3684	8", 10"
20040	Dallas County, IN Collection System Improvements	Rob Belsuch	Dallas County Regional WW District	P 815-566-2768	rob@ccsdc.com	100 W Main St, #211 Marion, IN 47350	Alan Stuhlietz	Chris Vogt	CIPP-IN	10/2/20	\$525,041.50	100%	17680	8", 10", 12"
20042	Kansas City, KS LAWRENCE, KS 1311 System Improvement	Trevor Knabberg	Sub to Laveco	P 816-272-8659	trevor@laveco.com	5037 S 4th Street Leavenworth, KS 66048	Danny Brown	Brent Adams	CIPP-KS	9/15/20	\$38,880.00	100%	40	36"
20045	Williamsport, IN 1111 System Improvement	Conor Swan	Sub to Midwest Mate	P 317-507-4022	cswan@midwestmate.com	8814 W 350N Greenfield, IN 46140	Alan Stuhlietz	Chris Vogt	CIPP-IN	10/16/20	\$138,210.70	100%	4710	8", 8", 10"
20056	Laverne, MN 161 Improvement No. 20-27	Steven Grossman	City of Laverne	(652)865-2742	sgrossman@laverne.mn.gov	15400 Iowa Avenue Laverne, MN 55044	Danny Brown	Karl Bates	CIPP-MN	12/15/20	\$315,694.00	100%	13024	8", 9"
20058	Topeka, KS 1-1" CIPP	Darren Casper, P.E.	Sub to Arrowhead Contracting	P 913-481-0723	dcasper@arrowhead-cta.com	10081 Eicher Drive Lenexa, KS 66219	Danny Brown	Nick Pryor	CIPP-KS	7/6/20	\$15,700.00	100%	173	12"
20056	Louis, IN 2000 Street Improvements	Keith Kugheben	Sub to Dyer Construction Company	P 219-733-3156	kegheben@dyerconstruction.com	1716 Sheffield Ave Dyer, IN 46311	Brian Schenning	Chris Vogt	CIPP-IN	11/16/20	\$124,534.00	100%	3044	12"
20109	Lawrence, KS Cok-119-4506	Christopher Bratley	Sub to Exco Constructors	P 913-927-3416	chris.bratley@excoconstructors.com	8041 W 47th Street Overland Park, KS 66203	Danny Brown	Brent Adams	CIPP-KS	11/25/20	\$16,965.00	100%	45	15"

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

7 of 8

**3. Onsite Superintendent/Foreman**

(Must be completed and submitted with Bid for consideration)

**List name of onsite superintendent/foreman and list a minimum of 3 projects of similar complexity totaling 10,000 lineal feet of CIPP lining in sanitary sewers greater than 24 inches in diameter that they have supervised in the past 7 years and provide references.**

Superintendent/Foreman Name: Jason Laney

**3.1.** Client's Name: City of Decatur

Address: 1 Gary K Anderson Plaza, Decatur, IL 62523

Contact Name: Paul Caswell Contact Phone: 217.424.2747

Type of Work: Project consisted of the rehabilitation of 23,288 linear feet of 18-inch to 84-inch diameter sewers utilizing the CIPP method. Of that 23,288 linear feet, 21,940 linear feet consisted of 37-inch to 84-inch diameter sewers. Project Name: 7th Ward Sewer Rehabilitation

Year Work Performed: 2018 (Completed) Work Amount (\$): \$7,675,591.93

**3.2.** Client's Name: Metropolitan Council

Address: 390 Robert Street North, Saint Paul, MN 55101

Contact Name: Kim Sanders Contact Phone: 651.602.4616

Type of Work: Project consisted of the rehabilitation of 3,543 linear feet of 36-inch to 42-inch diameter sewers utilizing the CIPP method. Project Name: Metropolitan Council Contract Number 17P030, Project Number 807635.

Year Work Performed: 2019 (Completed) Work Amount (\$): 2,501,744.27

**3.3.** Client's Name: Metropolitan St. Louis Sewer District

Address: 2350 Market Street, St. Louis, MO 63103

Contact Name: Steve Welnick Contact Phone: 314.678.6200

Type of Work: Project consisted of the rehabilitation of 17,866 liner feet of 36-inch, 42-inch, 48-inch,

DS- 7

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**8 of 8**

54-inch & 60-inch diameter sewers utilizing the CIPP method. Project Name: Lower Meramec  
Watershed I/I Removal.

Year Work Performed: 2016 (Completed) Work Amount (\$): \$5,921,823.38

**3.4.** Client's Name: CH2M Hill Engineers, Inc.

Address: 9191 South Jamaica Street, Englewood, CO 80112

Contact Name: Kevin Wittmeyer Contact Phone: 973.896.0045

Type of Work: Project consisted of the rehabilitation of 3,564 linear feet of 84-inch, 90-inch and  
96-inch diameter sewer lines utilizing the CIPP method. Project Name: Honeywell, DMT 15th Street  
South CIPP Trunk Lining Phase 1 & 2 Project.

Year Work Performed: 2018 & 2019 Work Amount (\$): \$6,368,986.53

DS- 8



636.385.1000 tel  
636.385.1100 fax  
864 Hoff Road  
O'Fallon, MO 63366  
www.sakcon.com

August 23, 2021

To Whom It May Concern:

Joe Feuerborn, Vice President and General Manager of our CIPP Division is hereby authorized to sign bids, extend offers, submit proposals and execute contracts on behalf of SAK Construction, LLC.

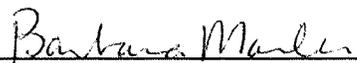
Boyd Hirtz, President -Tunneling Division is hereby authorized to sign bids, extend offers, submit proposals and execute contracts on behalf of SAK Construction, LLC.

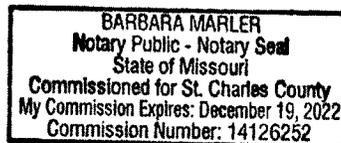
  
\_\_\_\_\_  
Jerome P. Shaw, Jr.  
President  
SAK Construction, LLC

State of Missouri)

County of St. Charles)

On this 23rd day of August, in the year 2021, before me, Barbara Marler, a notary public, personally appeared, Jerome P. Shaw, Jr. proved on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged he executed the same. Witness my hand and official seal.

  
\_\_\_\_\_  
NOTARY PUBLIC



SEAL

**UNANIMOUS WRITTEN CONSENT  
OF THE SOLE MANAGER OF  
SAK CONSTRUCTION, LLC**

Pursuant to Section 5.3 of the Operating Agreement of SAK Construction, LLC, a Missouri limited liability company (the "Company"), the undersigned, being the sole manager of the Company, hereby adopts the following resolutions for the Company and consents to the taking of the actions therein described, such consent to have the same force and effect as a unanimous vote of the managers of the Company at a meeting duly held on the date hereof:

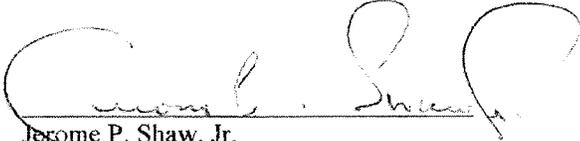
**RESOLVED**, that the following individuals are hereby elected as officers of the Company, to hold the offices set forth opposite their respective names below for the ensuing year or until their successors are duly elected and shall have qualified, unless sooner removed by the Manager:

Thomas Kalishman	Chairman and Chief Executive Officer
Jerome P. Shaw, Jr.	President
Boyd Hirtz	President-Tunneling Division
Joe Feuerborn	Vice President
Roger Archibald	Chief Financial Officer, Secretary and Treasurer
Steve Stulce	Assistant Secretary and Assistant Treasurer

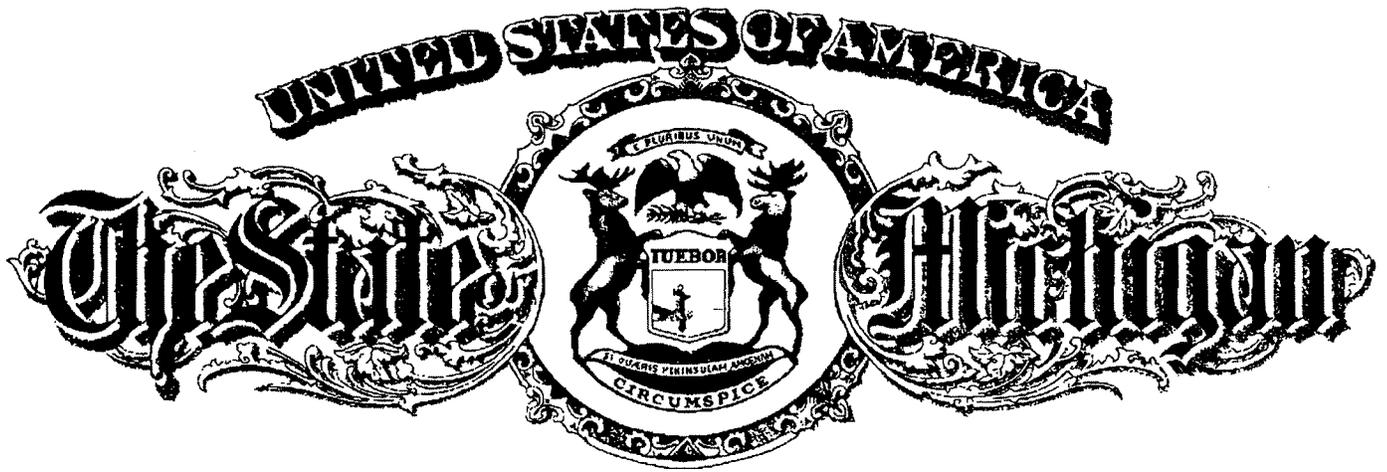
**RESOLVED FURTHER**, that any and all action heretofore taken, and any and all things heretofore done, by any director of the Company in connection with, or with respect to, the matters referred to in the foregoing Resolutions be and hereby are confirmed as authorized and valid acts taken on behalf of the Company.

**RESOLVED FURTHER**, that the foregoing resolutions shall replace and supersede any and all prior resolutions appointing officers of the Company.

Dated as of July 1, 2020.

  
Jerome P. Shaw, Jr.

BEING THE SOLE MANAGER OF THE COMPANY



Department of Energy, Labor & Economic Growth

Lansing, Michigan

*This is to Certify That*

**SAK CONSTRUCTION, LLC**

*a limited liability company existing under the laws of the State of MISSOURI was validly authorized to transact business in Michigan on the 9th day of September, 2009, in conformity with 1993 PA 23.*

*The company is authorized to transact in this state any business of the character set forth in its application which a domestic company formed under this act may lawfully conduct. This authority shall continue as long as the company retains its authority to transact such business in the jurisdiction of its organization, its authority to transact business in this state has not been suspended or revoked, and the company has not surrendered its authority to transact business in this state.*

*This certificate is in due form, made by me as the proper officer, and is entitled to have full faith and credit given it in every court and office within the United States.*

*In testimony whereof, I have hereunto set my hand, in the City of Lansing, this 9th day of September, 2009.*

Director

Bureau of Commercial Services

**CONTRACT**

THIS CONTRACT is between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 East Huron Street, Ann Arbor, Michigan 48104 ("City") and SAK Construction, LLC ("Contractor"), a Missouri Limited Liability Company, 864 Hoff Road, O'Fallon, MO 63366

Based upon the mutual promises below, the Contractor and the City agree as follows:

**ARTICLE I - Scope of Work**

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled **ITB No. 4704 – 2022 Sewer Lining Project** in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, all of which are incorporated as part of this Contract:

- |  |                         |
|--|-------------------------|
| Non-discrimination and Living Wage Declaration of Compliance Forms (if applicable) | General Conditions      |
| Vendor Conflict of Interest Form   | Standard Specifications |
| Prevailing Wage Declaration of Compliance Form (if applicable)                     | Detailed Specifications |
| Bid Forms  | Plans                   |
| Contract and Exhibits  | Addenda                 |
| Bonds  |                         |

**ARTICLE II - Definitions**

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

**Project** means **ITB No. 4704 – 2022 Sewer Lining Project**

**Supervising Professional** means the person acting under the authorization of the manager of the Administering Service Area/Unit. At the time this Contract is executed, the Supervising Professional is: Nicholas S. Hutchinson, PE whose job title is City Engineer. If there is any question concerning who the Supervising Professional is, Contractor shall confirm with the manager of the Administering Service Area/Unit.

**Contractor's Representative** means Nick Pryor whose job title is Project Manager.

**ARTICLE III - Time of Completion**

- (A) The work to be completed under this Contract shall begin immediately on the date specified in the Notice to Proceed issued by the City.
- (B) The entire work for this Contract shall be completed within two hundred thirty

(230) consecutive calendar days.

- (C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the Contractor to pay the City, as liquidated damages and not as a penalty, an amount equal to \$1,500 for each calendar day of delay in the completion of all the work. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

#### **ARTICLE IV - The Contract Sum**

- (A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Form for the estimated bid total of:

One Million, Forty Eight Thousand, Four Hundred Sixty Eight and 00/100 Dollars (\$1,048,468.00)

- (B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the Contract Documents. Increases or decreases shall be determined only by written agreement between the City and Contractor.

#### **ARTICLE V - Assignment**

This Contract may not be assigned or subcontracted any portion of any right or obligation under this contract without the written consent of the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under this contract unless specifically released from the requirement, in writing, by the City.

#### **ARTICLE VI - Choice of Law**

This Contract shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this Contract, the Contractor and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this Contract. The parties stipulate that the venue referenced in this Contract is for convenience and waive any claim of non-convenience.

Whenever possible, each provision of the Contract will be interpreted in a manner as to be effective and valid under applicable law. The prohibition or invalidity, under applicable law, of any provision will not invalidate the remainder of the Contract.

## **ARTICLE VII - Relationship of the Parties**

The parties of the Contract agree that it is not a Contract of employment but is a Contract to accomplish a specific result. Contractor is an independent Contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship between the City and the Contractor.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any Contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this Contract.

## **ARTICLE VIII - Notice**

All notices given under this Contract shall be in writing, and shall be by personal delivery or by certified mail with return receipt requested to the parties at their respective addresses as specified in the Contract Documents or other address the Contractor may specify in writing. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; or (2) three days after mailing certified U.S. mail.

## **ARTICLE IX - Indemnification**

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with this Contract, by the Contractor or anyone acting on the Contractor's behalf under this Contract. Contractor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. The provisions of this Article shall survive the expiration or earlier termination of this contract for any reason.

## **ARTICLE X - Entire Agreement**

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations, negotiations, agreements, or understandings whether written or oral. Neither party has relied on any prior representations in entering into this Contract. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Contract, regardless of the other party's failure to object to such form. This Contract shall be binding on and shall inure to the benefit of the parties to this Contract and their permitted successors and permitted assigns and nothing in this Contract, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

**ARTICLE XI – Electronic Transactions**

The City and Contractor agree that signatures on this Contract may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Contract. This Contract may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

**FOR CONTRACTOR**

By

  
Boyd Hirtz  
Its: President

**FOR THE CITY OF ANN ARBOR**

By

Christopher Taylor, Mayor

By

Jacqueline Beaudry, City Clerk

**Approved as to substance**

By

Milton Dohoney Jr., Interim City  
Administrator

By

Brian Steglitz, Interim Public  
Services Area Administrator

**Approved as to form and content**

Stephen K. Postema, City Attorney

Bid Tblulation (Revised)

Project: ITB 4704 - 2022 Sewer Lining Project

LINE No.	DESCRIPTION	UNIT	ESTIMATED		TOTAL COST
			QUANTITY	UNIT PRICE	
130	Protective Fencing	LF	100	\$ 18.00	\$ 1,800.00
140	Exploratory Excavation (0-10' deep), Trench Detail - Type I Modified	EA	2	\$ 5,000.00	\$ 10,000.00
141	Exploratory Excavation (0-10' deep), Trench Detail - Type IV	EA	2	\$ 5,000.00	\$ 10,000.00
200	General Conditions, Modified, Maximum \$100,000	LS	0.5	\$ 100,000.00	\$ 50,000.00
201	Project Supervision, Modified, Maximum \$50,000	LS	1	\$ 50,000.00	\$ 50,000.00
202	Audiovisual Tape Coverage, Modified	LS	1	\$ 15,000.00	\$ 15,000.00
203	Minor Traffic Control, Modified, Maximum \$100,000	LS	0.5	\$ 100,000.00	\$ 50,000.00
204	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	EA	10	\$ 140.00	\$ 1,400.00
205	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	EA	10	\$ 4.00	\$ 40.00
206	Channelizing Device, 42 inch, Furn	EA	100	\$ 20.00	\$ 2,000.00
207	Channelizing Device, 42 inch, Oper	EA	100	\$ 3.00	\$ 300.00
208	Lighted Arrow, Type C, Furn	EA	3	\$ 930.00	\$ 2,790.00
209	Lighted Arrow, Type C, Oper	EA	3	\$ 13.00	\$ 39.00
210	Plastic Drum, High Intensity, Lighted, Furn	EA	100	\$ 25.00	\$ 2,500.00
211	Plastic Drum, High Intensity, Lighted, Oper	EA	100	\$ 2.00	\$ 200.00
212	Sign, Type B, Temp, Prismatic, Furn	SF	1250	\$ 4.00	\$ 5,000.00
213	Sign, Type B, Temp, Prismatic, Oper	SF	1250	\$ 0.50	\$ 625.00
214	"No Parking" Sign	EA	50	\$ 60.00	\$ 3,000.00
215	Sewer Flow Control	LS	0.5	\$ 115,000.00	\$ 57,500.00
217	8 inch Diameter CIPP Sewer Lining	LF	2506	\$ 50.00	\$ 125,300.00
218	10 inch Diameter CIPP Sewer Lining	LF	2900	\$ 61.00	\$ 176,900.00
219	12 inch Diameter CIPP Sewer Lining	LF	48	\$ 84.00	\$ 4,032.00
220	15 inch Diameter CIPP Sewer Lining	LF	334	\$ 118.00	\$ 39,412.00
221	18 inch Diameter CIPP Sewer Lining	LF	0	\$ 160.00	\$ -
224	24 inch Diameter CIPP Sewer Lining	LF		\$ 207.00	\$ -
225	30 inch Diameter CIPP Sewer Lining	LF		\$ 422.00	\$ -
226	40 inch Diameter CIPP Sewer Lining	LF		\$ 606.00	\$ -
228	Rem. Concrete Curb or Curb and Gutter, Any Type, Modified	LF	50	\$ 44.50	\$ 2,225.00
229	Rem. Concrete Sidewalk, Ramp and Drive, Any Thickness, Modified	SFT	50	\$ 21.50	\$ 1,075.00
230	Aggregate Base	TON	50	\$ 128.00	\$ 6,400.00
231	Hand Patching	TON	50	\$ 500.00	\$ 25,000.00
232	Concrete Curb or Curb & Gutter - Any Type	LF	50	\$ 167.00	\$ 8,350.00
233	4" Concrete Sidewalk, Modified	SFT	25	\$ 50.00	\$ 1,250.00
234	6" Concrete Sidewalk, Ramp, Drive Approach, Modified	SFT	25	\$ 56.00	\$ 1,400.00
235	6" Concrete Sidewalk, Ramp, Drive Approach, High Early	SFT	25	\$ 67.00	\$ 1,675.00
236	Concrete Type M Drive Opening, High Early	LF	25	\$ 223.00	\$ 5,575.00
237	Inlet Filter, Special	Each	15	\$ 167.00	\$ 2,505.00
238	Level 2 MACP Inspect Manhole	EA	25	\$ 167.00	\$ 4,175.00
239	Internal Chimney Seal	Each	25	\$ 139.00	\$ 3,475.00
240	Reconstruct Flow Channel	Each	25	\$ 589.00	\$ 14,725.00
241	Manhole Cementitious Liner	Vf	50	\$ 179.00	\$ 8,950.00
242	Clean-Up & Restoration, Special	LS	1	\$ 5,000.00	\$ 5,000.00
243	Certified Payroll Compliance and Reporting	LS	1	\$ 3,500.00	\$ 3,500.00
305	8" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 767.00	\$ 38,350.00
306	10" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 706.00	\$ 35,300.00
307	12" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 889.00	\$ 44,450.00
308	15" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 784.00	\$ 39,200.00
309	18" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 972.00	\$ 48,600.00
310	24" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 1,000.00	\$ 50,000.00
311	30" SDR 26 PVC Sewer, Trench Detail - Type I Modified	LF	50	\$ 1,222.00	\$ 61,100.00
353	4" SDR 35 PVC Service Lead	LF	50	\$ 567.00	\$ 28,350.00
<b>Total</b>					<b>\$ 1,048,468.00</b>

The City of Ann Arbor current Sanitary Sewer budget could not cover the entire amount of Sanitary Sewer work on the 2022 Sewer Lining project per original bid. The City of Ann Arbor decided to adjust some Estimated Quantities to bring the total cost of the Sanitary Sewer work on this project within the approved budget. The change to the Estimated Quantities is accepted by the Contractor.

