

BID DOCUMENTS
FOR
2024 Sewer Lining Project



CITY OF OWOSSO
301 W. MAIN STREET
OWOSSO, MICHIGAN 48867

February 5, 2024

**NOTICE TO BIDDERS
2024 SEWER LINING PROJECT
FOR THE CITY OF OWOSSO, MICHIGAN**

Sealed proposals will be received by the city of Owosso for the

2024 SEWER LINING PROJECT

and should be addressed to:

Bid Coordinator
City of Owosso
301 W. Main Street
Owosso, Michigan 48867

Major items include sanitary sewer and storm sewer lining on various streets within the city of Owosso.

Bids will be accepted until **3:00 p.m. Tuesday, March 5, 2024** for the **2024 Sewer Lining Project** at which time bids will be publicly opened and read aloud. This bid will be considered "All or None".

"All or None" means that bidders are required to submit pricing for all items requested. Any proposal received that does not meet this requirement will be disqualified. If said bid is not listed as "All or None" the City reserves the right to split said bid to our best benefit.

All bids must be in writing and must contain an original signature by an authorized officer of the firm. Electronic bids (i.e., telephonic, fax, email, etc.) are **NOT** acceptable.

All bids must be accompanied by a certified Cashier's Check or Bid Bond for a sum of not less than 5% of the total bid and shall be made payable to the city of Owosso. This amount shall be forfeited in the case of failure on the part of the successful bidder to sign a contract and furnish satisfactory bonds as required within ten (10) consecutive calendar days after the acceptance of the bid by the city of Owosso.

The bidder agrees that if the city accepts their proposal, the bidder will, within 10 consecutive calendar days after receiving notice of this acceptance, enter into a contract to furnish all labor, equipment and tools necessary to execute the work at the unit prices named in the bid proposal and will furnish the surety for performance, for one hundred percent (100%) of this bid, which shall be accepted and approved by the city.

All bids shall clearly contain on the outside of the **sealed** envelope in which they are submitted:

2024 SEWER LINING PROJECT

Hard copies of the proposal, contract forms and specifications are on file and may be obtained for a fee in accordance with the city's FOIA Policy at the office of the Bid Coordinator, City Hall, 301 West Main Street, Owosso, Michigan 48867. Bid documents are available at no charge on our website at www.ci.owosso.mi.us or on the MITN website at www.mitn.info.

The city reserves the right to accept any proposal; or to reject any proposal; to waive irregularities in a proposal; or to negotiate if it appears to be in the best interest of the city of Owosso.

Work can begin no earlier than 10 days after award and all work is to be completed by June 28, 2024.

INQUIRIES/ADDENDUMS

Addendums will be available on the city's website at www.ci.owosso.mi.us and on the MITN website at www.mitn.info.

All inquiries regarding this bid request must be submitted to Clayton Wehner, P.E. and received at least seven (7) calendar days prior to the submission and shall be received in, and responded to, in writing, or via FAX at 989-723-8854 or by e-mail to: clayton.wehner@ci.owosso.mi.us , Call 989-725-0551 to arrange a field inspection.

INSTRUCTIONS TO BIDDERS

1. Each proposal must be signed by the bidder with his usual signature. Bids by partnerships should be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and title of the person signing. Proposals by corporations must be signed with the name of the corporation, followed by the signature and designation of the president, vice-president or person authorized to bind it in the matter. **Any paperwork not filled out properly or signed will cause the bid to be considered non-responsive and shall be rejected by the city.**
2. Proposals, to receive consideration, must be received prior to the specified time of opening and reading as designated in the invitation.
3. Bidders are requested to use the proposal form furnished by the city when submitting their proposals. Envelopes must be **sealed** when submitted and clearly marked on the outside indicating the name of the bid.
4. Proposals having erasures or corrections thereon may be rejected unless explained or noted over the signature of the bidder.
5. References in the specifications or description of materials, supplies, equipment, or services to a particular trade name, manufacturer's catalog, or model number are made for descriptive purposes to guide the bidder in interpreting the type of materials or supplies, equipment, or nature of the work desired. They should not be construed as excluding proposals on equivalent types of materials, supplies, and equipment or for performing the work in a manner other than specified. However, the bidders' attention is called to General Condition seven (7).
6. Proposals should be mailed or delivered to: Bid Coordinator's Office, City Hall, 301 W. Main Street, Owosso, MI 48867.
7. Special conditions included in this inquiry shall take precedence over any conditions listed under General Conditions or Instructions to Bidders.
8. Insurance coverage – The winning bidder, prior to execution of the contract, shall file with the city copies of completed certificates of insurance naming the city of Owosso as an additional insured party, as evidence that the contractor carries adequate insurance satisfactory to the city.
9. The city of Owosso has a local preference policy for the purchase of goods and services. The policy in part states: *A business located within the city limits and paying real or personal property taxes to the city of Owosso will be granted a six percent (6%) bid advantage or \$2,500, whichever is less, over a business located outside Shiawassee County. A business located outside the city limits but within Shiawassee County and paying property taxes to the county will be granted a three percent (3%) bid advantage or \$2,500, whichever is less, over a business located outside Shiawassee County. The preference also applies to subcontractors performing twenty-five percent (25%) or more of the work of a general contract.*
10. **The following items must be included with the bid response:**
 - a. **Vendor Proposal**
 - b. **Signature Page & Legal Status/ Acknowledgement of Addendum(s)**
 - c. **Local Preference Affidavit**
 - d. **W-9 Request for Taxpayer ID No. and Certification**

BID Proposal

2024 SEWER LINING PROJECT

TO: THE CITY OF OWOSSO (HEREINAFTER CALLED THE “CITY”)

Bidder must provide pricing for each item listed. If additional pricing elements are being offered by the bidder, they are to be listed under “other services/items offered.”

The undersigned, having examined the bid proposal forms and specifications, does hereby offer to **2024 SEWER LINING PROJECT** to be completed by **June 28, 2024** listed below at the following prices to wit:

Base Bid (Items 1-9):

Item	Description	Approx. Quantity	Unit	Unit Price	Total Price
1	Mobilization, Max \$23,900	1	LSUM		
2	Maintenance of Traffic	1	LSUM		
3	CIPP Lining, Sanitary Sewer, 10 inch	312	Ft		
4	CIPP Lining, Sanitary Sewer, 18 inch	363	Ft		
5	CIPP Lining, Sanitary Sewer, 8 inch	293	Ft		
6	CIPP Lining, Storm Sewer, 15 inch	1227	Ft		
7	CIPP Lining, 10 inch, Spot Liner	1	Ea		
8	CIPP Lining, 8 inch, Top Hat Liner	1	Ea		
9	Heavy Cleaning	10	Hr		

Bidder's Initial _____

BID TOTAL (ITEMS 1-9)

(use words)

\$

(use figures)

VARIANCE FROM SPECIFICATIONS: If the bidder is unable to comply with the specifications as outlined, the bidder shall clearly note these variations from the specifications. The bidder may also propose additions to these specifications for the city to consider, but the costs associated with these additions shall be stated separately.

If the work is not complete on or before the date set for completion or any extension, the Contractor shall pay the city liquidated damages of **\$800.00** a calendar day until the work is satisfactorily completed. Liquidated damages for delay may be deducted from payments due the contractor or may be collected from the Contractor or the Contractor's surety.

The undersigned agrees that if the city accepts this proposal, Contractor will, within 10 consecutive calendar days after receiving notice of this acceptance, enter into a contract to furnish all labor, equipment and tools necessary to execute the work at the unit prices named in the bid proposal. Contractor will furnish the surety for performance, for 100% of this bid, which shall be accepted and approved by the city.

The undersigned agrees that if the city accepts this proposal, Contractor will start this project no earlier than 10 days after award and will substantially complete the entire work under this contract by **June 28, 2024**. This schedule may be extended for rain days or cold weather for calendar days after **June 28, 2024**, only as approved by the city of Owosso.

On behalf of _____, I hereby submit this proposal for **2024 SEWER LINING PROJECT** for your consideration. The undersigned acknowledges that this proposal is subject to the General Conditions and the General Specifications included in the contract documents. In submitting this proposal, it is understood that the right is reserved by the CITY to reject any and all proposals, and waive any irregularities in the bidding process. The CITY may award this contract based on any combination of the total bid and/or alternates.

Bid proposal by (Name of Firm):

Please check the appropriate box and USE CORRECT LEGAL NAME.