FOR CONTRACTOR

By Boyd Hertz  
President

Date 3/9/22

**PERFORMANCE BOND**

- (1) SAK Construction, LLC  
of 864 Hoff Road, O'Fallon, MO 63366 (referred to as "Principal"),  
and Travelers Casualty and Surety Company of America  
One Tower Square, Hartford, CT 06183, a corporation duly authorized  
to do business in the State of Michigan (referred to as "Surety"), are bound to the City of Ann Arbor,  
Michigan (referred to as "City") for \$1,048,468.00 the payment of which Principal and Surety bind  
themselves, their heirs, executors, administrators, successors and assigns, jointly and severally,  
by this bond.  
(One Million Forty Eight Thousand Four Hundred Sixty Eight & 00/100)
- (2) The Principal has entered a written Contract with the City entitled \_\_\_\_\_  
2022 Sewer Lining Project  
for ITB No. 4704 and this bond is given for that Contract in compliance with Act No. 213  
of the Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq.
- (3) Whenever the Principal is declared by the City to be in default under the Contract, the Surety may  
promptly remedy the default or shall promptly:
  - (a) complete the Contract in accordance with its terms and conditions; or
  - (b) obtain a bid or bids for submission to the City for completing the Contract in accordance with  
its terms and conditions, and upon determination by Surety of the lowest responsible bidder,  
arrange for a Contract between such bidder and the City, and make available, as work progresses,  
sufficient funds to pay the cost of completion less the balance of the Contract price; but not  
exceeding, including other costs and damages for which Surety may be liable hereunder, the  
amount set forth in paragraph 1.
- (4) Surety shall have no obligation to the City if the Principal fully and promptly performs under the  
Contract.
- (5) Surety agrees that no change, extension of time, alteration or addition to the terms of the Contract  
or to the work to be performed thereunder, or the specifications accompanying it shall in any way  
affect its obligations on this bond, and waives notice of any such change, extension of time,  
alteration or addition to the terms of the Contract or to the work, or to the specifications.
- (6) Principal, Surety, and the City agree that signatures on this bond may be delivered electronically  
in lieu of an original signature and agree to treat electronic signatures as original signatures that  
bind them to this bond. This bond may be executed and delivered by facsimile and upon such  
delivery, the facsimile signature will be deemed to have the same effect as if the original signature  
had been delivered to the other party.

SIGNED AND SEALED this \_\_\_\_\_ day of \_\_\_\_\_, 202\_.

Travelers Casualty and Surety  
Company of America

(Name of Surety Company)

By [Signature]  
(Signature)

Its Andrew P. Thome, Attorney-in-Fact  
(Title of Office)

Approved as to form:

Stephen K. Postema, City Attorney

SAK Construction, LLC

(Name of Principal)

By [Signature]  
Boyd Herz  
(Signature)

Its President  
(Title of Office)

Name and address of agent:

Marsh McLennan Agency

825 Maryville Centre Drive, Suite 200  
St. Louis, MO 63017

**LABOR AND MATERIAL BOND**

(1) SAK Construction, LLC

of 864 Hoff Road, O'Fallon, MO 63366 (referred to as "Principal"), and Travelers Casualty and Surety Company of America, a corporation duly authorized to do business in the State of Michigan, (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for the use and benefit of claimants as defined in Act 213 of Michigan Public Acts of 1963, as amended, being MCL 129.201 et seq., in the amount of One Million Forty Eight Thousand Four Hundred Sixty Eight & 00/100 \$1,048,468.00, for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.

(2) The Principal has entered a written Contract with the City entitled 2022 Sewer Lining Project

for ITB No. 4704; and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963 as amended;

- (3) If the Principal fails to promptly and fully repay claimants for labor and material reasonably required under the Contract, the Surety shall pay those claimants.
- (4) Surety's obligations shall not exceed the amount stated in paragraph 1, and Surety shall have no obligation if the Principal promptly and fully pays the claimants.
- (5) Principal, Surety, and the City agree that signatures on this bond may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this bond. This bond may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

**SIGNED AND SEALED** this \_\_\_\_\_ day of \_\_\_\_\_, 202\_\_

**Travelers Casualty and Surety Company of America**

(Name of Surety Company)

By [Signature]  
(Signature)

Its Andrew P. Thome, Attorney-in-Fact  
(Title of Office)

Approved as to form:

Stephen K. Postema, City Attorney

SAK Construction, LLC

(Name of Principal)

By [Signature]  
Brad Hirtz  
(Signature)

Its President  
(Title of Office)

Name and address of agent:

Marsh McLennan Agency

825 Maryville Centre Drive, Suite 200

St. Louis, MO 63017

**ACKNOWLEDGEMENT FOR CONTRACTOR**

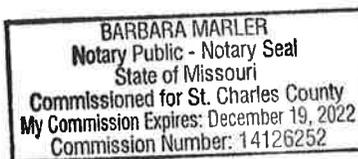
**ACKNOWLEDGEMENT FOR CONTRACTOR, IF LIMITED LIABILITY COMPANY**

STATE OF Missouri }

COUNTY OF St. Charles }

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, **20**\_\_\_\_, BEFORE ME  
PERSONALLY APPEARED Boyd Hirtz TO ME KNOWN AND  
KNOWN TO ME TO BE THE President OF **SAK Construction, LLC**,  
A LIMITED LIABILITY COMPANY, DESCRIBED IN AND WHO EXECUTED THE  
FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE  
EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT  
HE EXECUTED THE SAME AS AND FOR THE ACT AND DEED OF SAID LIMITED  
LIABILITY COMPANY.

Barbara Marler  
Notary Public

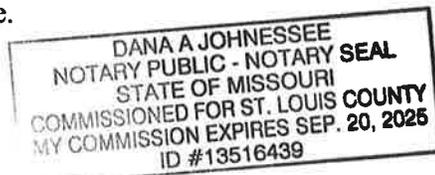


State of Missouri  
County of St. Louis

ss:

On \_\_\_\_\_ before me, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared **ANDREW P. THOME** known to me to be Attorney-in-Fact of **TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA** the corporation described in and that executed the within foregoing instrument, and known to me to be the person who executed the said instrument in behalf of said corporation, and he duly acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year stated in this certificate above.



My Commission Expires \_\_\_\_\_

A handwritten signature in blue ink that reads "Dana A. Johnessee".

**Dana A. Johnessee**  
**Notary Public**



**Travelers Casualty and Surety Company of America  
Travelers Casualty and Surety Company  
St. Paul Fire and Marine Insurance Company**

**POWER OF ATTORNEY**

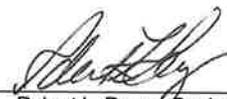
**KNOW ALL MEN BY THESE PRESENTS:** That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **ANDREW P THOME** of **CHESTERFIELD Missouri**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

**IN WITNESS WHEREOF**, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, 2021.



State of Connecticut

City of Hartford ss.

By:   
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, 2021, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

**IN WITNESS WHEREOF**, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2026



  
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

**RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

**FURTHER RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

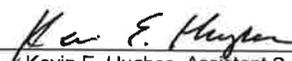
**FURTHER RESOLVED**, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

**FURTHER RESOLVED**, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this \_\_\_\_\_ day of \_\_\_\_\_



  
Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.  
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.**

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2020

CAPITAL STOCK \$ 6,480,000

ASSETS		LIABILITIES & SURPLUS	
CASH AND INVESTED CASH	\$ 239,403,348	UNEARNED PREMIUMS	\$ 1,121,070,380
BONDS	3,831,156,861	LOSSES	1,003,200,666
STOCKS	109,074,035	LOSS ADJUSTMENT EXPENSES	163,346,678
INVESTMENT INCOME DUE AND ACCRUED	36,856,709	COMMISSIONS	48,805,693
OTHER INVESTED ASSETS	4,970,512	TAXES, LICENSES AND FEES	13,561,421
PREMIUM BALANCES	277,653,788	OTHER EXPENSES	42,508,558
NET DEFERRED TAX ASSET	55,188,715	CURRENT FEDERAL AND FOREIGN INCOME TAXES	4,865,484
REINSURANCE RECOVERABLE	32,553,518	REMITTANCES AND ITEMS NOT ALLOCATED	8,646,391
RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES	34,876,347	AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	42,228,250
OTHER ASSETS	4,155,794	POLICYHOLDER DIVIDENDS	12,353,304
		PROVISION FOR REINSURANCE	7,930,280
		ADVANCE PREMIUM	1,867,512
		CEDED REINSURANCE NET PREMIUMS PAYABLE	63,102,972
		RETROACTIVE REINSURANCE RESERVE ASSUMED	800,763
		OTHER ACCRUED EXPENSES AND LIABILITIES	588,668
		<b>TOTAL LIABILITIES</b>	<b>\$2,534,855,020</b>
		CAPITAL STOCK	\$6,480,000
		PAID IN SURPLUS	433,803,760
		OTHER SURPLUS	1,850,750,847
		<b>TOTAL SURPLUS TO POLICYHOLDERS</b>	<b>\$2,091,034,607</b>
<b>TOTAL ASSETS</b>	<b>\$ 4,625,889,627</b>	<b>TOTAL LIABILITIES &amp; SURPLUS</b>	<b>\$4,625,889,627</b>

STATE OF CONNECTICUT )  
 COUNTY OF HARTFORD ) SS.  
 CITY OF HARTFORD )

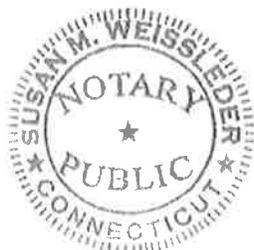
MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS VICE PRESIDENT - FINANCE, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2020.

*Michael J. Doody*  
 VICE PRESIDENT - FINANCE

SUBSCRIBED AND SWORN TO BEFORE ME THIS  
 26TH DAY OF MARCH, 2021

*Susan M. Weissleder*  
 NOTARY PUBLIC

SUSAN M. WEISSLEDER  
 Notary Public  
 My Commission Expires November 30, 2022



# **GENERAL CONDITIONS**

## **Section 1 - Execution, Correlation and Intent of Documents**

The contract documents shall be signed in 2 copies by the City and the Contractor.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

(1) Addenda in reverse chronological order; (2) Detailed Specifications; (3) Standard Specifications; (4) Plans; (5) General Conditions; (6) Contract; (7) Bid Forms; (8) Bond Forms; (9) Bid.

## **Section 2 - Order of Completion**

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

## **Section 3 - Familiarity with Work**

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery, and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

## **Section 4 - Wage Requirements**

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of

subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. A sample Prevailing Wage Form is provided in the Appendix herein for reference as to what will be expected from contractors. Use of the Prevailing Wage Form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Contract a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Contract are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

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

## **Section 5 - Non-Discrimination**

The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

## **Section 6 - Materials, Appliances, Employees**

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work

assigned.

Adequate sanitary facilities shall be provided by the Contractor.

## **Section 7 - Qualifications for Employment**

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

## **Section 8 - Royalties and Patents**

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

## **Section 9 - Permits and Regulations**

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

## **Section 10 - Protection of the Public and of Work and Property**

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the contract documents, or caused by agents or employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

## **Section 11 - Inspection of Work**

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the contract documents, the Contractor shall pay the cost.

## **Section 12 - Superintendence**

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

## **Section 13 - Changes in the Work**

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in

the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

### **Section 14 - Extension of Time**

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;
- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in contract completion is appropriate under this or any other section of the contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in contract completion shall be extension of the required time for contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

## Section 15 - Claims for Extra Cost

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section 13. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the contract documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;
- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;
- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract.

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

## **Section 16 - Progress Payments**

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

## **Section 17 - Deductions for Uncorrected Work**

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

## **Section 18 - Correction of Work Before Final Payment**

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material

at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

## **Section 19 - Acceptance and Final Payment**

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;
- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's guarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

## **Section 20 - Suspension of Work**

The City may at any time suspend the work, or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the

written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

## **Section 21 - Delays and the City's Right to Terminate Contract**

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have, make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred. The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

## **Section 22 - Contractor's Right to Terminate Contract**

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

## **Section 23 - City's Right To Do Work**

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

## **Section 24 - Removal of Equipment and Supplies**

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

## **Section 25 - Responsibility for Work and Warranties**

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and installed under the contract, shall be inspected by the Contractor and the Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

## **Section 26 - Partial Completion and Acceptance**

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

## **Section 27 - Payments Withheld Prior to Final Acceptance of Work**

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

## **Section 28 - Contractor's Insurance**

- (1) The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set forth below, as will protect itself and the City from all claims for bodily injuries, death or property damage that may arise under this Contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor, or anyone employed by them directly or indirectly. Prior to commencement of any work under this contract, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the required policies and endorsements. The certificates of insurance endorsements and/or copies of

policy language shall document that the Contractor satisfies the following minimum requirements. Contractor shall add registration@mycoitracking.com to its safe sender's list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).

Required insurance policies include:

- (a) Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident  
Bodily Injury by Disease - \$500,000 each employee  
Bodily Injury by Disease - \$500,000 each policy limit

- (b) Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 04 13 or current equivalent. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements specifically for the following coverages: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further there shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. The following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined.  
\$2,000,000 Per Project General Aggregate  
\$1,000,000 Personal and Advertising Injury  
\$2,000,000 Products and Completed Operations Aggregate, which, notwithstanding anything to the contrary herein, shall be maintained for three years from the date the Project is completed.

- (c) Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

- (d) Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- (2) Insurance required under subsection (1)(b) and (1)(c) above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its

insurer against the City for any insurance listed herein.

- (3) Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional and un-qualified 30-day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number(s); name of insurance company(s); name and address of the agent(s) or authorized representative(s); name(s), email address(es), and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which may be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) and all required endorsements to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.
- (4) Any Insurance provider of Contractor shall be authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-authorized insurance companies are not acceptable unless approved in writing by the City.
- (5) City reserves the right to require additional coverage and/or coverage amounts as may be included from time to time in the Detailed Specifications for the Project.
- (6) The provisions of General Condition 28 shall survive the expiration or earlier termination of this contract for any reason.

## **Section 29 - Surety Bonds**

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company authorized to transact business in Michigan and satisfactory to the City Attorney.

## **Section 30 - Damage Claims**

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

## **Section 31 - Refusal to Obey Instructions**

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

## **Section 32 - Assignment**

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

## **Section 33 - Rights of Various Interests**

Whenever work being done by the City's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other contractors whose work impacts this project.

## **Section 34 - Subcontracts**

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other contract documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the contract documents.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

### **Section 35 - Supervising Professional's Status**

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

### **Section 36 - Supervising Professional's Decisions**

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

### **Section 37 - Storing Materials and Supplies**

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

### **Section 38 - Lands for Work**

The Contractor shall provide, at its own expense and without liability to the City, any additional land and access that may be required for temporary construction facilities or for storage of materials.

### **Section 39 - Cleaning Up**

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

### **Section 40 - Salvage**

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

## **Section 41 - Night, Saturday or Sunday Work**

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

## **Section 42 - Sales Taxes**

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

**Section 43**

**CONTRACTOR'S DECLARATION**

I hereby declare that I have not, during the period \_\_\_\_\_, 20\_\_\_\_, to \_\_\_\_\_, 20\_\_\_\_, performed any work, furnished any materials, sustained any loss, damage or delay, or otherwise done anything in addition to the regular items (or executed change orders) set forth in the Contract titled \_\_\_\_\_, for which I shall ask, demand, sue for, or claim compensation or extension of time from the City, except as I hereby make claim for additional compensation or extension of time as set forth on the attached itemized statement. I further declare that I have paid all payroll obligations related to this Contract that have become due during the above period and that all invoices related to this Contract received more than 30 days prior to this declaration have been paid in full except as listed below.

There is/is not (Contractor please circle one and strike one as appropriate) an itemized statement attached regarding a request for additional compensation or extension of time.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Date

By \_\_\_\_\_  
(Signature)

Its \_\_\_\_\_  
(Title of Office)

Past due invoices, if any, are listed below.



## **STANDARD SPECIFICATIONS**

All work under this contract shall be performed in accordance with the Public Services Department Standard Specifications in effect at the date of availability of the contract documents stipulated in the Bid. All work under this Contract which is not included in these Standard Specifications, or which is performed using modifications to these Standard Specifications, shall be performed in accordance with the Detailed Specifications included in these contract documents.

Standard Specifications are available online:

<http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx>

# **DETAILED SPECIFICATIONS**

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**1 of 8**

**a. General.-** As detailed elsewhere in the Contract Documents and Drawings the work of this project is to be performed in a sensitive, valuable, natural area within the City of Ann Arbor (City). This Detailed Specification sets forth criteria that will be used by the City in determining if the Contractor has the necessary personnel, equipment, and experience to perform the work of this project.

**b. Documentation to be provided.-** The Contractor Qualifications detailed in this specification apply to the following items:

- Sewer Televising and Cleaning
- Cured-In-Place Pipe (CIPP) Lining
- Onsite Superintendent/Foreman

Contractor to complete the attached Reference Form and submit it as part of the bid submittal. **Not filling out the form or providing past experience may result in disqualification of the bid.** If subcontractors are to be used for any of the above items, they are to fill out a separate form.

The projects and total footage claimed to have been performed by the Contractor shall be supported by owner references. The Contractor shall submit information to document their experience.

1. **Sewer Televising and Cleaning.-** The Contractor performing the sewer televising and cleaning shall be fully qualified, experienced, and equipped to complete this work as shown on the Drawings and as indicated in the specifications. The Contractor shall have cleaned and televised a minimum of 100,000 lineal feet of sanitary sewers equal to or greater than 36 inches in diameter with lengths of the individual segments over 1,000 feet each in the past 7 years. The Contractor shall also have cleaned and televised at least 3 sanitary siphon sewers equal to or greater than 24 inches in diameter in the past 7 years. The Contractor shall have also worked a minimum of three projects in similar environmentally sensitive areas in the past 7 years. The Contractor shall provide detailed description of these environmentally sensitive projects and methods used to mitigate the work upon request of the Engineer.

2. **Sewer CIPP Lining.-** The Contractor performing the CIPP lining work shall be fully qualified, experienced, and equipped to complete this work expeditiously and in a satisfactory manner and shall be certified and/or licensed as an installer by the CIPP manufacturer. The Contractor shall have installed a minimum of 10,000 lineal feet of CIPP in sanitary sewers equal to or greater than 36 inches in diameter in the past 7 years and over 1,000,000 feet of lining in general over the past 7 years. Installations must have been in northern states and/or Canada. Contractor must also provide safety record for the past 7 years.

3. **Onsite Superintendent/Foreman.-** The full-time, onsite superintendent/ foreman shall be responsible for supervising all the work onsite, including but not limited to, the diversion of sanitary flow, bypass pumping, sewer televising and cleaning, and sewer CIPP lining, shall have supervised a minimum of 3 projects of this complexity in the past 7 years and shall have installed a minimum of 10,000 lineal feet of CIPP in sanitary sewers greater than 24 inches in diameter in the past 7 years.

DS- 1

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

2 of 8

**1. Sewer Televising and Cleaning References**

(Must be completed and submitted with Bid for consideration)

**List sewer cleaning and televising projects of sewers equal to or greater than 36 inches in size that total (together) over 100,000 lineal feet with the lengths of the individual segments over 1,000 feet in the past 7 years and provide references. Also, list a minimum of 3 projects that include the cleaning and televising of the sanitary siphon sewers equal to or greater than 24 inches in size in the past 7 years and provide references. The Contractor shall have also worked a minimum of three projects in similar environmentally sensitive areas in the past 7 years.**

Firm's Name: \_\_\_\_\_

Role on Project: \_\_\_\_\_

**1.1.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**1.2.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**1.3.** Client's Name: \_\_\_\_\_

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**3 of 8**

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**1.4.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**1.5.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**1.6.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

DS- 3

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**4 of 8**

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**1.7.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

5 of 8

**2. Sewer CIPP Lining References**

(Must be completed and submitted with Bid for consideration)

**List sewer CIPP lining projects of sewers equal to or greater than 36 inches in diameter that total (together) over 10,000 lineal feet in northern states and/or Canada in the past 7 years and over 1,000,000 feet of lining in general over the past 7 years, and provide references. Also, provide safety record for the past 7 years as an attachment.**

Firm's Name: \_\_\_\_\_

Role on Project: \_\_\_\_\_

**2.1.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**2.2.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**2.3.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

DS- 5

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**6 of 8**

Type of Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**2.4.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

7 of 8

**3. Onsite Superintendent/Foreman**

(Must be completed and submitted with Bid for consideration)

**List name of onsite superintendent/foreman and list a minimum of 3 projects of similar complexity totaling 10,000 lineal feet of CIPP lining in sanitary sewers greater than 24 inches in diameter that they have supervised in the past 7 years and provide references.**

Superintendent/Foreman Name: \_\_\_\_\_

**3.1.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**3.2.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**3.3.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

DS- 7

**DETAILED SPECIFICATION  
FOR  
CONTRACTOR QUALIFICATIONS**

**8 of 8**

---

---

---

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**3.4.** Client's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

Type of Work: \_\_\_\_\_

---

---

---

Year Work Performed: \_\_\_\_\_ Work Amount (\$): \_\_\_\_\_

**DETAILED SPECIFICATION  
FOR  
PROJECT SCHEDULE**

1 of 2

**DESCRIPTION**

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

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

1. The Contractor shall begin the work of this project on or before **March 15, 2022**, and only upon receipt of the fully executed Contract and Notice to Proceed. Appropriate time extensions shall be granted if the Notice to Proceed is delayed beyond this date.
2. The entirety of work under this Contract, including but not limited to sanitary sewer inspection, cleaning, televising, and rehabilitation (cured-in-place pipe [CIPP] lining); manhole rehabilitation; the removal of any and all traffic control devices; and the installation/maintenance of the needed temporary soil erosion and sedimentation control devices, shall be completed by the Final Completion date of **October 31, 2022**.

The Contractor is expected to be furnished with two (2) copies of the Contract, for his/her execution, on or before **February 25, 2022**. The Contractor shall properly execute both copies of the Contract and return them, with the required Bonds and Insurance Certificate, to the City within ten (10) days. The Contractor shall not begin the work before the applicable date(s) as describes herein without approval from the Project Engineer, and in no case before the receipt of the fully executed Contract. City Council approval is expected on **March 11, 2022**.

Time is of the essence in the performance of the work of this contract. The Contractor is expected to mobilize sufficient personnel and equipment and work throughout all authorized hours to complete the project within the specified time/date of this Contract. Should the Contractor demonstrate that work must occur on Sundays in order to maintain the project schedule, they may do so between the hours of 9:00 a.m. and 5:00 p.m. with prior approval from the City. The Contractor will submit authorization requests for any Sunday work a minimum of three working days in advance of the day of the proposed work. There will be no additional compensation due to the Contractor for work performed on Sundays.

Prior to the start of any construction, the Contractor shall submit a detailed progress schedule of work for the Engineer's review and approval. Work shall not start until a schedule is approved in writing by the Engineer. The Contractor shall update the approved work schedule upon request by the Engineer and present it to the Engineer within seven days of said request.

The City's decision to delete locations, add locations, change the limits of construction limits at any locations, or, the City's contribution to a delay of the construction at any one location shall not entitle the Contractor to receive additional compensation for work on any other location(s), nor shall it relieve the Contractor of any responsibilities for completion of work on any other location(s).

**DETAILED SPECIFICATION  
FOR  
PROJECT SCHEDULE**

**2 of 2**

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

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

No work shall be performed, or lane closures permitted during the holiday periods, as defined by the Engineer.

Failure to complete all work as specified herein within the times specified herein, including time extensions granted thereto as determined by the Engineer, shall entitle the City to deduct from the payments due the Contractor, **\$1,500.00** in Liquidated Damages, and not as a penalty, for delays in the completion of the work for each and every calendar day beyond any "Complete Work" date for each location, and beyond the overall project completion date as required by this Detailed Specification.

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

If the work required by this construction contract is not completed by the specified date(s) including any extensions of time granted thereto, at the sole discretion of the City of Ann Arbor, this Contract may be terminated with no additional compensation due to the Contractor, and the Contractor may be forbidden to bid on future City of Ann Arbor projects for a period of at least three (3) years. If the Engineer elects to terminate the Contract, contract items paid for on a Lump Sum basis shall be paid up to a maximum percentage equal to the percentage of the contract work that has been completed.

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

**1 of 1**

The Contractor is reminded as to the requirements of article 104.07 of the 2020 edition of the MDOT Standard Specifications, "Cooperation by the Contractor."

The Contractor shall directly coordinate his/her work with individual City Departments/Divisions/Units.

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

The following Utility Owners, and others not listed specifically, may have overhead and/or underground facilities located within the Right-of-Way/Public Easements:

The City of Ann Arbor  
University of Michigan (UM)  
Michigan Department of Transportation (MDOT)  
AT&T  
Comcast  
DTE Energy - Detroit Edison Company (Edison)  
DTE Energy - Michigan Consolidated Gas Company (Michcon)  
Fiber Link Inc.  
Light Core (Century Tel)  
MCI Communications  
Windstream Communications

**On all projects:**

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

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

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

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

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

**DETAILED SPECIFICATION  
FOR  
MAINTENANCE OF TRAFFIC**

**1 of 2**

**DESCRIPTION**

Traffic shall be maintained in accordance with the City of Ann Arbor Public Services Department Standard Specifications and as specified in Sections 104.11, 812, and 922 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction, the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD), and as described herein.

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

**MATERIALS**

The materials and equipment shall meet the requirements specified in the corresponding sections of the MDOT 2012 Standard Specifications for Construction and the 2011 MMUTCD.

**Maintenance of Local Traffic**

Unless otherwise indicated on the plans, all side roads shall not be closed to through traffic except during construction operations of short duration and only upon written approval of the Engineer.

Local access shall be maintained at all times for emergency vehicles, refuse pick-up, mail delivery, school buses, and ingress/egress to public and private properties.

Contractor must accommodate the safe access to the residential buildings and businesses located within construction area.

Driveways shall not be blocked for extended periods of time unless arrangements can be made with the affected property owner(s). When it becomes necessary to temporarily block driveways, the Contractor shall notify the affected property owners in advance to coordinate the work and allow sufficient time for vehicles to vacate from properties. It may be necessary to allow for vehicles to temporarily park in the roadway at locations that do not interfere with the Contractor's work. During these periods the owners of the respective vehicles must be available to, with proper notice, move their vehicles if it becomes necessary to accommodate the work.

At times, when it becomes necessary to temporarily obstruct local traffic during the performance of the work, the Contractor shall provide traffic regulator control in conformance with Chapter 6E of the MMUTCD, Sections 6E.01 thru 6E.08. A minimum of two traffic regulators are required. The cost of traffic regulator control shall be included in the contract pay item "Minor Traffic Control, Modified, Maximum \$100,000".

A lane-closure permit shall be obtained by the Contractor from the Engineering Department, at least 48 hours in advance of any proposed lane or street closing.

**DETAILED SPECIFICATION  
FOR  
MAINTENANCE OF TRAFFIC**

**2 of 2**

No lane closures shall be permitted during the Independence Day and Labor Day holiday periods, as defined by the Engineer.

The hours of work on all Local streets are 7:00 a.m. to 8:00 p.m., Monday through Saturday, or as specified on the lane-closure permit. No equipment will be allowed in the street before or after these hours. Local streets may only be closed to through traffic (local access only) with written authorization of the Engineer. Work must be completed each day such that all streets are re-opened to through traffic by 8:00 p.m. unless otherwise specified, directed, or authorized in writing by the Engineer. All major changes in traffic control shall be made either between 9:30 a.m. and 3:30 p.m. or between 7:00 p.m. and 6:30 a.m. in order to minimize interference with rush-hour traffic. All traffic controls must be in-place and ready for traffic each day by 6:30 a.m. and 3:30 p.m.

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

The Contractor shall use quantities of dust palliative, maintenance aggregate, and cold patching/HMA mixtures for use as temporary base, surfacing, and dust control at utility crossings, side roads and driveways (wherever required to maintain traffic), and where directed by the Engineer to maintain local access. The cost for the use of dust palliative, maintenance aggregate, cold patch and/or hot mix asphalt 36A mixture, as required and directed by the Engineer for maintenance of traffic and local access, shall be included in contract pay item "General Conditions," and it will not be paid for separately.

The work of maintaining and relocating existing warning, regulatory and/or guide signs; and of removing, salvaging and reinstalling existing signs and supports is included in the bid price for the contract pay item "Minor Traffic Control, Modified, Maximum \$ 100,000 ”.

Mailboxes and newspaper boxes that are in the way of the construction shall be removed and reset immediately in a temporary location approved by the Engineer. Mail and paper delivery shall not be interrupted during the construction. Upon completion of the construction, all mailboxes and newspaper boxes, including their supports, shall be repositioned in their permanent locations as approved by the Engineer. This work shall be included the contract unit price for the contract pay item "General Conditions," and it will not be paid for separately.

The Contractor shall perform the work of this Contract while maintaining traffic in accordance with the Contract Documents as specified herein. No traffic shall be allowed on newly placed asphalt surfaces until rolling has been satisfactorily completed and the surface has cooled sufficiently to prevent damage from traffic. This is to be accomplished by flag persons and by relocating traffic control devices to prevent traffic from entering the work area until such time that it can be safely maintained without damaging the new construction. The Contractor shall provide traffic regulators in sufficient number to maintain traffic as described herein, and to keep traffic off sections being surfaced, and provide for safe travel at all times as directed by the Engineer.

The Contractor shall furnish, erect, maintain, and upon completion of the work, remove any and all traffic control devices utilized on the project.

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

**DETAILED SPECIFICATION  
FOR  
CONSTRUCTION SEQUENCING**

**1 of 1**

The Contractor must submit a detailed progress schedule at the Pre-construction meeting which is to be approved by the Engineer. Unless an alternative sequence is requested by the Contractor and approved in writing by the Engineer, the work shall be performed in the order as shown on the schedule. This outline does not detail the full range of materials and processes needed to complete the work under this Contract. At each location the Contractor shall:

1. Install the required temporary traffic control devices in accordance with the construction plans, as detailed in the specifications, and as directed by the Engineer.
2. Install the soil erosion control measures in accordance with the plans and as directed by the Engineer.
3. Obtain approval for, set up, and activate by-pass pumping.
4. Clean & videotape sewer to be lined.
5. Construct the proposed sewer lining. The new sewer shall be tested in accordance with the plans and specifications.
6. After all the new sewer has passed the required testing, the contractor shall open all service leads. Service leads shall not be out of service for more than 12 hours.
7. Deactivate and breakdown by-pass pumping equipment.
8. Perform manhole rehabilitation.
9. Perform final cleanup and restoration in accordance with the Contract documents.
10. Remove temporary soil erosion and sedimentation control measures.
11. Remove all temporary traffic control devices.

Reference the plans for additional construction sequencing requirements.

**DETAILED SPECIFICATION  
FOR  
HOURS OF WORK**

**a. General Restrictions.- Hours** of work shall be as stated in the Ann Arbor City Code Title IX, Chapter 119, Page 9.363, Monday through Saturday, between the hours of 7:00 a.m. and 8:00 p.m.

**b. Exceptions.- During** installation of the cured-in-place pipe (CIPP) lining, the Contractor may choose, in some cases, to perform nighttime work to facilitate construction during the inversion and curing processes. Additional requirements regarding this work are contained in Detailed Specification “CIPP Sewer Lining” and elsewhere in the Contract Documents. The Contractor shall include this work in their progress schedule, notify, and submit a request to the Engineer for permission to perform the nighttime CIPP work a minimum of 5 working days prior to beginning the work.

Maintenance of the sewer flow control may also require working outside the allowable hours of work (“off-hour” work). The Contractor shall provide anticipated off-hour work as part of their Sewer Flow Control Plan submittal(s) as contained in the Detailed Specification for “Sewer Flow Control.”

Additional work restrictions are contained in the Detailed Specifications for “Project Schedule,” “Maintenance of Traffic,” “Working Space,” “Construction Sequencing,” and elsewhere in the Contract Documents. These work restrictions shall take precedence over the General Restrictions and Exceptions listed above.

The Contractor shall only perform work at night or on Sundays as required by the Contract Documents, unless there is a special need and the work is approved by the Engineer. All requests to work during off-hours shall be included in the Contractor’s progress schedule and submitted to the Engineer for approval a minimum of 5 working days prior to beginning the work.

**c. Noise Control.** - All noise generated by construction activities shall not exceed 71 decibels (dBA) beyond the property line of the property on which the work is being conducted between 7:00 a.m. and 8:00 p.m., Monday through Saturday. The Contractor shall provide screening, noise absorption, and level II sound attenuation as required on equipment to meet the noise limitations set herein. Any “off-hour” work will require a temporary exemption from the City of Ann Arbor City Administrator. A temporary exemption may be granted in accordance with each respective entities’ code of ordinance.

**d. Method of Payment.-** The costs of night work, whether required by the Contract Documents or requested by the Contractor, shall not be paid for separately, but shall be considered included in the cost of the affected contract pay items.

**DETAILED SPECIFICATION  
FOR  
WORKING IN THE RAIN**

Portions of the work to be performed under this contract are weather sensitive. Contractor shall be responsible for coordinating and scheduling their work in anticipation of the weather.

Sewer flow control must cease during wet weather conditions. Wet weather conditions are as defined in Detailed Specification "Sewer Flow Control."

In the event of a wet weather event, Contractor shall remove plugs installed for sanitary flow diversion. Plugs shall be reinstalled upon cessation of the wet weather event and as approved by the Engineer.

The Contractor shall not be compensated for the time and/or effort spent removing the temporary flow diversion plugs and the lateral bypass pumping system or for unused materials or downtime caused as a result of a wet weather event. The Contractor is solely responsible for repairing all damage to the work and to the site, including road infrastructure, road subgrades, underground utilities, any adjacent properties, and the like, which are damaged as a result of working in the rain or working in areas that are wet from recent precipitation.

The only exception to the above is as indicated in Detailed Specification "Extension of Time, Additional Compensation."

The costs of complying with this requirement shall not be paid for separately but shall be considered included in the cost of the affected contract pay items.

**DETAILED SPECIFICATION  
FOR  
EXTENSION OF TIME, ADDITIONAL COMPENSATION**

The Contractor shall notify the Engineer of their intent to submit a claim for additional compensation or an extension of time in accordance with the requirements of Section 104.10 of the 2020 edition of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction. Failure to do so may be a basis for not approving the request for additional compensation or extension of time. The notification will allow the Engineer an opportunity to influence, keep records, and monitor the work.

Extensions of time will not be authorized due to delays caused by, or stemming from, the weather for the period between November 14th and April 16th unless any of the following conditions are present:

1. Air temperature (as measured from a thermometer provided, maintained, and installed by the Contractor in a location on the worksite, as mutually agreed upon between the Contractor and the Engineer) is below 15°F for a period of time longer than 48 consecutive hours.
2. Accumulations of snow in excess of 12 inches occur in any 24 hour period.
3. Freezing rain in excess of 1/4-inch occur in any 24 hour period.
4. Wet weather event, as defined in Detailed Specification “Sewer Flow Control” requiring the temporary removal of flow diversion plugs and lateral bypass pumping system.

Should the above mentioned weather conditions occur, and the Contractor requests an extension of contract time, the time extension shall only be for the realized delay to the controlling work operation.

The above weather delays shall not be considered as a basis for additional compensation on this project. The only exception shall be that if the temporary removal of the flow diversion plugs and lateral bypass pumping system occurred after the sewers had been cleaned, televised, prepped for lining, and approved by the Engineer for lining before the sewers were lined. In such an event, the Contractor may request compensation for the re-cleaning and re-televising of the affected pipes only. The re-cleaning must first be approved by the Engineer prior to the work beginning. No compensation shall be provided for the removal and re-installation of the plugs.

In addition, if delays resulting from air temperature, snow accumulation, and/or freezing rain occur and the Contractor has their bypass pumping system in place and operational, the Contractor shall still be responsible to continuously protect and maintain in operation the complete sewer flow control system. Expenses related to maintaining the bypass pumping system shall not be considered to be additional costs or extra expenses during an authorized extension of time due to these weather-related time extensions.

The Contractor shall anticipate underground utility complications arising from the proposed utility work, unknown and/or fragile utilities, and utilities requiring investigation and or relocation. These utilities may be shown on the Drawings, correctly or incorrectly, or not at all, and may delay a controlling operation.

Additional compensation is defined as additional work, extra work, upward unit price adjustments, payments for down time, and the like.

**DETAILED SPECIFICATION  
FOR  
ITEM #200 – GENERAL CONDITIONS, MODIFIED, MAXIMUM \$100,000**

**1 of 2**

**DESCRIPTION**

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

- Scheduling and organization of all work, subcontractors, suppliers, testing, inspection, surveying, and staking
- Coordination of, and cooperation with, other contractors, agencies, departments, and utilities
- Protection and maintenance of Utilities
- Placing, maintaining, and removing all soil erosion and sedimentation controls, including stone inlets filers (as shown on project plants)
- Maintaining drainage
- Maintaining driveways drive openings, sidewalks, bike paths, mail deliveries, and solid waste/recycle pick-ups. This includes the placement and maintenance of gravel in driveway openings as directed by the Engineer
- Storing all materials and equipment off lawn areas
- Temporary relocation and final replacement/re-setting of mailboxes
- Site clean-up
- Coordination efforts to furnish various HMA mixtures as directed by the Engineer
- Coordination efforts to furnish and operate various-size vehicles/equipment as directed by the Engineer
- Furnishing and operating vacuum-type street cleaning equipment a minimum of once per week or more frequently as directed by the Engineer
- Furnishing and operating vacuum-type utility structure cleaning equipment
- Furnishing and operating both vibratory plate and pneumatic-type (“pogo-stick”) compactors
- Furnishing and operating a backhoe during all work activities
- Furnishing and operating a jackhammer and air compressor during all work activities
- Noise and dust control
- Mobilization(s) and demobilization(s)
- Furnishing submittals and certifications for materials and supplies
- Disposing of excavated materials and debris - The Contractor shall dispose of, at the Contractor’s expense, all excavated material. Costs for this work will not be paid for separately.
- All miscellaneous and incidental items such as overhead, insurance, and permits.
- Meeting all requirements relating to Debarment Certification, Davis Bacon Act, and Disadvantaged Business Enterprise, and providing the necessary documentation.

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

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

**DETAILED SPECIFICATION  
FOR  
ITEM #200 – GENERAL CONDITIONS, MODIFIED, MAXIMUM \$100,000**

**2 of 2**

**MEASUREMENT AND PAYMENT**

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

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

**PAY ITEM**

**PAY UNIT**

General Conditions, Modified, Maximum \$100,000

Lump Sum

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

**DETAILED SPECIFICATION  
FOR  
ITEM #201 - PROJECT SUPERVISION, MODIFIED, MAXIMUM \$50,000**

1 of 3

**DESCRIPTION**

The Contractor shall designate a full-time Project Supervisor to act as the Contractor's agent/representative, and to be responsible for scheduling and coordination of all subcontractors, suppliers, other governmental agencies, and all public and private utility companies.

The Project Supervisor shall not be an active crew member of the Contractor, shall not be an active member or employee of any subcontractor's work force, and shall not perform general or specialized labor tasks.

**The Project Supervisor shall work exclusively on this project, and shall put forth his/her full effort into the organization and coordination of the work of this project.**

Prior to the pre-construction meeting, the Contractor shall designate a proposed Project Supervisor by name, and shall furnish the City with a current, thorough, detailed summary of the proposed Project Supervisor's work history, outlining all previous supervisory experience on projects of a similar size and nature. The detailed work history shall include personal and professional references (names and phone numbers) of persons (previous owners or agents) who can attest to the qualifications and work history of the proposed Project Supervisor. Proposed candidates for Project Supervisor shall have a demonstrated ability to work harmoniously with the City, the public, subcontractors, and all other parties typically involved with work of this nature. The Supervising Professional will have the authority to reject a proposed Project Supervisor whom he/she considers unqualified.

The Project Supervisor shall be available 24 hours-per-day to provide proper supervision, coordination and scheduling of the project for the duration of the Contract. The Contractor shall furnish the City with telephone numbers of the Project Supervisor in order to provide 24 hour-per-day access during business and non-business hours, including weekends and holidays.

The Project Supervisor shall be equipped by the Contractor with a mobile telephone to provide the City with 24 hour-per-day access to him/her during daily construction activities, during transit to and from the construction site, and during all non-business hours including weekends and holidays.

The Project Supervisor shall be equipped with assistants as necessary to provide project supervision as specified herein, and in accordance with the Contract.

**DUTIES AND RESPONSIBILITIES**

The Project Supervisor work harmoniously with the City, the public, subcontractors, and all other parties typically involved with work of this nature.

The Project Supervisor shall have a thorough, detailed understanding and working knowledge of all construction practices and methods specified elsewhere herein, as well as the handling, placement, testing and inspection of aggregates, aggregate products, HMA concrete, and Portland cement concrete materials.

The Project Supervisor shall be responsible for all of the work of all of the Contractor's, subcontractors' and suppliers' work forces.

**DETAILED SPECIFICATION  
FOR  
ITEM #201 - PROJECT SUPERVISION, MODIFIED, MAXIMUM \$50,000**

**2 of 3**

The Project Supervisor shall be responsible for proper and adequate maintenance (emissions, safety, and general operation) of all of the Contractor's, subcontractors' and suppliers' equipment and vehicles.

The Project Supervisor shall be responsible for the legal, proper and safe parking/storage of all of the Contractor's, subcontractors' and suppliers' equipment, work vehicles, and employee's vehicles.

The Project Supervisor shall schedule and coordinate the work of all parties involved in the project, including utility companies, testing agencies, governmental agencies, all City departments (such as Utilities and Transportation), and City inspectors.

The Project Supervisor shall coordinate and schedule the work of any independent survey crews that may be retained by the City to witness and reset existing and new geographic/benchmark monuments. Failure to have existing monuments witnessed and reset may result in delays to the Contractor's work. Costs for such delays will be the Contractor's sole responsibility.

The Project Supervisor shall coordinate and schedule both testing inspectors and City inspectors in a timely manner, to assure proper and timely testing and inspection of the work.

The Project Supervisor shall review the Inspector's Daily Reports (IDRs) for accuracy, and shall sign all IDRs on a daily basis as the representative of the Contractor. Items to be reviewed include descriptions, locations and measurements of quantities of work performed, workforce, equipment, and weather. The Project Supervisor shall also be responsible for its subcontractors' review and initialing of IDRs containing work items performed by each respective subcontractors.