Corporation

State of Incorporation:

Partnership

List of names:

DBA

State full name:

Other

Explain:

Signature of Bidder:

Title:

Signature of Bidder:

Title:

Address:

City, Zip:

Telephone:

Email Address:

Signed this

Day of

2024

Bidder acknowledges receipt of the following Addenda:

ADDENDUM NO: BIDDER'S INITIALS:

GENERAL CONDITIONS

1. LOCAL PREFERENCE POLICY

The city of Owosso has a local preference policy for the purchase of goods and services. The policy in part states: *A business located within the city limits and paying real or personal property taxes to the city of Owosso will be granted a 6% bid advantage or \$2,500, whichever is less, over a business located outside Shiawassee County. A business located outside the city limits but within Shiawassee County and paying property taxes to the county will be granted a 3% bid advantage or \$2,500, whichever is less, over a business located outside Shiawassee County. The preference also applies to subcontractors performing 25% or more of the work of a general contract.*

2. BID ACCEPTANCE

The city reserves the right to reject any or all proposals. Unless otherwise specified, the city reserves the right to accept any item in the proposal. In case of error in extending the total amount of the bid, the unit prices shall govern. The city objects to any additional terms stated in any documents submitted by the contractor. Performance pursuant to our Purchase Order/Equipment Agreement constitutes a course of conduct consisting of Contractor's Agreement to the terms of our Purchase Order/Equipment Agreement.

3. PAYMENT

Unless otherwise stated by the bidder, time, concerning discount offered, will be computed from date of delivery and acceptance at destination or from date correct bill or claim voucher properly certified by the contractor is received. When so stated herein, partial payments, based on a certified approved estimate by the city of materials, supplies or equipment delivered or work done, may be made upon presentation of a properly-executed claim voucher. The final payment will be made by the city when materials, supplies, equipment or the work done have been fully delivered or completed to the full satisfaction of the city.

4. BID DEFAULT

In case of default by the bidder or contractor, the city of Owosso may procure the articles or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.

5. UNIT PRICES

Prices should be stated in units of quantity specified.

6. QUOTED PRICES

Unless otherwise stated by the bidder, prices quoted will be considered as being based on delivery to a designated destination and to include all charges for packing, crating, containers, shipping, etc., and being in strict accordance with specifications and standards as shown.

7. SUBSTITUTIONS

Wherever a reference is made in the specifications or description of the materials, supplies, equipment, or services required, to a particular trade name, manufacturer's catalog, or model number, the bidder, if awarded a contract or order, will be required to furnish the particular item referred to in strict accordance with the specifications or description unless a departure or substitution is clearly noted and described in the proposal.

8. HOLD CITY HARMLESS

The bidder, if awarded an order or contract, agrees to protect, defend, and save the city harmless against any demand for payment for the use of any patented material, process, article, or device that may enter into the manufacture, construction, or form a part of the work covered by either order or contract. Bidder further agrees to indemnify and save the city harmless from suits or action of every nature and description

brought against it, for or on account of any injuries or damages received or sustained by any party or parties, by or from any of the acts of the contractor, his employees, subcontractors, or agents.

9. COMPETITIVE BIDDING STATUTES

The laws of the state of Michigan, the charter and ordinances of the city of Owosso, as far as they apply to the laws of competitive bidding, contracts and purchases, are made a part hereof.

10. SAMPLES

Samples, when requested, must be furnished free of expense to the city and, if not destroyed, will upon request be returned at the bidder' expense.

11. BONDS

A certified check or bid bond may be required, payable to the City of Owosso. If so required in the bid documents, a performance bond and labor and material bond in the amounts stated in the bid documents, shall be on file with the city before work commences. The city will determine the amount and sufficiency of the sureties.

12. PROPOSAL GUARANTEE

All checks or bid bonds, except those of the three lowest bidders, will be returned when the bids have been opened and tabulated. The certified checks or bid bonds of the three lowest bidders will be held until the contract documents have been signed, after which remaining certified checks or bid bonds will be returned to the respective bidders.

13. BIDDERS

The city may demand that the contractor file a sworn experience and financial statement setting forth the financial resources, adequacy of plant and equipment, organization, experience and other pertinent and material facts as may be desirable.

14. INSURANCE AND HOLD HARMLESS

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

Contractor shall not commence work under this contract until they have obtained the insurance required under this paragraph, and shall keep such insurance in force during the entire life of this contract. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan and acceptable to the City of Owosso. The requirements below should not be interpreted to limit the liability of Contractor. All deductibles and SIR's are the responsibility of Contractor. Contractor shall procure and maintain the following insurance coverage:

- a. Worker's Compensation Insurance including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- b. Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors

Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included. (E) Explosion, Collapse, and Underground (XCU) coverage, if applicable. Limits may be obtained by the use of primary and excess/umbrella liability policies.