The Project Supervisor shall submit to the Engineer, an updated, detailed schedule of the proposed work on a weekly basis, and an update of all proposed changes on a daily basis, all in accordance with the Detailed Specification for Project Schedule contained elsewhere herein.

The Project Supervisor shall schedule and chair a weekly progress meeting with the Engineer and all subcontractors to discuss the work. Upon the completion of each meeting, the Project Supervisor shall prepare and distribute, to all present, a written summary of the meeting's minutes. Those in attendance shall review the minutes and, if necessary, comment on any deficiencies or errors prior to or at the next scheduled progress meeting.

**ADDITIONAL PERFORMANCE REQUIREMENTS**

If, in the sole opinion of the Supervising Professional, the Project Supervisor is not adequately performing the duties as outlined in this Detailed Specification, the following system of notices will be given to the contractor with the associated penalties:

First Notice – A warning will be issued in writing to the contractor detailing the deficiencies in the Project Supervision. The contractor must respond within 7 calendar days in writing with a plan to correct the stated deficiencies. Failure to respond within 7 calendar days will result in the issuing of a second notice.

**DETAILED SPECIFICATION  
FOR  
ITEM #201 - PROJECT SUPERVISION, MODIFIED, MAXIMUM \$50,000**

**3 of 3**

Second Notice – A second warning will be issued in writing to the contractor further detailing the deficiencies in the Project Supervision. The contractor must respond within 7 calendar days in writing with a plan to correct the stated deficiencies. Failure to respond within 7 calendar days will result in the issuing of a third notice. A deduction of 10% will be made from the original Project Supervision contract amount. At this time, the City reserves the right to meet with personnel with the necessary authority within the Contractor’s organization to discuss the deficiencies in the Project Supervision.

Third Notice – An additional deduction of 25% will be made from the original Project Supervision contract amount, and the Project Supervisor shall be removed from the project, and replaced immediately with another individual to be approved by the Supervising Professional.

Should, in the sole opinion of the Supervising Professional, the Project Supervisor fail to perform his/her duties and responsibilities as described herein to such a degree that the successful completion of the project is put in jeopardy, the above system of notices may be foregone, and the Contractor shall immediately replace the Project Supervisor upon receipt of written notice. Failure to provide adequate project supervision, as determined by the Engineer, shall be considered basis for the Supervising Professional to suspend work without extension of contract time or additional compensation.

**MEASUREMENT AND PAYMENT**

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

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

**PAY ITEM**

**PAY UNIT**

Project Supervision, Maximum \$50,000

Lump Sum

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

**DETAILED SPECIFICATION  
FOR  
ITEM #202 – AUDIO VISUAL TAPE COVERAGE, MODIFIED**

**1 of 3**

**DESCRIPTION**

This work shall include digital audiovisual record of the physical, structural, and aesthetic conditions of the construction site and adjacent areas as provided herein. This work will be performed for the entire project limits prior to the start of construction.

The audio-visual filming shall be:

1. Of professional quality, providing a clear and accurate audio and visual record of existing conditions.
2. Prepared within the four (4) week period immediately prior to the start of construction
3. Furnished to the Engineer a minimum of one (1) week prior to bringing any materials or equipment within the areas described in this Detailed Specification.
4. Carried-out under the supervision of the Engineer.

The Contractor shall furnish one (1) copy of the completed audiovisual record to the Engineer. An index of the footage shall be included, which will enable any particular area of the project to be easily found. **This includes indexing the files according to street and Station number as applicable.** The Contractor shall retain a second copy of the audiovisual record for his/her own use.

Any portion of the film determined by the Engineer to be unacceptable for the documentation of existing conditions shall be filmed again at the Contractor's sole expense prior to mobilizing onto the site.

**PRODUCTION**

The audio-visual filming shall be completed in accordance with the following minimum requirements:

1. DVD Format, No Editing - The filming shall be done in color using equipment that allows audio and visual information to be recorded. Splicing or editing of the tape shall not be allowed and the speed and electronics of the videotaping equipment and DVD shall be equal to that which is standard to the videotaping industry.
2. Perspective / Speed / Pan / Zoom - To ensure proper perspective, the distance from the ground to the camera lens shall not be less than 10 feet and the filming must proceed in the general direction of travel at a speed not to exceed 48 feet per minute. Pan and zoom rates shall be controlled sufficiently so that playback will ensure quality of the object viewed.
3. Display - The recording equipment shall have transparent time, date stamp and digital annotation capabilities. The final copies of the tape shall continuously and simultaneously display the time (hours:minutes:seconds) and the date (month/date/year) in the upper left-hand corner of the frame. Accurate project stationing, where applicable, shall be included in the lower half of the frame in standard format (i.e. 1+00). Below the stationing periodic information is to be shown, including project name, name of area shown, street address, direction of travel, viewing direction, etc. If in the event, the stationing has not been established on-site, refer to the plans and approximate the proposed stationing.

**DETAILED SPECIFICATION  
FOR  
ITEM #202 – AUDIO VISUAL TAPE COVERAGE, MODIFIED**

**2 of 3**

4. Audio Commentary / Visual Features. Locations relative to project limits and landmarks must be identified by both audio and video means at intervals no longer than 100 feet along the filming route. Additional audio commentary shall be provided as necessary during filming to describe streets, buildings, landmarks, and other details, which will enhance the record of existing conditions.
5. Visibility / Ground Cover - The filming shall be performed during a time of good visibility. Filming shall not be performed during periods of precipitation or when snow, leaves, or other natural debris obstruct the area being filmed. The Contractor shall notify the Engineer in writing in the event that the weather or snow cover is anticipated to cause a delay in filming.

**COVERAGE**

The audio-visual film coverage shall include the following:

1. General Criteria - This general criteria shall apply to all filming and shall include all areas where construction activities will take place or where construction vehicles or equipment will be operated or parked and or where materials will be stored. The filming shall extend an additional 50 feet outside of all areas. The filming shall include all significant, existing man-made and natural features such as driveways, sidewalks, utility covers, utility markers, utility poles, other utility features, traffic signal structures and features, public signs, private signs, fences, landscaping, trees, shrubs, other vegetation, and other similar or significant features.
2. Other Areas - The Contractor shall film at his sole expense other areas where, in his/her opinion, the establishment of a record of existing conditions is warranted. The Contractor shall notify the Engineer in writing of such areas.

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

**AUDIOVISUAL FILMING SERVICES**

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

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

**DETAILED SPECIFICATION  
FOR  
ITEM #202 – AUDIO VISUAL TAPE COVERAGE, MODIFIED**

**3 of 3**

**MEASUREMENT AND PAYMENT**

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

**PAY ITEM**

**PAY UNIT**

Audiovisual Tape Coverage, Modified

Lump Sum

Audiovisual Tape Coverage shall include all labor, equipment, and materials required to perform the filming and to provide the finished videotape the Engineer. The unit price includes filming the entire project limits, for each and every street, as described above.

**DETAILED SPECIFICATION  
FOR  
ITEM #203 – MINOR TRAFFIC CONTROL, MODIFIED, MAXIMUM \$100,000**

**1 of 5**

**DESCRIPTION**

The work shall include, but is not limited to the following:

- The furnishing and operating of miscellaneous signs, warning devices, traffic regulators, flags, paddles, and cones;
- The operation of additional signs furnished by the City;
- Furnishing and installing meter bags;
- Coordinating with the City to have meter heads removed and reinstalled;
- Maintaining pedestrian traffic;
- Temporarily covering traffic controls;
- Temporarily covering existing signs as directed;
- Any and all other miscellaneous and/or incidental items which are necessary to properly perform the work.

This work shall consist of protecting and maintaining vehicular and pedestrian traffic, in accordance with Sections 104.11 and 812 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction; Part 6 of the 2011 Edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD); and the City of Ann Arbor Standard Specifications for Construction, except as modified herein.

**MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS**

Materials and equipment shall meet the requirements specified in the above designated sections of the MDOT 2020 Standard Specifications for Construction.

The Contractor shall maintain two-way traffic on major streets, access for local traffic on local streets, and keep all intersections open to traffic at all times, unless specifically authorized in writing by the Engineer.

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

The Contractor shall keep all driveways open at all times, unless specifically authorized in writing by the Engineer.

The Contractor shall maintain pedestrian traffic at all times. For maintaining normal pedestrian traffic while performing sidewalk and driveway repair, Plastic Drum, High Intensity, Lighted shall be placed by the Contractor as directed by the Engineer. The Contractor, when directed by the Engineer, shall place "Sidewalk Closed" and/or "Cross Here" signs and the cost shall be included in this pay item and will not be paid for separately.

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

**DETAILED SPECIFICATION  
FOR  
ITEM #203 – MINOR TRAFFIC CONTROL, MODIFIED, MAXIMUM \$100,000**

**2 of 5**

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

The Contractor shall obtain a Traffic Detour or Lane Closure Permit from the City's Project Management Services Unit, at least 48 hours in advance of any proposed lane or street closing.

Traffic on major streets should not be impacted between the hours of 7:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:00 p.m. without written permission from the Engineer or as specified on the Lane Closure Permit. All major changes in traffic control shall be made either between 9:00 a.m. and 3:30 p.m. or between 7:00 p.m. and 6:30 a.m. in order to minimize interference with rush hour traffic. All traffic controls must be in place and ready for traffic each day by 6:30 a.m. and 3:30 p.m.

The hours of work on all local streets are 7:00 a.m. to 8:00 p.m., Monday through Saturday, or as specified on the Lane Closure Permit. No equipment will be allowed in the street before or after these hours. Local streets may only be closed to through traffic (local access only) with written authorization of the Engineer. Work must be completed each day such that all streets are re-opened to through traffic by 8:00 p.m. unless otherwise specified, directed, or authorized in writing by the Engineer.

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

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

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

The work for Minor Traffic Control, Modified shall include: furnishing and operating of miscellaneous signs and warning devices; furnishing cones; operating additional signs furnished by the City throughout the life of the Contract; furnishing and operating pedestrian traffic control devices; maintaining a safe trench during all non-working hours; maintaining access to all drives; covering conflicting existing signs and removal of these covers; and any and all other miscellaneous and/or incidental items which are necessary to properly perform the work.

Where there is metered parking, the Contractor shall either rent and install meter bags, or, with the Engineer's authorization, coordinate with the City Field Services to have meter heads removed and reinstalled.

The Contractor shall maintain vehicular and pedestrian traffic during the work by the use of traffic regulators, channelizing devices and signs as necessary, as directed by the Engineer, and in accordance with 2011 Edition of the MMUTCD. Typical applications for maintaining pedestrian traffic in accordance with the 2011 Edition of the MMUTCD are included in this detailed specification.

**DETAILED SPECIFICATION  
FOR  
ITEM #203 – MINOR TRAFFIC CONTROL, MODIFIED, MAXIMUM \$100,000**

**3 of 5**

In order to maintain areas of on-street parking available for residents, the Engineer may direct the contractor to cover and uncover temporary “No Parking” signs within the project limits multiple times throughout the course of the project. Such repeated covering and uncovering of signs shall be included in this item of work and shall not be paid for separately.

**MEASUREMENT AND PAYMENT**

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

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

Minor Traffic Control, Modified, Maximum \$25,000 will be paid for on a pro rata basis with each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum minus any deductions incurred for inadequate performance as described herein. This amount will not be increased for any reason, including extensions of time, extras, and/or additional work.

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

**PAY ITEM**

**PAY UNIT**

Minor Traffic Control, Modified, Maximum \$100,000

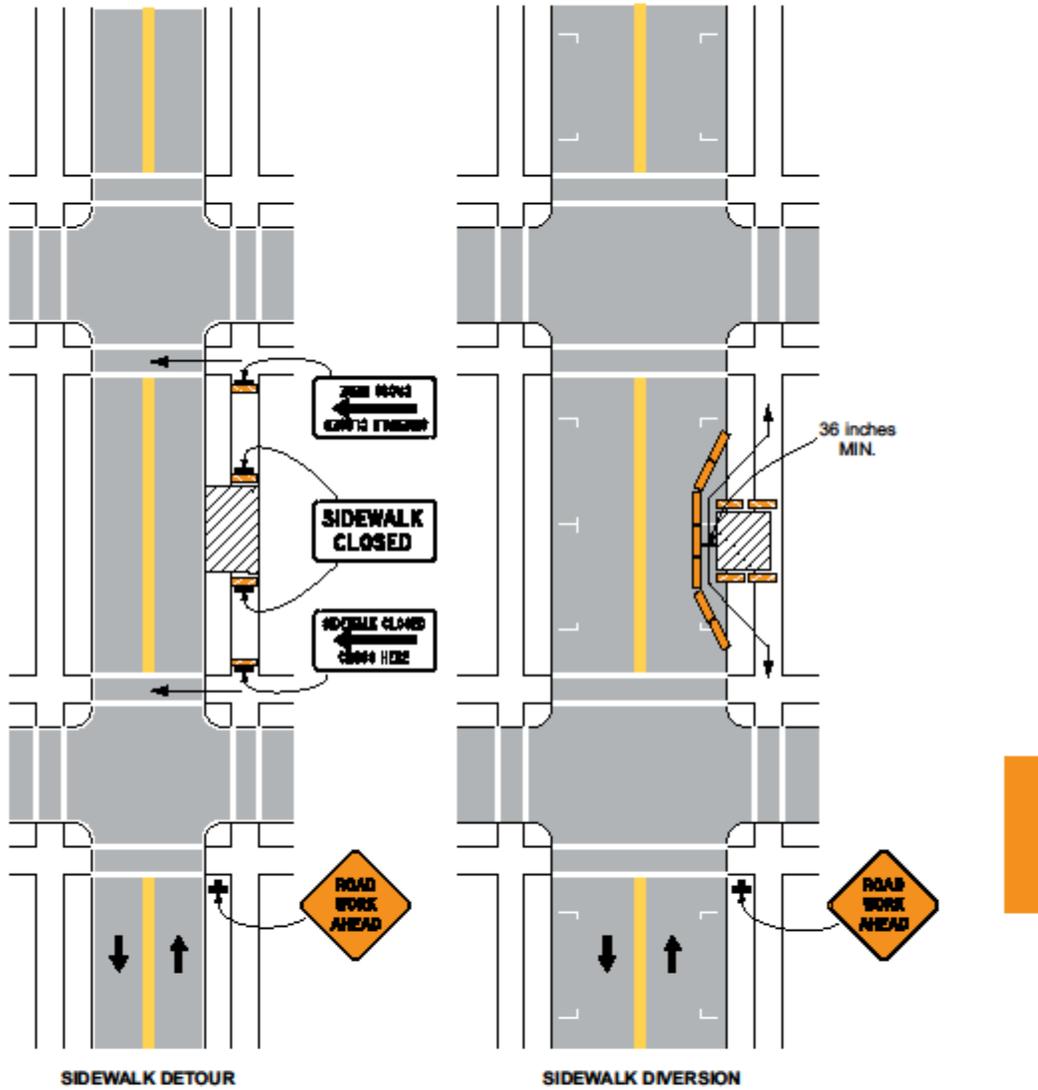
Lump Sum

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

**DETAILED SPECIFICATION  
FOR  
ITEM #203 – MINOR TRAFFIC CONTROL, MODIFIED, MAXIMUM \$100,000**



**Figure 6H-28. Sidewalk Detour or Diversion (TA-28)**



**Typical Application 28**

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.



**DETAILED SPECIFICATION  
FOR  
ITEMS #204/205 – BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED,  
LIGHTED, FURN/OPER  
ITEMS #206/207 – CHANNELIZING DEVICE, 42 INCH, FURN/OPER  
ITEMS #208/209 – LIGHTED ARROW, TYPE C, FURN/OPER  
ITEMS #210/211 – PLASTIC DRUM, HIGH INTENSITY, LIGHTED, FURN/OPER  
ITEMS #212/213 – SIGN, TYPE B, TEMP, PRISMATIC, FURN/OPER**

1 of 3

**DESCRIPTION**

This work shall consist of protecting and maintaining vehicular and pedestrian traffic in accordance with Sections 140.11, 812, and 922 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction; Part 6 of the 2011 Edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD); and the City of Ann Arbor Standard Specifications for Construction, except as modified herein.

**MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS**

Materials and equipment shall meet the requirements specified in the above designated sections of the MDOT 2012 Standard Specifications for Construction.

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

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

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

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

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

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

**Lighted Plastic Drums, Type III Barricades, and Type B Temporary Signs**

The Contractor shall furnish and operate these items as directed by the Engineer.

**DETAILED SPECIFICATION  
FOR  
ITEMS #204/205 – BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED,  
LIGHTED, FURN/OPER  
ITEMS #206/207 – CHANNELIZING DEVICE, 42 INCH, FURN/OPER  
ITEMS #208/209 – LIGHTED ARROW, TYPE C, FURN/OPER  
ITEMS #210/211 – PLASTIC DRUM, HIGH INTENSITY, LIGHTED, FURN/OPER  
ITEMS #212/213 – SIGN, TYPE B, TEMP, PRISMATIC, FURN/OPER**

**2 of 3**

Type III Barricades shall have standard orange-and-white stripes on both sides of the barricade.

Sufficient signs shall be provided by the Contractor to insure the safety of the workers and the general public in accordance with the 2011 Edition of the MMUTCD.

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

**MEASUREMENT AND PAYMENT**

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

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

Barricade, Type III, High Intensity, Double Sided, Lighted, Furn/Oper

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

Channelizing Device, 42 inch, Furn/Oper

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

Lighted Arrow, Type C, Furn/Oper

Payment for lighted arrow shall be for the maximum quantity used on each street.

Plastic Drum, High Intensity, Lighted, Furn/Oper

There will be a one-time payment for each street for the maximum number of plastic drums in-place (operated) at any one time, as directed by the Engineer.

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

Payment for temporary signs shall be for the maximum quantity used on each street.

**DETAILED SPECIFICATION  
FOR  
ITEMS #204/205 – BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED,  
LIGHTED, FURN/OPER  
ITEMS #206/207 – CHANNELIZING DEVICE, 42 INCH, FURN/OPER  
ITEMS #208/209 – LIGHTED ARROW, TYPE C, FURN/OPER  
ITEMS #210/211 – PLASTIC DRUM, HIGH INTENSITY, LIGHTED, FURN/OPER  
ITEMS #212/213 – SIGN, TYPE B, TEMP, PRISMATIC, FURN/OPER**

**3 of 3**

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

<b><u>PAY ITEM</u></b>	<b><u>PAY UNIT</u></b>
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Each
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Each
Channelizing Device, 42 inch, Furn	Each
Channelizing Device, 42 inch, Oper	Each
Lighted Arrow, Type C, Furn	Square Foot
Lighted Arrow, Type C, Oper	Square Foot
Plastic Drum, High Intensity, Lighted, Furn	Each
Plastic Drum, High Intensity, Lighted, Oper	Each
Sign, Type B, Temp, Prismatic, Furn	Each
Sign, Type B, Temp, Prismatic, Oper	Each

**DETAILED SPECIFICATION  
FOR  
ITEM #214 – “NO PARKING” SIGN**

**1 of 1**

**DESCRIPTION**

This work shall consist of installing, maintaining and removing of "No Parking" signs and posts as outlined herein and as referenced on the plans. "No Parking" signs shall be installed in accordance with the Public Services Department Standard Specifications and the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

**MATERIAL**

All materials for this work shall conform to the requirements of the Public Services Department Standard Specifications.

**CONSTRUCTION METHODS**

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

The City will furnish "No Parking" signs to the Contractor at no cost. The Contractor shall furnish the signposts and shall securely bolt the signs to the signposts as directed by the Engineer. The Contractor shall install the signposts at least two feet deep into the ground, and there shall be a minimum of six feet and maximum of seven feet of clearance maintained between the bottom of the sign and the ground. The signs are to be placed at intervals no more than 150 feet and as necessary to eliminate parking in the construction area.

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

**MEASUREMENT AND PAYMENT**

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

**PAY ITEM**

**PAY UNIT**

“No Parking” Sign

Each

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

**DETAILED SPECIFICATION  
FOR  
SEWER FLOW CONTROL**

**1 of 7**

**DESCRIPTION**

The work covered by this Detailed Specification shall consist of furnishing all labor, supervision, tools, equipment, appliances, materials, incidental items, and the installation, operation, and maintenance needed to perform all operations in connection with the diversion of flow and bypass pumping of sanitary sewage for cleaning and inspecting of sewers and manholes, and sewer rehabilitation procedures. The purpose of which is to provide un-interrupted sewerage service at all times and to prevent sewage overflows.

It is the intent of this project to divert dry weather upstream sanitary sewer flow within the work zone to other City of Ann Arbor (City) sanitary sewers by installing plugs in the sewer system. The flows from the various laterals to the smaller diameter sewers connected to the sanitary sewer in the work zone shall be bypass pumped to a manhole downstream of the work zone. The design, installation, and operation of the temporary sewer flow control system shall be the Contractor's sole responsibility.

When working inside manholes or sewer, the Contractor shall exercise caution and comply with Occupational Safety and Health Administration (OSHA) and City requirements for working in confined spaces.

The Contractor shall manage, plan, and execute their operations such that there will be no backups, leaks, overflows or unauthorized discharges of sewerage. The Contractor shall be completely responsible for the proper clean-up and any environmental remediation as may be required by the City and the EGLE for any backup, leak, spill, or sanitary sewerage overflow.