- c. Automobile Liability including Michigan No-Fault Coverages, with limits of liability not less than \$1,000,000 per occurrence, combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- d. Owners' and Contractor Protective Liability: The Contractor shall procure and maintain during the life of this contract, a separate Owners' and Contractor's Protective Liability Policy with limits of liability not less than \$1,000,000 per occurrence and aggregate for Personal Injury, Bodily Injury, and Property Damage. The City of Owosso shall be the "Named Insured" on said coverage.
- e. Additional Insured: Commercial General Liability and Automobile Liability as described above shall include an endorsement stating the City of Owosso shall be listed as additional insured. It is understood and agreed by naming the City of Owosso as additional insured, coverage afforded is considered to be primary and any other insurance the City of Owosso may have in effect shall be considered secondary and/or excess.
- f. Cancellation Notice: All policies, as described above, shall include an endorsement stating that it is understood and agreed Thirty (30) days, Ten (10) days for non-payment of premium, Advance Written Notice of Cancellation, shall be sent to: **(The City of Owosso, Debbie Hebert, Insurance Coordinator, 301 W. Main Street, Owosso, MI 48867).**
- g. Proof of Insurance Coverage: Contractor shall provide the City of Owosso at the time that the contracts are returned by him/her for execution, a Certificate of Insurance as well as the required endorsements. In lieu of required endorsements, if applicable, a copy of the policy sections where coverage is provided for additional insured and cancellation notice would be acceptable.

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

15. PROTECTION OF LAND MONUMENTS AND PROPERTY STAKES

Land monuments or stakes marking property corners shall not be moved or otherwise disturbed except as directed by the city. If any land monuments or lot stakes are moved or disturbed by the contractor, the cost of replacing each land monument or lot stake so moved or disturbed shall be deducted from any money due the contractor, as payment to the city for the cost of replacing said land monument or lot stakes.

16. CONTRACTOR'S RESPONSIBILITY FOR WORK

The contractor shall be responsible for any damages that the work may sustain before its acceptance, and shall rebuild, repair, restore and make good, at its own expense, all injuries and damages to any portion of the work by the action of the elements or from any cause whatsoever before its acceptance. Neither the final payment nor any provision in the contract documents shall relieve the contractor of the responsibility for negligence or faulty materials or workmanship within the extent and period provided by law, and, upon written notice, the contractor shall remove any defects due therefrom and pay for any damaged due to other work resulting therefrom, which shall appear within one year after the date of completion and acceptance.

17. PAYMENT

At monthly intervals commencing after construction has been started, the city will make partial payment to the contractor based on a duly-certified estimate prepared by the city of the work done by the contractor during the preceding four-week period. Each estimate will be submitted to the city council for approval on either the first or third Monday of each month. The city will retain ten percent (10%) of the amount of each such estimate until final completion and acceptance of all work covered by this contract. Before the contractor shall demand final estimates or payment, contractor will furnish to the city, supported by sworn statements, satisfactory evidence that all persons that have supplied labor, materials, or equipment for the work embraced under this contract have been fully paid for the same; and that, in case such evidence be not furnished as aforesaid, such sums as the city may deem necessary to meet the lawful claims of such persons may be retained by the city from any monies that may be due or become due to the contractor under this contract until such liabilities shall be fully discharged and the evidence thereof be furnished to the city.

18. CITY'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

Besides the payment to be retained by the city under the preceding provisions of these general conditions, the city may withhold a sufficient amount of any payment otherwise due to the contractor to cover a) payments earned or due for just claims for furnish labor or materials on the project under this contract, b) for defective work not remedied and c) for failure of the contractor to make proper payments to subcontractors. The city shall disburse and shall have the right to act as agent for the contractor in disbursing such funds as have been previously withheld pursuant to this paragraph to the party or parties who are entitled to payment from it. The city will pay to the contractor a proper accounting of all such funds disbursed for the contractor.

19. OWNER'S RIGHT TO DO WORK

If the contractor should neglect to prosecute the work properly or fail to perform any provisions of this contract, the city, after three (3) days' written notice to the contractor and contractor's surety, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost of it from the payment due the contractor.

20. DEFINITION OF NOTICE

Where in any of the contract documents there is any provision in respect to the giving of notice, such notice shall be deemed given to the owner, when written notice is delivered to the city manager, or placed in the United States mail addressed to the city clerk; as to the contractor, when a written notice shall be delivered to contractor's representative at the project site or by mailing such written notice in the United States mail addressed to the contractor at the place stated in the bid proposal as the business address; as to the surety on the performance bond, when a written notice is placed in the United States mail addressed to the surety at the surety's home office or to its agent or agents who executed such performance bond on behalf of the surety.