**SUBMITTALS**

The Contractor shall provide a detailed Sewer Flow Control Plan to the Engineer for review and acceptance prior to the start of any flow control work. This plan must include descriptions outlining all provisions and precautions to be taken by the Contractor regarding the handling of existing flow. The Sewer Flow Control Plan must be specific, including such items as schedules, locations, elevations, capacities of the equipment, materials, and all other incidental items necessary and/or required to ensure proper protection of the facilities, including protection of existing structures and pipes, and compliance with the requirements and conditions specified in the Contract Documents. The flow control plan shall be submitted to the Engineer for review and approval in accordance with Section 104.02 of the 2020 edition of the Michigan Department of Transportation Standard Specifications for Construction. No construction shall begin until all provisions and requirements have been reviewed and accepted in writing by the Engineer.

For each submittal and re-submittal, the Contractor shall allow at least 14 calendar days from the date of the submittal to receive the Engineer's acceptance or request for revisions. The Engineer's comments shall be incorporated into the re-submitted plans, calculations, and descriptions. The Engineer's written acceptance of the plan is required before beginning the work. Re-submittals shall be reviewed and returned to the Contractor within 14 calendar days. Required revisions will not be a basis of payment for additional compensation, extra work, or an extension of contract time. The Contractor shall include time for this entire review process in their schedule.

Sewer Flow Control Plan submittal shall include at a minimum:

1. Overall flow control plan and sequence of construction;

**DETAILED SPECIFICATION  
FOR  
SEWER FLOW CONTROL**

**2 of 7**

2. Flow control schedule including times when the flow control system shall be temporarily shut down and flow allowed to return to normal operations;
3. Overall plan for removal of flow control system during wet weather events and/or emergency situations;
4. Plan for providing redundancy for all aspects of the system especially the plugs;
5. Safety Program for confined space entry and procedure for entering manholes and installing plugs under live flow conditions;
6. Emergency clean-up plan should a spill occur or backups in the system occur. The plan should include at a minimum:
  - I. Contact names and 24-hour phone numbers
  - II. Emergency cleanup plan for any residences that experience backups caused by bypass pumping operational failures, including list of proposed cleanup contractors
  - III. Vactor truck and lime on site at all times;
  - IV. Spill kits for all storm drains in bypass pumping work zone this also includes “Pig Drain Blocker Drain cover” or approved equal;
  - V. Additional Traffic Control Measures (stored on site) to do a temporary detour;
  - VI. All employees on the job site must be familiar with SOP in case of a failure
7. Procedure for continuous (24 hour) monitoring of system, including verifying that plugs are sealed, and lateral bypass pumping system is operating. The plan is to include type and location of level sensors, method of installation, set elevations of sensors, and continuous monitoring system; high level alarms;
8. Maintenance of traffic plan for plug installation and removal in public roadways;
9. Sewer plug types, method of installation and removal, anchors and restraints, and hydraulic head limits;
10. Lateral bypass pump sizes, capacities, power requirements, and number of each size to be provided at each manhole including redundancy;
11. Calculations giving flow capacity provided by each pump given the system’s Total Dynamic Head (TDH), including the calculations that are used to derive the system TDH. This data should also include the calculations determining what the Net Positive Suction Head available is in comparison to the Net Positive Suction Head required by each pump. Pump curves shall be submitted;

**DETAILED SPECIFICATION  
FOR  
SEWER FLOW CONTROL**

**3 of 7**

12. Number, size, material, and location of lateral bypass pumping suction and discharge piping, procedure for protecting lines, and location of bypass pumping discharge manhole;
13. Lateral bypass pumping system flushing and drainage plan;
14. Buried bypass pipe locations and details;
15. Environment protection including pump containment and leak detection;
16. Method of protecting discharge manholes or structures from erosion and damage;
17. Method of noise control for each pump; and,
18. Design plans for access to bypass pumping locations indicated on the Drawings.

**FLOW DIVERSION EQUIPMENT**

Provide materials and equipment suitable for, and known to be reliable to meet, the flow diversion requirements as shown on the Drawings and as needed for the Contractor's operations.

The plug shall be a temporary plug that allows for quick removal in case of emergency or wet weather situation and re-installation after wet weather event has passed. Plugs shall be capable of withstanding minimum static head pressure of 15 feet. Plugs shall include form or bracing, anchoring, or restraint to keep plugs properly installed. Plugs should be of the type capable of being installed under live flow conditions and in depths exceeding 35 feet as shown on the Drawings. Plugs should be able to be installed in either the incoming or outgoing pipe in a manhole and allow for quick removal under surcharged conditions.

Pressure gages shall be installed with the plugs to continuously monitor the plugs and adjust the air pressure as needed to maintain full blockage of flow.

Ultrasonic level sensors shall be installed, at a minimum, in both discharge and intake manholes and any additional sensors as directed by the Engineer. The Contractor may elect to install sensors in other locations at their expense if they so choose. The Contractor shall be responsible for the installation and maintenance of the sensors. The level sensors shall provide continuous level readings that the Contractor shall be able to review remotely to monitor the level in the system during flow diversion. The level sensors shall provide notifications and alarms to allow the Contractor time to remove the plugs should an emergency or a wet weather event occur.

**LATERAL BYPASS PUMPING EQUIPMENT**

Provide materials and equipment suitable for, and known to be reliable to meet, the bypass pumping requirements.

**DETAILED SPECIFICATION  
FOR  
ITEM #215 - SEWER FLOW CONTROL**

**4 of 7**

The pumps must be capable of passing a minimum of a 3-inch solid. All pumps must be constructed to allow dry running for long periods of time to accommodate the cyclical nature of effluent flows.

Equipment used for bypass pumping shall be sufficient to handle anticipated average and peak flows from each sewer. The Contractor shall maintain sanitary sewer flows within their bypass pumping system, including all wet weather flows.

The Contractor shall take into account seasonal variations and include a safety factor above the indicated peak flow values in sizing pumping equipment.

For sanitary sewerage, bypass piping shall be PVC Schedule 80, or equivalent, with solvent welded joints; or HDPE with butt fused joints. The Contractor shall perform hydrostatic testing of bypass pump discharge pipes in accordance with ASTM F2164 for HDPE or ASTM F2261 for PVC pipe, prior to operating bypass pumping system to ensure structural integrity of pipeline. Any defects or leaks found during testing shall be repaired and the pipeline shall be re-tested until results are satisfactory in accordance with the ASTM standard, and as acceptable to the Engineer.

**REDUNDANT EQUIPMENT**

The Contractor shall have redundant flow diversion equipment including, but not limited to, plugs and level sensors, available for immediate use at the job site at all times in the event of a failure.

Any damage to the Contractor's equipment, sewer system, or delays to the Contractor's operations due to equipment or plug failure/leakage shall be the Contractor's sole responsibility and no additional payment shall be made for these occurrences. The Contractor shall take all necessary precautions to verify that the plugs and flow diversion plan is operational prior to performing the work.

The Contractor shall have redundant lateral bypass pumping equipment installed and ready for immediate operation and use in the event of an emergency or primary system breakdown or failure. The standby system shall be capable of pumping dry weather and peak flow. The standby pump(s) shall not be considered as any part of the primary system as designed for peak flow. The Contractor shall also furnish and have available onsite, and ready for operation, redundant pumping ancillary equipment in case of any failure of the pumping system including piping, electrical equipment, pipe appurtenances, etc. Redundant pumping facilities shall also include having a backup power generator in case the primary power source fails.

The Contractor shall not obstruct flows in the sewer unless the primary and redundant equipment is onsite and in operable condition and authorization has been granted by the Engineer.

**FLOW DIVERSION**

The Contractor shall install plugs and level sensors in both discharge and intake manholes and any additional sensors as directed by the Engineer and test the system for a minimum of 48 hours prior to the start of any other work onsite. The Contractor, City, and Engineer shall review the flow diversion during the testing period, including flow levels in the manholes. The Contractor shall not start any other work onsite until acceptance of the diversion test.

**DETAILED SPECIFICATION  
FOR  
ITEM #215 - SEWER FLOW CONTROL**

5 of 7

**LATERAL BYPASS PUMPING**

Service laterals that enter the mainline sewer shall be bypass pumped to the downstream bypass pumping manhole. At no time shall plugging and/or blocking of flow from lateral service connections be permitted.

The Contractor shall construct and maintain bypass pumping facilities as needed that will pump at the required flow rates. The Contractor shall provide the City with a minimum of 7 days advance notice prior to initiating the sanitary sewer bypass pumping system.

The Contractor is responsible for obtaining any approvals for placement of the temporary equipment and/or piping within public ways from the Agency having jurisdiction.

The Contractor shall provide an adequate labor force and have designated personnel onsite for maintenance and operation, and emergency back-up service, of the bypass pumping facility 24 hours per day 7 days per week during bypass operations.

Anytime bypass pumping operations cease as required due to weather conditions described in Detailed Specification "Extension of Time, Additional Compensation" or as required by the Engineer, the Contractor shall drain the bypass pump discharge line back into the sanitary system as described in the Sewer Flow Control Plan and as directed by the Engineer to avoid freezing of the pipeline. Under no circumstances shall sanitary sewage within the bypass discharge line be drained to the storm system, or any other surface water.

The Contractor is to arrange for and provide all necessary temporary power, electrical service, board switches, etc. as required by DTE Energy and the National Electrical Code (NEC) current edition to provide temporary bypass pumping.

All bypass pumping discharge pipes shall be protected from the pipe header to the discharge structure. The Contractor shall provide necessary fittings or deflection in pipe to route pipe as necessary to minimize environmental impact and conflict with pedestrian, construction, and emergency vehicle traffic. When the bypass pipeline crosses drives or trails, or when pipeline is within any Contractor work zone/staging area, the Contractor shall place the bypass pipeline in a casing pipe and bury in temporary trenches with compacted backfill or any other approved method, as indicated on the Drawings, as required for the Contractor's operations, and as approved by the Engineer. All work associated with temporary bypass discharge pipe trench, including but not limited to piping, fittings, deflections, casing, spacers, trenching, and backfill shall be included in the contract pay item "Sewer Flow Control."

**WET WEATHER EVENT**

A wet weather event is defined as an event that causes the flow in the system to surcharge.

When a wet weather event occurs, the Contractor shall cease all operations in the sewer system and remove all plugs. The plugs shall be removed as not to cause a surge downstream.

It is the Contractor's responsibility to monitor the weather and verify weather conditions prior to the start of any work that could have an impact on the capacity of the affected sewers. Any damage to the

**DETAILED SPECIFICATION  
FOR  
SEWER FLOW CONTROL**

**6 of 7**

Contractor's equipment, sewer system, or delays to Contractor's operations due to wet weather conditions shall be the Contractor's sole responsibility and no additional payment shall be provided.

The only exception to that is if the temporary removal of the flow diversion plugs and lateral bypass pumping system occurred after the sewers had been cleaned, televised, prepped for lining, and approved by the Engineer before the sewers were lined. In such an event, the Contractor may request compensation for the re-cleaning of the pipes only. The re-cleaning must first be approved by the Engineer prior to the work beginning.

No compensation shall be provided for the removal and re-installation of the plugs due to wet weather events as described in Detailed Specification "Working in the Rain."

**NOISE CONTROL**

All noise generated by the bypass pumping operation shall not exceed the safe sound limits, and shall follow necessary procedures as required for temporary exemptions, as defined in Detailed Specification "Hours of Work."

**FLOW DIVERSION AND BYPASS PUMPING COMPLETION**

At the end of the flow control operation, and after receipt of written permission from the Engineer, the Contractor shall remove all flow diversion and bypass pumping equipment, including level control system, temporary power equipment, and suction/discharge piping in a manner that permits the sewage flow to return to normal without overflowing to the environment, surcharging, or causing other major disturbances to the system. The Contractor shall restore all disturbed areas and structures, and restore all pavement in accordance with Detailed Specification, "Project Clean-Up and Restoration, Special" and as directed by the Engineer.

The duration of the bypass pumping shall be determined by the Contractor as needed to perform the work under this contract while maintaining un-interrupted sewage service.

**FLOW CONTROL PRECAUTIONS**

When flow in a sewer line is bypassed or plugged, sufficient precautions must be taken to protect the sewer liner and the Contractor's operations from damage that might result from sewer surcharging. Further, precautions must be taken to ensure that sewer flow control operations do not cause flooding or damage to public or private property being served by the sewers involved. At no time shall sewage be pumped in or allowed to flow into a catch basin, storm sewer, open watercourse or any other surface water.

**DETAILED SPECIFICATION  
FOR  
SEWER FLOW CONTROL**

7 of 7

**MEASUREMENT AND PAYMENT**

The completed work shall be paid for at the contract unit price for the following contract pay item:

<b><u>PAY ITEM</u></b>	<b><u>PAY UNIT</u></b>
Sewer Flow Control .....	Lump Sum

The contract unit price for this item shall include all labor, supervision, tools, permits, shop drawing submittals, materials, equipment, operation, any incidental items, and all other work as noted on the Drawings and as specified herein to allow the Contractor to perform the work of diverting and bypass pumping flows as detailed herein.

The installation, maintenance, operation, monitoring, and removal of the level sensors shall not be paid for separately, but shall be included in the item of work “Sewer Flow Control.”

The cost for the sewer flow control shall be paid for as a Lump Sum item regardless of the duration, number of, and/or duration of the wet weather events encountered, flow encountered, weather conditions, or number of times flow control system is temporarily removed and re-installed.

30% of the lump sum shall be paid for Sewer Flow Control following the initial installation, 48-hour test, and acceptance of the system by the Engineer. The remainder of the cost shall be paid for at the conclusion of all flow diversion activities and after the removal of all equipment from the site.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**1 of 10**

**DESCRIPTION**

This work shall consist of rehabilitating pipelines by the insertion of a resin impregnated flexible lining and cured-in-place to form a pipe. The cured-in-place pipe (CIPP) shall be saturated with a thermosetting resin and inserted into the existing pipeline. Curing shall be accomplished by circulating hot water or steam to harden the resin into a hard impermeable pipe. When cured, the hardened CIPP shall be a tight fitting watertight pipe within a pipe. The CIPP shall be continuous from manhole to manhole with no circumferential joints or seams. Except as otherwise specified herein, all work shall be performed in accordance with the City of Ann Arbor (City) Public Services Area Standard Specifications, and as directed by the Engineer.

For a CIPP system to be considered acceptable, the CIPP system must have at least two million lineal feet of successful, documented installations, a minimum of 250,000 lineal feet of which shall have been in Midwestern United States or Canada.

When requested by the Engineer, the Contractor shall submit test results from previous field installations of the same resin system and tube materials as proposed for this installation. The test results must verify that the CIPP physical properties specified in this Detailed Specification have been achieved in the field.

The lining operation shall not begin until the sewer has been cleaned and video inspected in accordance with the Detailed Specification “Cleaning and Televising Sewer and Manholes” and authorization to begin by the Engineer has been granted.

**DESIGN CONSIDERATIONS**

The required structural CIPP wall thickness shall be based, at a minimum, on the physical properties of the cured composite and per the design of the Professional Engineer. The finished liner shall be designed per ASTM F1216 Appendix X1 for the following condition:

Condition .....	Fully deteriorated gravity pipe
Safety Factor .....	2
Ovality .....	As measured by Contractor during sewer inspection, assume 2% for bidding purposes
Soil Density .....	130 pounds per cubic foot (lbs/cft)
Soil Modulus.....	700 pounds per square inch (psi) for pipe inverts up to and including 15 feet deep, 1,000 psi for pipe inverts greater than 15 feet deep
Groundwater Depth:.....	As field verified
Surcharge Loading .....	HS-20 (Highway) when any part of the sewer is under any major street, county road, or state highway; E-80 (Railroad) when under any railroad.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**2 of 10**

The acceptable resin system values to be incorporated into the formula for liner thickness shall not be greater than the following:

Table 1

	Polyester	Enhanced Polyester	Vinyl Ester	Epoxy
Short Term Flexural Modulus (psi)	300,000	400,000	250,000	300,000
Long Term Flexural Modulus (psi)	150,000	200,000	125,000	150,000
Creep Retention Factor	50%	50%	50%	50%
Flexural Strength (psi)	4,500	4,500	4,500	5,000

Where the requirements of this specification conflict with ASTM F 1216 or ASTM D5813 this Detailed Specification shall govern.

The Contractor shall determine the liner thickness and resin quantity for this project per ASTM F1216, Appendix X1. Liner thickness, resin, and resin quantity shall be furnished to the Engineer for review and approval prior to beginning work. The design calculations for wall thickness shall be completed by a Professional Engineer proficient in the design of pipeline systems, licensed in the State of Michigan, with design calculations signed and sealed. The CIPP design shall assume no bonding to the original pipe wall.

The Contractor shall submit, prior to installation of the lining materials, certification of compliance with these specifications. Certified material test results shall be included that confirm that all materials conform to these specifications. Materials not complying with these requirements will be rejected.

For each submittal and re-submittal, the Contractor shall allow at least 14 calendar days from the date of the submittal to receive the Engineer's acceptance or request for revisions. The Engineer's comments shall be incorporated into the re-submitted plans, calculations, and descriptions. The Engineer's acceptance of the submittal is required before beginning the work. Re-submittals shall be reviewed and returned to the General Contractor within 14 calendar days. Required revisions will not be a basis of payment for additional compensation, extra work, or an extension of contract time. The Contractor shall include time for this entire review process in their schedule.

**MATERIAL**

All materials shipped to the project site shall be accompanied by test reports certifying that the material conforms to the ASTM standards listed herein. Materials shall be shipped, stored, and handled in a manner consistent with written recommendations of the CIPP system manufacturer to avoid damage. Onsite storage locations shall be as indicated on the Drawings and approved by the Engineer.

**Preliner Tube.**- The preliner shall be a polyethylene material compatible with the lining system, and shall be utilized where necessary to accommodate infiltration, damaged, or missing pipe.

**Felt Liner Tube.**- The tube shall consist of one or more layers of absorbent, flexible, non-woven felt material. The tube shall be capable of carrying the specified resin, constructed to be able to withstand installation pressures and curing temperatures, have sufficient strength to bridge missing pipe and stretch to fit irregular pipe sections at all pipe locations, and be compatible with the resin used.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**3 of 10**

The outer tube coating shall consist of an impermeable, flexible membrane that contains the resin and allows for visual inspection and verification of proper resin impregnation (“wet-out”) procedure. The coating shall hold the resin inside the tube without leakage, accommodate installation, and stretch to the size and shape of the existing sewer, and shall not delaminate before, during, or after curing.

The tube shall have a uniform thickness that when compressed at installation pressures will meet, or exceed, the design thickness. The thickness of the tube shall be calculated based upon the resin system values given in this Detailed Specification.

The CIPP wall thickness shall be calculated from the equation in ASTM F1216, Appendix X1, based upon the parameters given in this Detailed Specification. The minimum CIPP wall thickness shall be not less than the value calculated by that equation. Any layers of tube that are not saturated with resin and capable of being cured shall not be deemed to have been included in the calculated CIPP wall thickness.

The tube shall be fabricated to a size and length that when installed will fit sufficiently tight within the existing pipe so as to not leak at manholes, at service connections, or through the wall of the installed pipe. The tube shall be properly sized to the diameter of the existing pipe and the length to be rehabilitated and be able to stretch to fit irregular pipe sections and negotiate bends. The Contractor shall determine the minimum tube length necessary to effectively span the designated run between manholes. The Contractor shall verify the lengths in the field prior to impregnation of the tube with resin, to ensure that the tube will have sufficient length to extend the entire length of the run. The Contractor shall also measure the inside diameter of the existing pipelines in the field prior to ordering liner so the liner can be installed in a tight-fitted condition. Allowance for circumferential stretching of the tube during insertion shall be made as per manufacturer's recommendations. Overlapped layers of felt in the longitudinal seam that cause lumps in the final product shall not be utilized

The tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material shall be included in the tube that may cause delamination in the cured CIPP. No dry or unsaturated layers shall be evident.

The wall color of the interior pipe surface of the CIPP after installation shall be a light reflective color so that a clear detail examination with closed circuit television inspection equipment may be made. The hue shall be dark enough to distinguish a contrast between the fully resin saturated felt fabric and dry or resin lean areas.

Seams in the tube shall be stronger than the unseamed felt and shall meet the requirements of ASTM D5813. Where the length of the tube to be installed requires joining along the circumference of the tube, the sewn joint shall not be perpendicular to the long axis but spirally formed and sewn.

The outside of the tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 feet. Such markings shall include the manufacturers name or identifying symbol. The tubes must be manufactured in the USA.

The length of the tube shall be that deemed necessary by the Contractor to effectively carry out the insertion and seal the pipe at the inlet and outlet points, plus that amount required to run-in and run-out for the

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**4 of 10**

installation process. The Contractor shall verify the lengths in the field before cutting the tube to length. Lengths of sewer shall be lined over one or more access points as shown on the Drawings.

**Resin.-** Resin shall be a polyester, enhanced polyester, vinyl ester, or epoxy system including all required catalysts, initiators, or hardeners that when cured within the tube creates a composite that satisfies the requirements of ASTM F1216 and ASTM F1743, the physical properties herein, and those which are to be utilized in the design of the CIPP for this project. Resin selected shall be resistant to the chemical composition of the sewage and comply with the structural requirements of this specification.