21. SUBCONTRACTS

The contractor shall not subcontract any work in the execution of this contract without the written consent of the city. The contractor shall be responsible for the acts or omissions of any subcontractor and of anyone employed directly or indirectly by such subcontractor.

22. ASSIGNMENT OF CONTRACT

The contractor shall not assign this contract or any part hereof without the written consent of the city. No assignment shall be valid unless it shall contain a provision that any funds to be paid to the assignee under this agreement are subject to a prior lien for services rendered or materials or supplies for the performance of the work specified in the contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

23. MAINTAINING TRAFFIC

The contractor shall provide flares, signs, barricades, traffic regulators, etc., to conform to the current *Michigan Manual of Uniform Traffic Control Devices* or as directed by the city. The contractor shall not close any road or street without the permission of the city. If any street or road is to be closed by the contractor, it shall be the responsibility of the contractor to notify the Owosso fire department when the street will be closed and again when the street is open to traffic. Traffic control devices for any detours deemed necessary by the city shall be provided by the contractor. Cost of maintaining shall be incidental to the cost of the project unless otherwise provided.

24. ORDER OF COMPLETION

The contractor shall submit, whenever requested by the city, a schedule of the work showing completion dates. The city may request that certain portions of the work be done before other portions. If so requested, the contractor shall arrange to schedule to meet the request by the owner.

25. USE OF COMPLETED PORTIONS

The city shall have the right to take possession and use any completed or partially completed portions of the work; but such taking possession and use shall not be deemed acceptance. Pending final completion and acceptance of the work, all necessary repairs and adjustments on any section of the work due to defective material, workmanship, natural causes, or other operations of the contractor, other than normal wear and tear, shall be done by and at the expense of the contractor.

26. WATER SUPPLY

The contractor shall secure an adequate water supply for use in construction and for drinking water for his employees. If the city's water is used on the work, the contractor shall make the necessary application and shall pay all costs involved. Connections, piping and fittings for conveying water shall be furnished and maintained by the contractor. Contractor shall pay for water according to the city's established rates. Hydrant meters are available at Owosso DPW. \$1,000 prepayment is required. This covers usage of the water meter/RPZ and bulk water prepayment per the following charges: bulk water rate is \$12 per 1,000 gallons with a \$60 minimum charge which includes the first 5,000 gallons. When water meter and RPZ are returned in good condition, \$450 will be returned less any water use over the minimum charge for 5,000 gallons.

27. CLEANUP

The contractor shall keep the project free from waste materials or rubbish caused by its employees or work. This includes as a minimum excess excavation or backfill material, broken or rejected materials, empty containers or general debris. The owner may require complete cleanup of certain areas as construction is completed.

28. SUPERVISION

The contractor shall have a superintendent on the job site to coordinate and expedite the various construction activities for the duration of this contract.

29. EQUAL EMPLOYMENT OPPORTUNITY AND OTHER CLAUSES

The contractor shall agree not to discriminate against any employee or applicant for employment because of age, race, religion, color, handicap, sex, physical condition, developmental disability as defined by Michigan Compiled Statutes, or national origin. This provision shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training including apprenticeship. The contractor further agrees to take affirmative action to ensure equal employment opportunities for persons with disabilities. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of the non-discrimination clause.

LOCAL PREFERENCE POLICY

The following affidavit should be completed if a bidder is located within Shiawassee County or intends to sub-contract more than twenty-five percent (25%) to a Shiawassee County based business: The city of Owosso has a local preference policy for the purchase of goods and services as recorded in the city ordinance in section 2-348. "Lowest qualified bidder" defined.

1. The term "lowest qualified bidder," as used in this division, shall mean the lowest bidder having qualifications to perform the work which are satisfactory to the council. The lowest bidder shall be determined based on an adjusted bid tabulation which shall be prepared in the following manner: To the bid of any bidder which is neither a city-based business nor a county-based business shall be added an amount equal to six (6) percent of the bid or two thousand five hundred dollars (\$2,500.00), whichever is less.
2. To the bid of any bidder which is a county-based business shall be added an amount equal to three (3) percent of the bid or two thousand five hundred dollars (\$2,500.00), whichever is less; provided, however, that if no bid is received from a city-based business, no additional amount shall be added to the bid of a county-based business.
3. "Owosso-based business" shall be interpreted to mean a business registered with the county clerk or a corporation registered with the state having a business address within the city limits which pays real and/or personal property taxes levied by the city.

The term "county-based business" shall be interpreted to mean a business other than a city-based business registered with the county clerk or a corporation registered with the state having a business address within the county which pays real and/or personal property taxes levied by the county.

4. If twenty-five (25) percent or more of a contract for construction or other services is to be subcontracted by a city-based business bidder to a non-city-based business or businesses, or by a county-based business bidder to a non-county-based business or businesses, the adjusted bid shall be calculated by applying the provisions of this section separately to each portion of the contract based on the status of the contractor or subcontractor performing that portion of the contract as a city-based or county-based business.

LOCAL PREFERENCE AFFIDAVIT

In accordance with Section 2-348 of the Owosso city code, the bid from a business located in Shiawassee County shall be adjusted to reflect a preference. In order for the city to calculate the adjustment, the bidder hereby deposes and states that their business address is registered, and is currently paying real and/or personal property taxes in Shiawassee County at the following address:

Registered business address

The affiant further deposes and states that a sub-contract with a business registered, and paying real and/or personal property taxes in Shiawassee County will be executed for a percentage equal to or greater than twenty-five percent (25%) as stated below:

Business name and address of sub-contractor

Percentage of contract

Authorized signature

Date

Title

Company name

W-9 INFORMATION FOR LEGAL STATUS

Sole proprietor. Enter your individual name as shown on your income tax return on the “Name” line. You may enter your business, trade, or “doing business as (DBA)” name on the “Business name/disregarded entity name” line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the “Name” line and any business, trade, or “doing business as (DBA) name” on the “Business name/disregarded entity name” line.

Disregarded entity. Enter the owner's name on the “Name” line. The name of the entity entered on the “Name” line should never be a disregarded entity. The name on the “Name” line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the “Name” line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the “Business name/disregarded entity name” line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

Note. Check the appropriate box for the federal tax classification of the person whose name is entered on the “Name” line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the “Name” line is an LLC, check the “Limited liability company” box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter “P” for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter “C” for C corporation or “S” for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the “Name” line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the “Name” line.

Other entities. Enter your business name as shown on required federal tax documents on the “Name” line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the “Business name/disregarded entity name” line.

Please see attached W-9 Request for Taxpayer Identification Number and Certification form for a detailed explanation on filling out the W-9 form.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or “doing business as” (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity’s name as shown on the entity’s tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a “disregarded entity.” See Regulations section 301.7701-2(c)(2)(iii). Enter the owner’s name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner’s name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on line 2, “Business name/disregarded entity name.” If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys’ fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.

You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.

You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions.

You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

TECHNICAL SPECIFICATIONS
CITY OF OWOSSO
PROGRESS CLAUSE – 2024 SEWER LINING PROJECT

1 of 1

In no case shall any work be commenced prior to receipt of formal notice of award by the City.

The Engineer anticipates that construction can begin no earlier than **10 days after award**.

The entire project must be completed by the final completion date of **June 28th, 2024**.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project.

The named subcontractor(s) for designated and/or specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

No work shall take place during the following US holidays:

Memorial Day: 3:00 PM, Friday, May 24th until 7:00 AM, Tuesday, May 28th

Failure by the Contractor to meet any completion dates will result in the assessment of liquidated damages in accordance with subsection 108.10 of the Standard Specifications for Construction. Schedule allowances for material shortages shall be made as approved by the City and Engineer.

**CITY OF OWOSSO
SPECIAL PROVISION
FOR
TECHNICAL SPECIFICATIONS**

City of Owosso/CW

1 OF 1

June, 2022

General Requirement

The MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION shall govern all technical specifications for this project. The following parts of the Contract will prevail over all other parts in the following order:

1. Special Provisions.
2. Supplemental Specifications.
3. Project Plans and Drawings.
4. MDOT Standard Plans.
5. 2020 Standard Specifications
6. City of Owosso Standard Specifications.

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

CITY OF OWOSSO
NOTICE TO BIDDERS
FOR
UTILITY COORDINATION

OHM

1 of 2

01/30/24

The contractor shall cooperate and coordinate activities with the owners of utilities as stated in section 104 of the Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in subsection 107.12 of the Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon subsection 109.05.E of the Standard Specifications for Construction.