**Resin selected shall be Styrene-Free.**

The resin shall be thermosetting resin that is compatible with the lining process and shall meet the requirements of ASTM F1216 except as otherwise specified in this Detailed Specification. The resin shall be able to cure in water with an initiation temperature for cure as required by the liner manufacturer, but not greater than maximum temperatures required under ASTM F1216. The cured resin/felt system shall be suitable for the expected conditions within the existing sanitary sewer.

The Contractor is responsible for choosing a resin system that is capable of meeting the physical and cured-in-place properties and performance requirements as detailed in this specification.

**Field Cured Line.-** The completed liner as installed and fully cured-in-place shall meet the minimum physical properties for short term flexural modulus and flexural strength as shown in Table 1.

**Remote Temperature Sensing Devices.-** Fiber optic probes shall be installed to monitor the average temperature along the entire length of the tube as it cures. Devices shall be provided by VeriCure or an Engineer-approved equal.

**CONSTRUCTION METHODS**

The Contractor shall carry out their operations in strict accordance with all Occupational Safety and Health Administration (OSHA), Michigan Occupational Safety and Health Administration (MIOSHA), and manufacturer's safety requirements. The Contractor shall be solely responsible for safety during the performance of all work. The Contractor shall not enter into any sewer segment where hazardous conditions may exist until such time as the source of those conditions is identified and eliminated by the Contractor and/or the City. The Contractor shall coordinate their work with local fire, police, and emergency rescue unit.

The Contractor shall be responsible for any damage to public or private property resulting from their sewer lining or televising activities and shall repair or otherwise make whole such damage at no cost to the City.

**Bypassing Flow –** The Contractor shall provide un-interrupted sewerage service at all in accordance to the Detailed specification for Sewer Flow Control.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**5 of 10**

**Cleaning of Pipelines.-** Prior to rehabilitation of any sewer, it shall be the responsibility of the Contractor to remove all internal deposits from the pipeline. Each sewer section shall be cleaned to a degree sufficient to allow video inspection and cured-in-place pipe (CIPP) lining to be completed in accordance with this specification. The Contractor shall take precautions to protect the sewer lines from damage. The Contractor shall assume the sewer will require heavy cleaning with unlimited passes to achieve a clean sewer and that rodding and root cutting shall be required and are included in the contract pay item.

The Contractor must adhere to the requirements of ASTM F1216 or ASTM F1606 for the following types of cleaning: hydraulic cleaning, high velocity hydro-cleaning, and mechanical cleaning.

Remove dirt, grease, rocks, sand, roots, and other solid or semisolid materials and obstructions from the sewer line and manholes. Cleaning shall be of the entire reach between manholes and/or chambers.

It shall be the responsibility of the Contractor to clear the line of obstructions such as solids, dropped joints, debris from collapsed pipe, sediment deposits, mineral deposits, stalactites, and all major blockages that would prevent sewer rehabilitation work to be performed at no additional cost to the project.

The sewers shall be cleaned by using a high pressure water cleaning machine with minimum capability of 5,000 pounds per square inch (psi) at 80 gallons per minute (gpm). A high pressure hose with a jet nozzle shall be introduced into the sewer so that a spray shall scour and clean the sewer line without applying internal pressure and damaging the pipe. This will require an unlimited amount of passes of the jet nozzle, or other cleaning measures to remove all debris. The hose shall be self-propelled by a minimum water pressure of 1,000 psi. Cleaning pressures to 5,000 psi may be required to remove heavy tuberculation and adhered debris from the pipe interior. The jet nozzle hose, upon withdrawal, will scour the pipe (invert, walls, and crown), flushing all materials into the downstream manhole for removal.

Material removal shall be performed at the identified-for-access manholes for the cleaning operation. At no time during cleaning shall material be allowed to enter or flow in the sewer past the downstream access manhole. Passing material from manhole section to manhole section shall not be permitted.

Waste material removed from the sanitary sewer system shall be disposed of by the Contractor at his expense.

Mechanical root cutting shall be performed with powered equipment. The Contractor shall furnish suitable power machinery which shall be used to remove tree roots and deposits remaining after jet cleaning that prevent passage of television inspection equipment or prevent the lining of the sewer.

**Sewer Television Inspection.-** The initial “pre-rehabilitation” television inspection of the sewers pipes shall be conducted within a week of the cleaning of each segment as long as the flow diversion and lateral bypass pumping system has remained in operation. Should the flow diversion have been temporarily suspended between the cleaning and the televising, or between the initial televising and the lining, then both the cleaning and televising shall be repeated at no additional cost to the project. The Contractor shall provide digital video on DVD, flash drive, or hard drive that verify that the sewer is clean and free of sediment and debris to the satisfaction of the Engineer. If any sewer is not satisfactorily cleaned, it shall be

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**6 of 10**

promptly cleaned and re-inspected by closed-circuit television camera and video provided to the Engineer for review and approval.

The camera must be operative in 100% relative humidity conditions. The live image obtained by the camera shall be transmitted to a color monitor of not less than 19 inches. The camera and monitor shall have a minimum 500 line resolution. The monitor shall be located inside the mobile recording studio.

Lighting for the camera shall be adequate to allow a clear picture of the entire periphery of the sewer and shall be varied as required to be effective for all pipe diameters inspected. Remote control of lighting brilliance, camera focus, and camera movement shall be from a control panel inside the mobile recording studio. Cables and equipment used to propel the camera shall not obstruct the camera view or interfere with the documentation of the sewer conditions.

The camera shall be moved through the sewer line at a uniform rate, maximum 30 feet per minute. Whenever possible, the camera shall move in an upstream direction. The camera shall be stopped for no less than 10 seconds at the manhole entrances, each service lateral, exit manholes, and at all points where the sewer is damaged or deficient. The camera shall pan and tilt to provide full view of each service lateral, and at all points where the sewer is damaged or deficient.

If the camera fails to pass through a pipe section, the Contractor shall re-set the equipment and attempt to perform the inspection coming back from the next upstream, identified-for-access, and manhole. If the inspection cannot be completed from the next manhole, the inspection shall be considered complete and the Engineer will provide written instructions to the Contractor describing how to proceed with the work in that reach of sewer.

**Line Obstructions/Repairs.**- It shall be the responsibility of the Contractor to clear the line of obstructions such as solids, dropped joints, protruding branch connections or broken pipe that will prevent proper insertion of the liner. If the pre-design video inspection reveals an obstruction that cannot be removed by conventional cleaning equipment, then the obstruction shall be removed by equipment operating within the pipeline.

Services which protrude more than 3/4 inch into the sewer lines shall be ground down as flush as possible with the wall of the sanitary sewer. Grinding shall be done with equipment operating inside of the sewer and shall not cause damage to the sewer or the service being ground.

If the protruding service is in such condition that grinding is not possible or if the condition of the sewer is such that repairs cannot be performed from inside the sewer then the Contractor shall make a spot repair excavation, to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Engineer prior to the commencement of the work.

If the pre-design video inspection reveals areas that require excavation, removal, spot repair, or grinding, then these excavations, removals, spot repairs, and grinding shall be included in the Contractor's bid. Such excavations, removals, spot repairs, and grinding shall only be paid for separately when the condition of the sanitary sewer has deteriorated to the point of making an excavation, removal, repair, and grinding necessary, since the pre-design video inspection.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**7 of 10**

**Pre-Rehabilitation Inspection of Pipelines.**- Inspection of pipelines shall be performed after the pipe has been cleaned, by experienced personnel trained in locating breaks, obstacles, and service connections by closed circuit television.

The interior of the pipeline shall be carefully inspected to determine the location and extent of any structural failures. The location of any conditions which may prevent proper installation of lining materials into the pipelines shall be noted so these conditions can be corrected as specified in this Detailed Specification and Detailed Specification "Cleaning and Televising Sewer, Manholes, and Chambers".

**Installation of Resin Impregnated Tube.**- The Contractor shall designate a location where the uncured resin in the original containers and the unimpregnated liner will be resin impregnated prior to installation. The Contractor shall allow the Engineer to inspect the materials and procedure. A resin and catalyst system compatible with the requirements of this Detailed Specification shall be used. The quantities of the liquid thermosetting materials shall be provided in accordance with manufacturer's standards to provide the cured liner properties specified. Sufficient resin shall be used to fill the volume of air voids in the liner with additional allowance for polymerization, shrinkage, and loss of resin through cracks and irregularities in host pipe wall. The Contractor shall ensure the proper amount of resin is uniformly distributed throughout the entire length of the tube.

The wetting out, installation, and curing of the resin impregnated tube shall be in accordance with ASTM F1216 and per manufacturer's specifications. The tube shall be inserted through existing opening by means of an inversion process, the application of a hydrostatic head sufficient to fully extend the liner to the next designated access point, or other means as approved by the Engineer.

The process will be adjusted as necessary to ensure a complete lining without over-stressing or tearing the lining, with sufficient pressure to hold the liner snug to the pipe wall, and to produce dimples at side

connections and flared ends at the entrance and exit access points. The use of a lubricant is recommended and if used, such lubricant shall be compatible with the rehabilitation process.

The manufacturer's standards shall be closely followed during the elevated curing temperature so as not to over-stress the felt fiber and cause damage or failure of the liner prior to cure.

**Curing.**- Hot water or steam is required for full length liners. After installation of the resin impregnated liner is completed, the Contractor shall supply a suitable heat source and water / steam recirculation equipment as necessary to cure the liner. For water curing the equipment shall be capable of delivering hot water to the far end of the liner through a hose, which has been perforated per manufacturer's recommendations, to uniformly raise the water temperature in the entire pipe above the temperature required to affect a cure of the resin. This temperature shall be determined by the resin/catalyst system employed.

For quality control during the CIPP lining operation, the Contractor shall utilize remote temperature sensing devices placed between the host pipe and the liner to continuously monitor the liner cure incrementally every 18 inches or less to verify that an exothermic reaction has occurred and that a full cure has taken place along the full length of the CIPP liner. Measuring temperatures at the liner endpoints only will not be permitted. The cure information must be taken from the bottom third of the pipe liner. Cure parameter information shall be provided by the resin manufacturer.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**8 of 10**

Liner and/or host pipe interface temperature shall be monitored and logged during curing of the liner. The monitoring system must have the ability to be remotely viewed live by the Engineer. Data collected shall be provided to the Engineer in Excel spreadsheet and graphical viewer formats at the same time as the post-lining inspection videos are provided.

Initial cure shall be deemed to be completed when the remote sensing devices reflect that the cure temperature, as recommended by the resin/catalyst system manufacturer, have been achieved. The cure period shall be of a duration recommended by the resin manufacturer, as modified for site-specific conditions, during which time the recirculation of the water and cycling of the heat exchanger to maintain the temperature in the liner continues.

**Cool-Down.**-The Contractor shall cool the CIPP in accordance with the CIPP manufacturer's recommendations, to a temperature below 100°F before relieving the static head in the liner. Temperatures and curing data shall be monitored and recorded by the Contractor throughout the installation process to ensure that each phase of the process is achieved in accordance with the CIPP manufacturer's recommendations. Cool-down may be accomplished by the introduction of cool water into the liner to replace water being drained from the downstream end. Care shall be taken in the release of the static head such that a vacuum will not be developed that could damage the newly installed liner. The cooled water shall be released to the existing sanitary sewer at a rate that is approved by the Engineer and the City of Ann Arbor's Waste Water Treatment Plant (WWTP) superintendent.

**Finish.**- The cured liner shall be continuous over the entire length of an insertion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes, and delamination. The lining shall be impervious and free of any leakage.

Any defects which will affect the integrity of the liner, or any deficiencies in required strengths or thicknesses, shall be repaired or removed and replaced at the Contractor's expense, in a manner acceptable to the Engineer.

**Sealing Liner at the Ends.**- A seal, consisting of a hydrophilic sealing gasket compatible with the installed CIPP, shall be installed at each manhole/pipe wall interface. The seal shall be a seamless molded tubular design that swells in the presence of water. The seal shall be secured in place by a retaining ring.

**Branch or Service Connections**

After the liner has been cured, the Contractor shall reconnect the existing service connections. This shall generally be done without excavation and in the case of non-man entry pipes, from the interior of the pipeline by means of a television camera and a cutting device that re-establishes them to operational capacity.

Reconnection of services shall begin immediately after curing of the CIPP has been completed. No service shall be interrupted for more than 12 hours unless otherwise approved by the Engineer.

**Post-Rehabilitation Television Inspection.**- The completed sewer shall be television inspected and color videotaped, by the Contractor, in accordance with Detailed Specification "Cleaning and Televising Sewer and Manholes" No payment shall be provided for post rehabilitation television inspection.

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**9 of 10**

**Acceptance Tests.**- The Engineer shall perform Acceptance Testing in accordance with ASTM F1216 (including appendices) and ASTM D5813.

The Contractor shall prepare plate test samples to be cured with the CIPP operation. The Contractor shall capture and prepare sample specimens of the liner for the Acceptance Testing to be performed by the Engineer for each section of sewer lined in accordance with Section 8 of ASTM F1216 for testing flexural strength and delamination. The Contractor shall prepare the samples for shipment to the laboratory, including cutting samples to proper length and width as described in the applicable ASTM test procedures. Samples shall be labeled for date, diameter, section of sewer, and delivered to the Engineer for testing. The cost of the sample postage, shipping, and testing will be paid for by the City. When tested, each sample shall meet the physical properties for flexural modulus and flexural strength used in the design calculations.

Air testing on isolated sections of sewer (minimum of 2 to 3 feet in length) shall be required if post-rehabilitation inspection indicates leaks in the liner. Air testing shall be performed on longer sections or multiple sections of sewer as required to identify the location(s) and full extent of defects. Such testing shall be performed by the Contractor at no additional expense to the project.

CIPP wall thickness shall be verified in accordance with Section 8.6 of ASTM F1216 and using test methods consistent with Section 8.1.2 of ASTM D5813.

Should the test results indicate that the liner fails to meet the required physical properties as specified herein, the work shall be rejected. The Contractor shall remove and replace or repair any defects in the installed liner to the satisfaction of the Engineer at no additional cost to the project. Contract time will continue during the period of time from the receipt of failing test results to the completion of the repairs.

**Clean-Up.**- Upon completion of the installation work and after required testing indicates the linings are acceptable, the Contractor shall restore the project area affected by their operation in accordance with Detailed Specification "Project Clean-Up and Restoration, Special."

**Traffic Control.**- During the entire rehabilitation process, the Contractor shall provide all necessary barricades, signs, traffic regulators (flaggers), minor traffic devices, etc., to maintain both vehicular and pedestrian traffic in accordance with the Michigan Manual of Uniform Traffic Control Devices, as shown on the Drawings, and in accordance with Detailed Specification "Maintenance of Traffic."

**Warranty.**- The materials used for the project shall be certified by the manufacturer for the specified purpose. The Contractor shall warrant the liner material and installation for a period of 2 years. During the Contractor warranty period, any defect which may materially affect the integrity, strength, function, and/or operation of the pipe, shall be repaired at the Contractor's expense in accordance with procedures described in this Detailed Specification, Section d.15, "Liner Repair/Replacement," and as recommended by the manufacturer.

The Contractor shall conduct warranty CCTV inspection of sewers which were lined. This work shall be completed at the Contractor's expense, no sooner than 2 months prior to the expiration of the original warranty period. The televising shall be performed in the presence of the Engineer. Television inspection that is not performed within the presence of the Engineer will not be accepted and shall be performed again at the Contractor's sole expense. Any areas that do not meet the requirements of this Detailed Specification will be repaired or re-lined at no additional cost to the City.

DS- 50

**DETAILED SPECIFICATION  
FOR  
CIPP SEWER LINING**

**10 of 10**

**MEASUREMENT AND PAYMENT**

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

<b><u>Pay Item</u></b>	<b><u>Pay Unit</u></b>
____ inch Diameter CIPP Sewer Lining.....	Lineal Foot

Rehabilitation of sanitary sewer will be paid for at the contract unit price per lineal foot. The contract unit price paid shall be payment in full for all labor, material, and equipment required for rehabilitation of existing sanitary sewers by insertion of a CIPP liner and shall include, but is not limited to; furnishing, transporting, preparing, and installing the structural pipe liner and CIPP end seals; furnishing and installing remote temperature sensing devices used during the liner curing process; reconnecting existing sewers or leads; performing any needed liner repairs; gaining access to work site; removal and replacement of site improvements; post-lining sewer televising; all required warranty work; and all other work and items necessary to complete the work as detailed within this Detailed Specification.

**DETAILED SPECIFICATION  
FOR  
ITEM #224 - REMOVE CONCRETE CURB OR CURB & GUTTER –  
ANY TYPE, MODIFIED  
ITEM #225 - REMOVE CONCRETE SIDEWALK, RAMP AND DRIVES –  
ANY THICKNESS, MODIFIED**

1 of 3

**DESCRIPTION**

This work shall consist of removing concrete curb, gutter, curb and gutter, integral curb, concrete pavement, sidewalk, sidewalk ramps, drive openings, and drive approach pavements as shown on the plans, as detailed in the Specifications, and as directed by the Engineer, in accordance with Section 204 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, except as specified herein, and as directed by the Engineer.

**CONSTRUCTION METHODS**

Curb, gutter, curb and gutter, sidewalk, sidewalk ramps, drive openings, and drives shall be replaced within 24 hours of their removal.

The Contractor shall remove concrete curb, gutter, curb & gutter, integral curb, pavement, sidewalk, sidewalk ramps, drive openings, and drives, all regardless of the type and thickness, and all as shown on the Plans, as detailed in the Specifications, and as directed by the Engineer.

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

The Contractor shall perform full-depth saw cutting at removal limits, including those necessary to construct 2-foot wide MDOT Type M drive openings, and including those necessary to provide for the partial removal of existing drive approaches as shown on the Plans, as directed by the Engineer, and as marked for removal. The Contractor shall cut steel reinforcement bars as directed by the Engineer at all areas of removal. All saw cutting shall be performed under wet conditions to prevent excessive airborne dust. All resulting slurry and debris shall be cleaned up the satisfaction of the Engineer.

The Contractor shall remove, salvage, and deliver to any location within the City limits, or to any City-owned property, and neatly stack/stockpile all bricks, if present, as directed by the Engineer.

The Contractor shall excavate, cut, remove stumps, remove brush, grade, and trim as needed and as directed, and shall import, furnish, fill, place, grade, and compact granular material as needed to: construct new concrete items; to repair or replace existing concrete items; to relocate existing concrete items to their new specified/directed elevations/locations, including all necessary grading at elevation changes of curb and gutter, sidewalks and ramps; and at locations where existing concrete items are to be removed and turf is to be established in its place.

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

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

DS-52

**DETAILED SPECIFICATION  
FOR  
ITEM #228 - REMOVE CONCRETE CURB, GUTTER, OR CURB & GUTTER –  
ANY TYPE, MODIFIED  
ITEM #229 - REMOVE CONCRETE SIDEWALK, RAMP AND DRIVES –  
ANY THICKNESS, MODIFIED**

**2 of 3**

The Contractor shall re-shape, re-grade, and re-compact the existing roadbed materials to the cross-section(s) as indicated on the Plans, as detailed in the Specifications, and as directed by the Engineer.

The Contractor shall use blade graders, maintainers, vibratory rollers, and/or other equipment as necessary, and as directed by the Engineer. The use of each specific piece of equipment is subject to the approval of the Engineer.

The Engineer may direct aggregate base materials to be either removed from or added to the job-site, to properly complete the work. Where the Engineer directs the addition of such materials, they shall be paid for as either the Item of Work: “Aggregate Base”. Where the Engineer directs such materials to be removed, they will not be paid for separately, but shall be included in the appropriate concrete removal item.

Concrete pavement removals shall be performed in accordance with the MDOT 2012 Standard Specifications, Section 603.03.B.1.b, Removing Pavement (Repair), except as modified herein. The item of work “Remove Concrete Pavement (Repair) - Any Thickness” refers to the removal of existing concrete pavement and concrete pavement base within the width of the street (i.e. edge-of-metal to edge-of-metal). Concrete removal outside the edge-of-metal shall be paid for as the appropriate item of either “Remove Concrete Curb or Curb & Gutter - Any Type, Modified”, or “Remove Concrete Sidewalk, Ramp and Drives - Any Thickness, Modified”.

Where existing concrete curb or curb & gutter is to be replaced on a street with a concrete (or brick) base, the Engineer may direct the Contractor to remove a 1-to-2-foot wide, full-depth section of pavement and pavement base from immediately in front of the curb & gutter. As part of this pavement/base removal, the Contractor shall perform additional (double) full-depth saw-cutting along the entire removal limits, and shall take sufficient care so as not to damage and/or disturb any adjacent pavement, pavement base, and/or any other site feature, all as directed by the Engineer. The removals shall be to a sufficient width and depth to allow for the placement and removal of the curb & gutter formwork. After the removal of the formwork, the Contractor shall replace the concrete base to its original thickness and elevation(s).

The Contractor shall remove composite pavement (HMA pavement overlaid on concrete/brick pavement or concrete/brick pavement base) of any thickness(es) as directed by the Engineer. This work shall be paid for as “Remove Concrete Pavement (Repair) - Any Thickness”. The work of removing HMA pavement overlays where concrete/brick pavement or concrete/ brick pavement base is to be removed will not be paid for separately.