PUBLIC UTILITIES

The following Public Utilities have facilities located within the right-of-way:

UTILITY	OWNER	CONTACT
Telephone / Fiber Optic	Frontier Communications 1943 W. M-21 Owosso, Michigan 48867	Harold Roth 989.627.9759 Harold.Roth@ftr.com
Fiber Optic	Daystarr Communications 307 N. Ball Street Owosso, Michigan, 48867	Jared Jackson 989.720-6004 Jared.Jackson@daystarrfiber.net
Cable Television	Charter Communications 1408 S. Valley Center Drive Bay City, MI 48706	Mark Kelly 989.233.9404 Mark.kelly@charter.com
Gas	Consumers Energy 530 W. Willow Street Lansing, Michigan 48906	Adam Bertram 517.614.8570 Adam.Bertram@cmsenergy.com
Electric	Consumers Energy 1801 W. Main Street Owosso, Michigan 48867	Tracy Mahar 989.204.9018 Pobox3PTY_LVDEZ6 @cmsenergy.com
Storm/County Drain	Shiawassee County Drain Comm. 149 E. Corunna Avenue L-1 Corunna, Michigan 48817	Tony Newman 989.743.2398 drains@shiawassee.net
City Water and Sewer	City of Owosso 301 W. Main Street Owosso, Michigan 48867	Ryan Suchanek 989.725.0555 Ryan.Suchanek@ci.owosso.mi.us
Road	City of Owosso 301 W. Main Street Owosso, Michigan 48867	Clayton Wehner, P.E. 989.725.0551 Clayton.Wehner@ci.owosso.mi.us
Soil Erosion Control	Shiawassee County Health Dept. Environmental Health Division 201 N. Shiawassee Street Corunna, Michigan 48817	Casey Elliot, R.E.H.S. 989.743.2289 Celliott@shiawasseechd.net
Township Water and Sewer	Owosso-Caledonia Township Utility Authority 135 N. State Rd. Owosso, MI 48867	John Langtry 989-743-3181 townshipsewer@owocalua.com

County Roads	Shiawassee County Road Commission 701 West Corunna Ave. Corunna, MI 48817-1229	Brad Rigoulot 989-743-2228, ext. 207 brigoulot@shiawasseeroads.com
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For the protection of underground utilities and in conformance with Public Act 174 of 2013, the Contractor shall contract the Miss Dig System, Inc. by phone at 811 or 800-482-7171 or via the web at either elocate.missdig.org for single address or rte.missdig.org, a minimum of 3 business days prior to excavation, excluding weekends and holidays.

Owners of public utilities will not be required to move poles or structures not already identified in the Plans to be relocated, in order to facilitate the operation of construction equipment, unless it is determined by the Engineer that such poles or structures constitute a hazard to the public or are extraordinarily dangerous to the Contractor's operations. **If the Contractor determines that additional relocations will be required in order to facilitate the operation of construction equipment for completion of this project, the Contractor shall notify the Engineer and the Utility in writing, no later than 10 calendar days after award.** The Contractor will be required to coordinate with utility companies to relocate any facilities required to accommodate the proposed scope of work. Support of utility poles during construction is the responsibility of the Contractor.

Additional underground electrical, cable, phone, and gas services that are not currently indicated on the plans may exist throughout the project limits. The Contractor shall be prepared to work with these utility companies to coordinate necessary relocations if additional conflicts arise. The private utility owner is responsible for costs, equipment, and labor to relocate their utilities as shown on the plans, or as deemed necessary by the Engineer.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC

OHM

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01/30/24

a. Description. This special provision consists of requirements and restrictions to maintain traffic on various streets in the City of Owosso during the 2024 Sewer Lining Project.

b. General. Maintain traffic throughout the project in accordance with the standard specifications, typicals, and supplemental specifications in the contract and as described on the plans for this project.

c. Construction Influence Area (CIA). The CIA includes the right-of-way of the following roadways, within the approximate limits described below:

1. Dewey Street between E Main St (M-21) and E Comstock St
2. Frederick Street from Nelson St to Kenwood Dr
3. E Comstock Street from S Washington St (M-71) to N Park St
4. S Saginaw Street from Harper St to E Ridge St
5. N Hickory Street from Stratford Dr to E North St
6. Dingwall Dr from Brandon St to 950 Ft north of Brandon St
7. Summit Street from Brandon St to Moore St
8. Grover Street from S Dewey St to Oakwood Ave
9. In addition, the CIA includes intersecting roads adjacent to the work zone as far as the construction or detour signing extends.

d. Traffic Restrictions. Maintain traffic in accordance with the Maintaining Traffic Typicals contained herein, except as noted below. Changes or adjustments to the Maintaining Traffic Typicals may be necessary to fit field conditions, subject to approval of the Engineer or as determined by the Engineer.