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

Removed or excavated materials which are not incorporated into the work shall become the property of the Contractor and shall be immediately removed and properly disposed of off-site. Removed or excavated materials may not be stockpiled overnight on, or adjacent to, the site.

Subbase or subgrade removed without authorization by the Engineer shall be replaced and compacted by the Contractor at the Contractor's expense, with materials specified by the Engineer.

**DETAILED SPECIFICATION  
FOR  
ITEM #228 - REMOVE CONCRETE CURB, GUTTER, OR CURB & GUTTER –  
ANY TYPE, MODIFIED  
ITEM #229 - REMOVE CONCRETE SIDEWALK, RAMP AND DRIVES –  
ANY THICKNESS, MODIFIED**

**3 of 3**

**MEASUREMENT AND PAYMENT**

Sidewalk ramp removal shall be measured and paid for as “Remove Concrete Sidewalk, Ramp and Drives - Any Thickness, Modified”.

Integral curb and gutter that is removed as part of “Remove Concrete Pavement (Repair)” shall be measured and paid for by the square yard, along with the pavement removal quantity.

All sawcutting required for removals shall be included in the appropriate item of work, and will not be paid for separately. Payment for saw cutting to create or modify Type M openings and to allow for the partial removal of existing drives shall be included in the price of the item of work, “Remove Concrete Sidewalk, Ramp and Drives - Any Thickness, Modified”, and will not be paid for separately.

Concrete removal items shall be field measured and paid for at the Contract Unit Prices for their respective Contract (Pay) Items as follows:

<b><u>PAY ITEM</u></b>	<b><u>PAY UNIT</u></b>
Remove Concrete Curb or Curb & Gutter - Any Type, Modified	Lineal Foot
Remove Concrete Sidewalk, Ramp and Drives - Any Thickness , Modified	Square Foot

The unit prices for these items of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

**DETAILED SPECIFICATION  
FOR  
ITEM #230 – AGGREGATE BASE**

**1 of 1**

**DESCRIPTION**

This work consists constructing an aggregate base course on a surface approved by the Engineer. Work will be performed in accordance with Section 302 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, and as directed by the Engineer.

**MATERIALS**

Aggregate Base material will be Dense-Graded Aggregate 21AA in accordance with that specified in Section 902 of the MDOT 2012 Standard Specifications for Construction.

**CONSTRUCTION METHODS**

Aggregate Base will be constructed in accordance with Section 302.03 of the MDOT 2012 Standard Specifications for Construction, and as directed by the Engineer.

**MEASUREMENT AND PAYMENT**

The completed work will be paid for at the contract unit price for the following contract item (pay item).

**PAY ITEM**

Aggregate Base

**PAY UNIT**

Ton

**Aggregate Base** will be measured by the unit ton in accordance with Section 302.04 of the MDOT 2012 Standard Specifications for Construction, and as directed by the Engineer, and will be paid for at the unit price per ton. The unit price for this contract item includes all labor, material, and equipment costs required to perform the work.

**DETAILED SPECIFICATION  
FOR  
ITEM #231 – HAND PATCHING**

**1 of 1**

**DESCRIPTION**

This work consists of filling holes, depressions, joints, cracks, voids, and opens cut areas in HMA pavements. Work will be performed in accordance with Section 501 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, and as directed by the Engineer.

**MATERIALS**

Materials will be in accordance with those specified in Section 501 of the MDOT 2012 Standard Specifications for Construction, and as directed by the Engineer.

**CONSTRUCTION METHODS**

Hand Patching will be constructed in accordance with Section 501 of the MDOT 2012 Standard Specifications for Construction, and as directed by the Engineer.

**MEASUREMENT AND PAYMENT**

The completed work will be paid for at the contract unit price for the following contract item (pay item).

**PAY ITEM**

**PAY UNIT**

Hand Patching

Ton

**Hand Patching** will be measured by the unit ton and will be paid for at the unit price per ton. The unit price for this contract item includes all labor, material, and equipment costs required to place the HMA, by hand or other methods, and compact the material.

**DETAILED SPECIFICATION  
FOR  
ITEM #232 – CONCRETE CURB OR CURB & GUTTER - ANY TYPE  
ITEM #233 – 4” INCH CONCRETE SIDEWALK, MODIFIED  
ITEM #234 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, MODIFIED  
ITEM #235 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, HIGH-EARLY  
ITEM #236 - CONCRETE TYPE M DRIVE OPENING, HIGH-EARLY**

1 of 5

**DESCRIPTION**

This work shall consist of constructing concrete items including curb, gutter, curb and gutter, sidewalks, drive approaches, and drive openings, all of any type and/or dimensions, all of either regular, fiber mesh reinforced, and/or high-early concrete, in accordance with Sections 801, 802, and 803 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, except as specified herein, as shown on the Plans, as described in this Detailed Specification, and as directed by the Engineer.

**The Contractor is responsible to construct all sidewalks, sidewalk ramps, curbs, and all other concrete items within ADAAG compliance.** All sidewalks and curb ramps must be constructed in accordance with MDOT Standard Plan R-28-H or version of standard plan/detail in place at time of the bid letting if different.

In addition, all concrete items of work shall comply with the Detailed Specifications for Concrete Durability and Concrete Placement and Protection.

**MATERIALS**

Concrete mixtures shall be as follows (or as directed by the Engineer), and concrete materials shall meet the requirements specified in the referenced sections of the MDOT Standard Specifications for Construction:

<u>Item Description</u>	<u>Concrete Mixture</u>	<u>MDOT Section</u>
Concrete Curb or Curb & Gutter – Any Type	P1, S2	601, 701
4" Concrete Sidewalk, Modified	P1, P2, S2, S3	601, 701
6" Concrete Sidewalk, Ramp, Drive Approach, Modified	P1, P2, S2, S3	601, 701
6" Concrete Sidewalk, Ramp, Drive Approach, High-Early	P-NC	601
Concrete Type M Drive Opening, High-Early	P-NC	601

**CONSTRUCTION METHODS**

General

Curb, gutter, curb and gutter, sidewalk, sidewalk ramps, drive openings, and drives shall be replaced the same day they are removed.

Concrete items, including sidewalk, non-integral curb/gutter, drives, and structure adjustments shall be completed prior to the placement of pavement.

All subgrade work shall be completed prior to placing concrete items, unless directed or approved by the Engineer.

**FOR**  
**ITEM #232 – CONCRETE CURB OR CURB & GUTTER - ANY TYPE**  
**ITEM #233 – 4” INCH CONCRETE SIDEWALK, MODIFIED**  
**ITEM #234 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, MODIFIED**  
**ITEM #235 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, HIGH-EARLY**  
**ITEM #236 - CONCRETE TYPE M DRIVE OPENING, HIGH-EARLY**

**2 of 5**

The subbase shall be trimmed to final elevation before placing curb. Curb shall not be placed on a pedestal or mound.

The Contractor shall excavate, cut, remove stumps, remove brush, remove pavement, grade, and trim as needed and as directed, and shall import, furnish, fill, place, grade, and compact Class II granular material and 21AA Aggregate material as needed to: construct new concrete items; to repair or replace existing concrete items; to relocate existing concrete items to their new specified/directed elevations/locations, including all necessary grading at elevation changes of curb and gutter, sidewalks and ramps; and at locations where existing concrete items are to be removed and turf is to be established in its place.

At locations where the subgrade, subbase or base becomes either disturbed, saturated or otherwise damaged, and where directed by the Engineer, the Contractor shall remove a minimum 6-inch thick layer of the subgrade, subbase or base, and replace it with approved 21AA Aggregate material, compacted in place.

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

The Contractor is responsible for any damage to concrete items, including but not limited to vandalism; vehicular, pedestrian and/or miscellaneous structural damage; surface texture damage; and rain damage.

The Contractor shall maintain on-site at all times, a sufficient quantity of adequate materials to protect concrete items. The Engineer may suspend or defer concrete placement if rain protection is not available. The Contractor shall not be entitled to any additional compensation due to work suspension or deferral resulting from a lack of adequate rain protection.

The Contractor shall perform full-depth saw cutting at removal limits, including those necessary to construct 2-foot wide Type M drive openings, and including those necessary to provide for the partial removal of existing drive approaches, as shown on the Plans, as directed by the Engineer, and as marked for removal.

The subbase and adjacent concrete shall be sufficiently wet-down with water prior to placing concrete, to prevent water loss from the new concrete, and to form a better bond between old and new concrete. If a cold-joint becomes necessary, the existing concrete surface(s) shall be cleaned with compressed air to expose the aggregate in the concrete.

Where it is necessary to remove existing pavement to provide space for concrete formwork, a sufficient amount of the existing pavement shall be removed to allow for the use of a vibratory plate compactor in front of the curb.

Where concrete items are placed in areas adjacent to existing pavement that is beyond the general resurfacing (pavement removal and/or milling) limits, the adjacent pavement area shall be backfilled and permanently patched within 48-hours of the removal of concrete formwork. The backfill material shall be

**DETAILED SPECIFICATION  
FOR  
ITEM #232 – CONCRETE CURB OR CURB & GUTTER - ANY TYPE  
ITEM #233 – 4” INCH CONCRETE SIDEWALK, MODIFIED  
ITEM #234 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, MODIFIED  
ITEM #235 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, HIGH-EARLY  
ITEM #236 - CONCRETE TYPE M DRIVE OPENING, HIGH-EARLY**

**3 of 5**

MDOT 21AA aggregate compacted in place to 95%, up to the elevation of the proposed bottom of pavement. The pavement patching material(s) shall be as specified and as directed by the Engineer.

Where concrete items are placed adjacent to existing pavement that is within areas scheduled for subsequent pavement removal and/or milling, the adjacent pavement area shall, within 48-hours of the removal of concrete formwork, be backfilled with MDOT 21AA aggregate compacted in place to 95% up to the elevation of the bottom of the adjacent pavement.

Prior to compacting backfill in front of curb and gutter, the back of curb shall be backfilled with approved material and compacted by mechanical means to 95%.

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

Restoration

The Contractor shall restore all disturbed areas to better than or equal to their original condition within two calendar days from the date of concrete placement. This includes the placement and compaction of 2.5 inches of topsoil, followed by the placement of grass seed, followed by the placement of 0.5 inches of topsoil, at all turf restoration locations, and at locations where concrete items are removed and turf is to be established. Restoration shall also include the replacement of any brickwork, decorative stone, or other adjacent materials. All restoration work and materials shall be in accordance with the City of Ann Arbor Standard Specifications for Construction.

Contraction Joints in Sidewalk

Contraction joints shall be placed at 5-foot intervals and may be tooled or sawed. The method of forming joints and spacing shall be approved by the Engineer prior to construction.

Expansion Joints in Sidewalks

¾-inch wide expansion joints shall be placed through concrete sidewalks in line with the extension of all property lines, at all expansion joints in the abutting curb, gutter, and combination curb and gutter, and as directed by the Engineer. Transverse expansion joints shall be placed through the sidewalks at uniform intervals of not more than 300-feet.

½-inch wide expansion joints shall be placed between the sidewalk and back of abutting curb or gutter, at the juncture of two sidewalks, between the sidewalk and buildings and other rigid structures, and as directed by the Engineer.

Expansion Joints in Curb and Gutter

¾-inch wide expansion joints shall be placed at all street returns, at all expansion joints in an abutting pavement, at each side of all driveways (at radius points), elsewhere at 300-foot maximum intervals, and as directed by the Engineer.

**DETAILED SPECIFICATION  
FOR  
ITEM #232 – CONCRETE CURB OR CURB & GUTTER - ANY TYPE  
ITEM #233 – 4” INCH CONCRETE SIDEWALK, MODIFIED  
ITEM #234 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, MODIFIED  
ITEM #235 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, HIGH-EARLY  
ITEM #236 - CONCRETE TYPE M DRIVE OPENING, HIGH-EARLY**

**4 of 5**

Expansion joint material shall extend to the full depth of the joint. After installation, the top shall not be above the concrete nor be more than ½-inch below it. No reinforcing steel shall extend through expansion joints.

Plane of Weakness Joints in Curb and Gutter

Intermediate plane of weakness joints shall be placed to divide the structure into uniform sections, normally 10-feet in length, with a minimum being 8-feet in length, and shall be placed opposite all plane of weakness joints in the abutting concrete base course.

Plane of weakness joints shall be formed by narrow divider plates, which shall extend 3-inches into the exposed surfaces of the curb or curb and gutter. Plates shall be notched, if necessary, to permit the steel reinforcement to be continuous through the joint.

**MEASUREMENT AND PAYMENT**

The work of furnishing and installing mechanical anchors and hook bolts will be measured and paid for by the number of hook bolts installed.

All concrete pavement repair, including that which is installed with integral curb and gutter, will be measured and paid for by the area actually placed in square yards (SY).

No additional compensation will be paid for the construction of concrete items adjacent to existing concrete curb, gutter, pavement, or any other pavement or surface feature(s).

No additional compensation will be paid for the removal of a 6-inch thick layer of the subgrade, subbase or base, and replacement with approved 21AA aggregate material, compacted in place.

A deduction in length for catch basins and inlet castings will be made to measurements of Curb and Gutter.

Curb, gutter, and curb and gutter shall be paid as "Concrete Curb or Curb & Gutter – Any Type, Modified".

Restoration work, including backfilling, compacting, HMA patching adjacent to concrete items, topsoiling and seeding will not be paid for separately, but shall be included in the appropriate associated items of work.

Payment for saw cutting for Type M openings and for partial removal of existing drives shall be included in the price for the item of work, "Remove Concrete Sidewalk, Ramp and Drives - Any Thickness, Modified", and will not be paid for separately.

**DETAILED SPECIFICATION  
FOR  
ITEM #232 – CONCRETE CURB OR CURB & GUTTER - ANY TYPE  
ITEM #233 – 4” INCH CONCRETE SIDEWALK, MODIFIED  
ITEM #234 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, MODIFIED  
ITEM #235 – 6” CONCRETE SIDEWALK, RAMP OR DRIVE APPROACH, HIGH-EARLY  
ITEM #236 - CONCRETE TYPE M DRIVE OPENING, HIGH-EARLY**

**5 of 5**

Payment for the removal of HMA pavement and aggregate base to provide space for concrete formwork and vibratory plate compactor shall be included in the price for the item of work, “Remove Concrete Curb or Curb and Gutter - Any Type, Modified”, and will not be paid for separately.

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

<b><u>PAY ITEMS</u></b>	<b><u>PAY UNIT</u></b>
Concrete Curb or Curb & Gutter – Any Type	Lineal Foot
4” Concrete Sidewalk, Modified	Square Foot
6” Concrete Sidewalk, Ramp, Drive Approach, Modified	Square Foot
6” Concrete Sidewalk, Ramp, Drive Approach, High Early	Square Foot
Concrete Type M Drive Opening, High Early	Lineal Foot

The unit prices for these items of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

**DETAILED SPECIFICATION  
FOR  
ITEM #237 – INLET FILTER, SPECIAL**

**1 of 1**

**DESCRIPTION**

This work shall consist of properly installing curb and gutter inlet filters, at locations indicated on the plans, and as directed by the Engineer, maintaining during the entire construction period, and removing at the end of construction. The curb and gutter inlet filters shall be constructed in accordance with the detailed plans.

**MEASUREMENT AND PAYMENT**

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

Curb and gutter inlet filters will be paid for by the unit "Each". A filter will be paid for when initially installed at a particular structure. Payment will be for installing, maintaining, reinstalling, and, removing the filter at the end of construction and as directed by the Engineer.

**PAY ITEM**

Inlet Filter, Special

**PAY UNIT**

Each

**DETAILED SPECIFICATION  
FOR  
CLEANING AND TELEVISIONING MANHOLES**

**1 of 2**

**DESCRIPTION**

This work shall consist of the cleaning and video inspection of manholes, and providing the required documentation as described herein. All work shall be performed in accordance with the City of Ann Arbor (City) Standard Specifications, except as modified herein, and as directed by the Engineer.

The Contractor is responsible for inspecting all manholes and chambers as indicated on the Drawings in accordance with NASSCO Manhole Assessment and Certification Program (MACP) Level 2 requirements.

**SUBMITTALS**

The cleaning and televising plan shall be submitted to the Engineer for review and approval in accordance with Section 104.02 of the 2012 edition of the Michigan Department of Transportation Standard Specifications for Construction. No work shall begin until all provisions and requirements have been reviewed and accepted by the Engineer.

**CONSTRUCTION**

The Contractor shall carry out their operations in strict accordance with all Occupational Safety and Health Administration (OSHA), Michigan Occupational Safety and Health Administration (MIOSHA), and manufacturer's safety requirements.

**Safety.** – The Contractor shall be solely responsible for safety of all those involved with the work during the performance of all work. The Contractor shall not enter into any sewer segment where hazardous conditions may exist until such time as the source of those conditions is identified and eliminated by the Contractor. The Contractor shall perform all work in accordance with the latest OSHA confined space entry regulations. The Contractor shall coordinate their work with local fire, police, and emergency rescue unit.

The Contractor shall be responsible for any damage to public or private property resulting from their televising and cleaning activities and shall repair or otherwise make whole such damage at no cost to City and owner of the property.

**Manhole and Chamber Cleaning.**- All sanitary manholes shall be cleaned to a degree sufficient to perform the Level 2 MACP manhole inspection and as acceptable to the Engineer. The manhole structures shall be cleaned below their invert elevations with a power vacuum, or other Engineer-approved method, to remove all sediment to allow for the inspection of the bottom of the structures.

The Contractor shall assume the manholes require heavy cleaning with multiple passes to achieve a clean manhole. Manhole cleaning shall be incidental to the sewer cleaning and no additional payment shall be provided.

**Manhole Inspection.**- All sanitary manholes shall be Level 2 MACP inspected. The Level 2 MACP inspections shall gather detailed information to fully document all defects, determine condition of the manhole, and provide specific information needed to recommend corrective action. Level 2 MACP inspection shall use the established defect coding system found in the PACP to the extent possible.

**DETAILED SPECIFICATION  
FOR  
CLEANING AND TELEVISIONING MANHOLES**

**2 of 2**

**Documentation.-** The Contractor shall use the City’s manhole numbering system on all project documentation. The City will provide the Contractor with utility maps or Drawings showing the manhole numbers.

The Contractor shall provide color photographs of all problem areas.

A color DVD and suitable log with voice and/or computer generated description for both pre- and post-rehabilitation inspection shall be made by the Contractor and kept for later reference by the Engineer.

The Contractor shall supply the Engineer with two electronic copies of the entire and final televised program, including PACP database, MACP database, video pipe recordings, reports on two separate flash drives or portable hard drives.

**MEASUREMENT AND PAYMENT**

The completed work shall be paid for at the contract unit price for the following contract pay item:

<b><u>PAY ITEM</u></b>	<b><u>PAY UNIT</u></b>
Level 2 MACP Inspect Manhole.....	Each

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

**DETAILED SPECIFICATION  
FOR  
ITEM # 239 – INTERNAL CHIMNEY SEAL**

**1 of 2**

**DESCRIPTION**

This specification includes the materials and procedures required for the internal sealing of the frame-chimney joint area of brick, block and precast manholes, as required in the contract documents.

A plural component, urethane internal manhole frame-chimney sealant, as specified herein shall be applied in all assigned manholes within the areas included in this project. If excavation is required to repair, rebuild, or replace a manhole; or if manhole linings or coatings are required, the sealant shall be applied after that work has been completed.

Design Requirements – The manhole frame-chimney sealant shall be designed to prevent leakage of water through the above-described portions of the manhole throughout its design life.

The manhole frame-chimney sealant shall remain flexible and bonded to the inside surfaces of the manhole frame and masonry throughout its design life.

**MATERIALS**

Manhole frame-chimney sealant consisting Cretex Easy Seal SG or engineer approved equal of a plural component, spray applied, quick setting urethane material conforming to the following requirements:

**Viscosity**

- a. Part A, 12,000-17,000 cps @ 25C, 20 RPM per ASTM D2393
- b. Part B, 300-510 cps @ 25C, 300 RPM per ASTM D4287

**Weight**

- a. Weight/Gallon Part A, 8.90-9.20 lb/gal per ASTM D1875
- b. Weight/Gallon Part B, 9.60-9.75 lb/gal per ASTM D1875
- c. Weight/Gallon Mixed, 9.25-9.48 lb/gal per ASTM D1875

**Processing**

- a. Mix Ratio By Weight, 100:107
- b. Mix Ratio by Volume, 100:100
- c. Cure Schedule, Hours, 4-5 hours @ 25C

**Gel Time**

Gel Time, Seconds, 0-15 seconds @ 25C, 100 grams per ASTM D3056

**Cured Properties**

- a. Hardness, Shore A, 95-100 per ASTM D2240
- b. Elongation, 379-473% per ASTM D638 or ASTM D412
- c. Tensile Strength, 2616-3216 psi per ASTM D638 or ASTM D412
- d. Peel Strength, 30.8-46.8 PLI (AL to AL) PER ASTM D1876

**CONSTRUCTION METHOD**

All concrete and masonry surfaces must be clean. Grease, organic matter, roots must be completely removed.