1. Utilize the following Maintaining Traffic Typicals:

- A. 101-GEN-SPACING-CHARTS
- B. 102-GEN-NOTES
- C. 107-GEN-SPEED
- D. 110-TR-NFW-2L
- E. 122-NFW-SHL-(R)
- F. WZD-100-A
- G. WZD-125-E

2. Do not work during the holiday periods as defined in Table 1.

Table 1: 2024 Holiday Periods

Holiday	Start Date and Time	End Date and Time
Memorial Day	3:00 PM, Friday, May 24 th	7:00 AM, Tuesday, May 28 th

3. Work hours are Monday-Friday, 7:00am to 7:00pm. Any additional work, including weekend work, done contradicting this schedule shall be approved by the Engineer.
4. Contractor shall maintain access for thru traffic at intersections as necessary, included in **Traf Regular Control**.
5. The Contractor may not work after dark unless approved by the Engineer and adequate lighting is provided. Work on weekends shall be approved by the Engineer.
6. Maintain a minimum of one 10-foot lane of traffic in each direction at all times.

e. Traffic General.

1. For any lane open to traffic, provide a minimum lane width of 10 feet with 2 feet of shy distance on both sides.
2. Do not close lanes or utilize traffic regulation sequences where work can be accomplished with a shoulder closure. Do not occupy any part of the active traffic lane with personnel or equipment when utilizing a shoulder closure.
3. The Contractor will be responsible for notifying emergency services, transit agencies, law enforcement and schools prior to any lane closures, detours or major traffic shifts. In addition, the Contractor will be responsible for working with and complying with any coordination that is necessary with emergency services, transit agencies, law enforcement and schools.

f. Traffic Regulator Control.

1. Crossroads must remain open to traffic at all times. Use intermediate traffic regulators at each intersection approach and commercial driveways within the closure limits, as directed by the Engineer. Use traffic regulator control as directed by the Engineer for cross street traffic while paving through intersections.

g. Traffic Control Devices. Ensure all traffic control devices are in accordance with the *MMUTCD* and must meet the “acceptable” criteria as defined in the *ATSSA* publication entitled “*Quality Guidelines for Temporary Traffic Control Devices and Features*” at the time of initial deployment and after each major stage change.

1. During non-working periods, place applicable advance signs and channelizing devices at specific locations, as directed by the Engineer, at no additional cost to the Owner.
2. Notify the Engineer 24 hours in advance of when traffic control devices are being delivered to the project site, to allow for initial inspection of devices to take place.
3. Remove from the project site all traffic control devices (including detour signing) no longer needed for a particular operation and equipment for construction within 14 calendar days of reopening the shoulder/lane/roadway.

4. Channelizing Devices.

- A. Ensure all devices have sufficient ballast to prevent moving or tipping. If moving or tipping occurs, place additional ballast, as directed by the Engineer, at no additional cost to the Owner. No more than two ballasts are allowed on each channelizing device.
- B. Do not use caution tape on this project.
- C. Space channelizing devices at 25 feet for tapers and 50 feet for tangents or tighter as directed by the Engineer.

h. Measurement and Payment. The completed work as measured will be paid for at the contract unit price for the following pay item(s).

<u>Pay Item</u>	<u>Pay Unit</u>
Maintenance of Traffic	Lump Sum

Maintenance of Traffic shall be payment in full for all labor, material, and equipment needed to accomplish this work.

No additional payment will be made for the following activities:

- 1. Transporting traffic control items from site to site.
- 2. Providing sufficient vehicles and staff to make changes as-needed on site during work.
- 3. Providing sufficient vehicles and staff to remove closures from the roadway.
- 4. Providing additional traffic control devices required to expedite the construction for the convenience of the Contractor.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
CURED-IN-PLACE PIPE LINING

OHM

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01/30/24

DESCRIPTION

The Contractor shall rehabilitate the structurally and/or functionally deteriorated sanitary sewer pipelines using the trenchless method of cured-in-place pipe (CIPP) in accordance with these Specifications.

The CIPP material shall consist of a resin-impregnated tube ("Liner") which when cured shall extend the full length of the original pipe and provide a structurally sound, smooth, jointless and airtight pipe.

REFERENCE STANDARDS

Unless otherwise specified, the Work for this Section shall conform to the applicable portions of the following standard specifications:

1. ANSI – American National Standards