**DETAILED SPECIFICATION  
FOR  
ITEM # 239 – INTERNAL CHIMNEY SEAL**

**2 of 2**

The CONTRACTOR shall have the manufacturer's recommended plural cartridge dispensing tool and all other equipment/tools necessary to prepare the surfaces of the manhole and apply the manhole frame-chimney sealant.

All loose and protruding mortar and brick that would prevent proper application of the Seal, shall be removed and the appropriate areas of the manhole frame, chimney and or cone/corbel cleaned and prepared. All areas to be sealed shall be free of surface contaminates, be dry and free of any excessive voids or defects. If an adequate sealing surface does not exist on the masonry, repair materials such as Cementitious grout shall be used to fill voids and profile the chimney area of the manhole.

“CEMENTITIOUS GROUT Cementitious grout shall be a premixed, non metallic, high strength, non-shrink grout which meets the requirements of ASTM C-191 and C-827 as well as CRD-C-588 and C-621. When mixed to a mortar or "plastic" consistency, it shall have minimum one day and 28 day compressive strength of 6,000 and 9,000 psi, respectively.”

All surface preparation shall be completed in strict accordance with the frame-chimney sealant manufacturer's published instructions.

The internal frame-chimney sealant shall be applied to cover 24 vertical inches inside of the entire circumference of the chimney at a minimum thickness of one hundred (100) mils.

**MEASUREMENT AND PAYMENT**

This item shall be paid at the unit price bid per manhole and shall include the cost of furnishing and applying the frame-chimney sealant material along with the surface preparation work needed to facilitate proper application.

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

**PAY ITEM**

**PAY UNIT**

Internal Chimney Seal

Ea.

The unit prices for these items of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specificatio

**DETAILED SPECIFICATION  
FOR  
ITEM # 240 – RECONSTRUCT FLOW CHANNEL**

**1 of 2**

**DESCRIPTION**

This work shall consist of reconstructing flow channel in accordance to what was described in Section 403 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, and as specified herein.

**MATERIALS**

Manhole bases and flow channel shall be formed of QUIKRETE Fast Setting

Concrete Mix PRODUCT NO.1004-50 or Engineer approved equal. The use of PVC SDR-26 to establish and form the flow channel if and when applicable upon Engineer approval.

**METHODS OF CONSTRUCTION**

All concrete and masonry surfaces must be clean. Grease, organic matter, loose bricks, mortar, unsound concrete, roots and other materials must be completely removed.

Thoroughly clean existing flow channel and remove any accumulated sediment, debris, and broken or loose concrete. Properly dispose of all materials removed from the flow channel.

Where the process requires interruption of flow, the Contractor shall provide all necessary diversion or bypass pumping equipment to handle the flow for the duration of the flow channel rehabilitation, including curing times where applicable.

Form and place the concrete mix, meeting City of Ann Arbor Materials Standards, to create new flow channel up to the springline of the flow channel.  
Install concrete flow channel up to springline of pipe with ¾” to 1” gap at pipe ends provided to maintain joint flexibility.

Changes in direction of the sewer and entering branch or branches shall be laid out in smooth curves of the longest possible radius which is targeted to the centerlines of adjoining pipelines. Regardless of differences in entrance and exit elevations, flow channels for all pipes are to be formed to present a smooth transition of flow and shall be subject to the approval of the ENGINEER.

Flow channels for sewer structures shall be finished in accordance with the city details. All flow channels shall be screeded and floated to a smooth, uniform surface and troweled to a hard surface finish.

The flow channel and surface surrounding it, shall be reformed and finished to provide flow channels. All such work shall be done with the proper tools and by careful workmen competent to do such work.

All necessary adjustments required to accommodate encountered field conditions for reconstructed

**DETAILED SPECIFICATION  
FOR  
ITEM # 240 – RECONSTRUCT FLOW CHANNEL**

**2 of 2**

flow channel including all necessary dewatering shall be included in the cost of the flow channel reconstruction and will not be paid for separately.

**MEASUREMENT AND PAYMENT**

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

**PAY ITEM**

**PAY UNIT**

Reconstruct flow channel

Ea

Payment for this item of work shall include all labor, materials and equipment needed to accomplish the work, regardless of depth or type of structure.

**DETAILED SPECIFICATION  
FOR  
ITEM #241 - MANHOLE CEMENTITIOUS LINER**

**1 of 3**

**DESCRIPTION**

Sanitary sewer manhole cementitious liner with spray applied or centrifugally cast light-weight structural reinforced concrete.

The Cementitious Liner shall be applied on the manhole base, bench, walls, corbel/cone, and chimney of brick, block, or precast manholes.

**INSTALLER EXPERIENCE AND QUALIFICATIONS**

Contractor must demonstrate a minimum of 3-years of recent experience.

**SUBMITTALS**

Submit to the Owner for review and acceptance at least 14-days prior to starting manhole cementation for the following:

- Manufacturers' Certificate of Compliance certifying compliance with the applicable Specifications and Standards. The certifications shall list all materials furnished under this Section.
- Certified copies of factory tests required by the applicable Standards, the Manufacturer, and this Section.
- Manufacturer's handling, storage, and installation instructions and procedures.

**MATERIALS**

- The materials used shall be designed, manufactured, and intended for sewer manhole rehabilitation and the specific application in which they are used.
- 
- The materials shall have a proven history of performance in sewer manhole rehabilitation. The materials shall be delivered to the job site in original unopened packages clearly labeled with the manufacturer's identification and printed instructions.
- 
- All materials shall be stored and handled in accordance with recommendations of the manufacturer.
- 
- All materials shall be mixed and applied in accordance with the manufacturer's written instructions.
- 
- The material applied to the surface of the manhole shall be a cementitious blend
- of calcium aluminate cement and manufactured calcium aluminate aggregates
- for constructing a liner that is impervious to the flow of water, is resistant to
- sulfide attack, and restores structural integrity to existing manhole walls.
- 
- A monolithic liner shall be formed which covers all interior manhole surfaces and
- shall have the following minimum requirements at 28-days:

**DETAILED SPECIFICATION  
FOR  
ITEM #241 - MANHOLE CEMENTITIOUS LINER**

**2 of 3**

- |   |                |
|---|----------------|
| • Compressive Strength (ASTM C-579B)        | 3,000-psi      |
| • Tensile Strength (ASTM C-496)             | 300-psi        |
| • Flexural Strength (ASTM C-293) (Modified) | 600-psi        |
| • Shrinkage (ASTM C-596)                    | 0% at 90% R.H. |
| • Bond (ASTM C-321)                         | 130-psi        |
| •   |                |

**PREPARATORY PROCEDURES**

Contractor will perform preliminary cleaning of the structure with high-pressure water-blasting at a minimum of 4000psi and 4gpm to obtain the desired concrete surface profile (CSP) of 3 or greater. If the desired CSP is not achieved by high-pressure water-blasting other methods of obtaining the surface profile such as abrasive blasting and acid etching shall be used.

The Contractor shall remove all the existing manhole steps. The metal portion of all steps will be removed to within ½” of the manhole interior wall surface. The remaining protruding metal portion of the step shall be covered with a cementitious material to provide a smooth surface on and around the protrusion for the liner to bond.

All open joints, voids, holes, cracks, and missing bricks larger than 3 inches in diameter or equivalent shall be patched with a cementitious material to provide a smooth surface for the cementitious liner to bond.

All roots, loose, cracked or disintegrated material shall be removed from the area to be patched exposing a sound substrate. The cementitious patch material shall be allowed to cure according to the manufacturer’s specifications before continuing with the cementitious Liner installation process.

Bench shall be sloped so that water will flow back into channel.

When the channel is required to be lined the Contractor shall plug the inlet pipe, inspect for infiltration leaks around the inlet and outlet pipes and in the channel. All leaks present shall be stopped by the use of chemical grout injection and/or by the use of fast-setting cement.

The final prepared surface shall have a concrete surface profile of 3 or greater and have a smooth uniform appearance.

**FINISHED LINER**

The finished Cementitious Liner shall be continuous over the entire length of the structure from the cover seat to the invert, including the channel. Liner shall be bonded to the structure, as required by design, and in such a way as to not allow any water to flow behind the liner and enter back into the waste stream.

The liner shall be visually inspect from inside the structure for any defects that may affect performance of the liner. All defects shall be fixed to conform with these specifications.

**DETAILED SPECIFICATION  
FOR  
ITEM #241 - MANHOLE CEMENTITIOUS LINER**

**3 of 3**

**CLEANUP**

Clean up the entire project area after the work is completed and all testing accepted. Remove and dispose of all excess material and debris not incorporated into the permanent installation.

**MAINTENANCE**

Any defects shall be repaired in accordance with the manufacturers' recommendations on an as needed basis.

**WARRANTY**

Manufacturer and Installer of the Liner system shall provide a 10 year warranty on materials and labor.

**MEASUREMENT AND PAYMENT**

Cementitious Liner shall be measured as units, complete in place. The completed work as measured shall be paid at the contract unit price for the following contract items (pay items):

**PAY ITEM**

**PAY UNIT**

Cementitious Liner

Vf

Payment for this item of work shall include all labor, materials and equipment needed to accomplish the work, regardless of depth or type of structure.

**DETAILED SPECIFICATION  
FOR  
ITEM #242 – CLEAN-UP & RESTORATION, SPECIAL**

**1 of 2**

**DESCRIPTION**

This item of work shall conform to Division IX, Section II, Item No. 891, Clean-Up & Restoration of the Public Services Area Standard Specifications, except as specified herein.

This work shall include the removal of all surplus materials from the site including; but not limited to; tools, dirt, rubbish, construction debris, and excess excavated material. This work shall also include the restoration of all existing lawn areas, road surfaces, culverts, drives, and sidewalks disturbed by the work. This work includes placing topsoil, fertilizer, seeding, and furnishing and installing mulch blankets on all disturbed areas as approved by the Engineer. Mulch blankets are required on all seeded areas.

**MATERIALS**

The materials shall meet the requirements specified in the MDOT 2012 Standard Specifications as designated, as specified herein, and as approved by the Engineer:

- Seed shall be THM seed mixture as described in Table 8 16-1.
- Fertilizers shall be a Class A. The percentages by weight shall be 12- 12- 12, or as approved by the Engineer.
- Water used shall be obtained from fresh water sources and shall be free from injurious chemicals and other toxic substances.
- Mulch blankets shall be High Velocity Straw Mulch Blankets as specified in MDOT section 917.

**MAINTENANCE AND ACCEPTANCE**

It is the responsibility of the Contractor to establish a dense lawn of permanent grasses, free from mounds and depressions prior to final acceptance and payment of this project. Any portion of a seeded area that fails to show a uniform germination shall be reseeded. Such reseeding shall be at the Contractor's expense and shall continue until a dense lawn is established. The Contractor is responsible for restoring all areas disturbed by his construction.

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

Lawns shall be protected and maintained by watering, mowing, and reseeding as necessary, until the period of time when the final acceptance and payment is made by the Engineer for the project, to establish a uniform, weed-free, stand of the specified grasses. Maintenance includes furnishing and installing additional topsoil, and reseeding all as may be required to correct all settlement and erosion until the date of final acceptance.

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

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

Cleanup and Restoration must be performed upon the completion of each sub-phase of work (as described in the Detailed Specification for Project Schedule), and not as one single operation at the completion of the entire project.

**DETAILED SPECIFICATION  
FOR  
ITEM #242 – CLEAN-UP & RESTORATION, SPECIAL**

**2 of 2**

**MEASUREMENT AND PAYMENT**

Measurement and payment for this item of work shall conform to Division IX, Section 2, Item No. 891, Clean-Up & Restoration of the Public Services Area Standard Specifications except as modified herein.

The completed work for “Clean-Up & Restoration, Special” will be paid for on a lump sum (LS) basis. 80% of said lump sum shall be paid upon completion and approval of the site by the Engineer. By May 31<sup>st</sup> of the year following the completion of the project, the Engineer will inspect the seeded turf to ensure that the end product is well established; weed free, and in a growing and vibrant condition. If the Engineer determines that the restored areas meet the project requirements, the remaining 20% of the lump sum will be paid. If the Engineer determines that the restored areas do not meet the project requirements, the Contractor will continue with any and all measures necessary to meet the project requirements. All costs associated with the remedial measures shall be borne entirely by the Contractor.

**Pay Item**

Clean-Up & Restoration, Special

**Pay Unit**

Lump Sum

**DETAILED SPECIFICATION  
FOR  
CERTIFIED PAYROLL COMPLIANCE AND REPORTING**

**1 of 2**

**DESCRIPTION**

This specification covers all administrative requirements, payroll reporting procedures to be followed by Contractors performing work on City-sponsored public improvements projects, and all other miscellaneous and incidental costs associated with complying with the applicable sections of the City of Ann Arbor Code of Ordinances with regard to payment of prevailing wages and its Prevailing Wage Compliance policy.

This specification is not intended to include the actual labor costs associated with the payment of prevailing wages as required. Those costs should be properly incorporated in all other items of work bid.

**GENERAL**

The Contractor is expected to comply with all applicable sections of Federal and State prevailing wage laws, duly promulgated regulations, the City of Ann Arbor Code of Ordinances, and its Prevailing Wage Compliance Policy as defined within the contract documents. The Contractor shall provide the required certified payrolls, city-required declarations, and reports requested elsewhere in the contract documents within the timeline(s) stipulated therein.

The Contractor shall also provide corrected copies of any submitted documents that are found to contain errors, omissions, inconsistencies, or other defects that render the report invalid. The corrected copies shall be provided when requested by the Supervising Professional.

The Contractor shall also attend any required meetings as needed to fully discuss and ensure compliance with the contract requirements regarding prevailing wage compliance. The Contractor shall require all employees engaged in on-site work to participate in, provide the requested information to the extent practicable, and cooperate in the interview process. The City of Ann Arbor will provide the needed language interpreters in order to perform wage rate interviews or other field investigations as needed.

Certified Payrolls may be submitted on City-provided forms or forms used by the Contractor, as long as the Contractor's forms contain all required payroll information. If the Contractor elects to provide their own forms, the forms shall be approved by the Supervising Professional prior to the beginning of on-site work.

**UNBALANCED BIDDING**

The City of Ann Arbor will examine the submitted cost for this item of work prior to contract award. If the City determines, in its sole discretion, that the costs bid by the Contractor for complying with the contract requirements are not reasonable, accurately reported, or may contain discrepancies, the City reserves the right to request additional documentation that fully supports and justifies the price as bid. Should the submitted information not be determined to be reasonable or justify the costs, the City reserves the right to pursue award of the contract to the second low bidder without penalty or prejudice to any other remedies that it may have or may elect to exercise with respect to the original low-bidder.

The Contract Completion date will not be extended as a result of the City's investigation of the as-bid amount for this item of work, even if the anticipated contract award date must be adjusted. The only exception will be if the Contractor adequately demonstrates that their costs were appropriate and justifiable. If so, the City will adjust the contract completion date by the number of calendar days commensurate with the length of the investigation, if the published Notice to Proceed date of the work cannot be met. The contract unit prices for all other items of work will not be adjusted regardless of an adjustment of the contract completion date being made.

**DETAILED SPECIFICATION  
FOR  
CERTIFIED PAYROLL COMPLIANCE AND REPORTING**

2 of 2

**MEASUREMENT AND PAYMENT**

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

**PAY ITEM**

**PAY UNIT**

Certified Payroll Compliance and Reporting

Lump Sum

The unit price for this item of work shall include all supervisory, accounting, administrative, and equipment costs needed to monitor and perform all work related to maintaining compliance with the tasks specified in this Detailed Specification, the City of Ann Arbor Code of Ordinances, its Prevailing Wage Compliance policy and the applicable Federal and State laws.

Payment for this work will be made with each progress payment, on a pro-rata basis, based on the percentage of construction completed. When all of the work of this contract has been completed, the measurement of this item shall be 1.0 times the Lump Sum bid amount. This amount will not be increased for any reason, including extensions of time, extra work, and/or adjustments to existing items of work.

**DETAILED SPECIFICATIONS  
FOR  
GENERAL CONSTRUCTION NOTES**

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

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

**DETAILED SPECIFICATION  
FOR  
DISPOSING OF EXCAVATED MATERIAL**

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

---

**DETAILED SPECIFICATION  
FOR  
PROTECTION OF UTILITIES**

Damages to utilities by the Contractor's operations shall be repaired by the utility owner at the Contractor's expense. Delays to the work due to utility repairs are the sole responsibility of the Contractor.

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

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

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

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

---

**DETAILED SPECIFICATION  
FOR  
SOIL EROSION AND SEDIMENTATION CONTROL MEASURES**

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

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

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

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

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

---

**DETAILED SPECIFICATION  
FOR  
MATERIALS AND SUPPLIES CERTIFICATIONS**

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

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

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

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

# APPENDIX

**CITY OF ANN ARBOR  
PREVAILING WAGE DECLARATION OF COMPLIANCE**

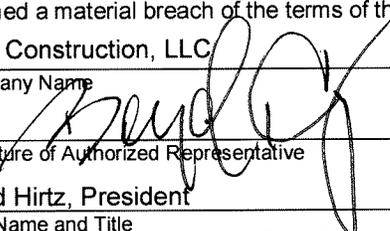
The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. Where the contract and the Ann Arbor City Code are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

- (a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,
- (b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall have been deemed a material breach of the terms of the contract and grounds for termination of same by the City.

SAK Construction, LLC  
Company Name  
  
Signature of Authorized Representative  
01/31/22  
Date  
Boyd Hirtz, President  
Print Name and Title  
864 Hoff Road, O'Fallon, MO 63366  
Address, City, State, Zip  
636.385.1000 / bidcippc@sakcon.com  
Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

**CITY OF ANN ARBOR**  
**LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE**

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

*Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here  No. of employees \_\_\_*

The Contractor or Grantee agrees:

- (a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$14.05/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$15.66/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

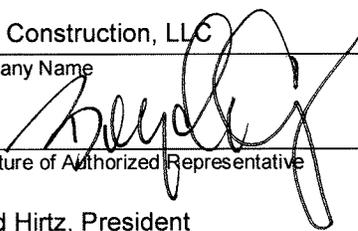
**Check the applicable box below which applies to your workforce**

- Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits
- Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

SAK Construction, LLC  
Company Name

  
Signature of Authorized Representative

01/31/22  
Date

Boyd Hirtz, President  
Print Name and Title

864 Hoff Road  
Street Address

O'Fallon, MO 63366  
City, State, Zip

636.385.1000 / bidcipcc@sakcon.com  
Phone/Email address

**CITY OF ANN ARBOR  
LIVING WAGE ORDINANCE**

**RATE EFFECTIVE APRIL 30, 2021 - ENDING APRIL 29, 2022**

**\$14.05 per hour**

If the employer provides health care benefits\*

**\$15.66 per hour**

If the employer does **NOT** provide health care benefits\*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

## **ENFORCEMENT**

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

\* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

**The Law Requires Employers to Display This Poster Where Employees Can Readily See It.**

**For Additional Information or to File a Complaint contact  
Colin Spencer at 734/794-6500 or [cspencer@a2gov.org](mailto:cspencer@a2gov.org)**



**Vendor Conflict of Interest Disclosure Form**

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

<b>Conflict of Interest Disclosure*</b>	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <input type="checkbox"/> Interest in vendor's company <input type="checkbox"/> Other (please describe in box below)

\*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

<b>I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:</b>		
SAK Construction, LLC	636.385.1000	
<b>Vendor Name</b>	<b>Vendor Phone Number</b>	
	01/31/22	Boyd Hirtz, President
<b>Signature of Vendor Authorized Representative</b>	<b>Date</b>	<b>Printed Name of Vendor Authorized Representative</b>

**CITY OF ANN ARBOR  
DECLARATION OF COMPLIANCE**

Non-Discrimination Ordinance

The “non discrimination by city contractors” provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

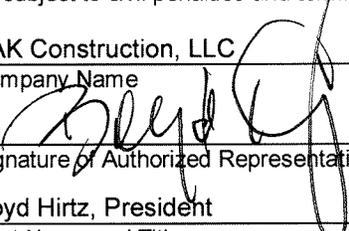
In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor’s Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor’s Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

SAK Construction, LLC  
Company Name

  
Signature of Authorized Representative

01/31/22  
Date

Boyd Hirtz, President  
Print Name and Title

864 Hoff Road, O'Fallon, MO 63366  
Address, City, State, Zip

636.385.1000 / bidcipcc@sakcon.com  
Phone/Email Address

**Questions about the Notice or the City Administrative Policy, Please contact:**  
Procurement Office of the City of Ann Arbor  
(734) 794-6500

## CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below.  
You can review the entire ordinance at [www.a2gov.org/humanrights](http://www.a2gov.org/humanrights).

**Intent:** It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

**Discriminatory Employment Practices:** No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

**Discriminatory Effects:** No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

**Nondiscrimination by City Contractors:** All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

**Complaint Procedure:** If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at [www.a2gov.org/humanrights](http://www.a2gov.org/humanrights). Then submit it to the Human Rights Commission by e-mail ([hrc@a2gov.org](mailto:hrc@a2gov.org)), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk's Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at [hrc@a2gov.org](mailto:hrc@a2gov.org).

**Private Actions For Damages or Injunctive Relief:** To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

THIS IS AN OFFICIAL GOVERNMENT NOTICE AND  
MUST BE DISPLAYED WHERE EMPLOYEES CAN READILY SEE IT.



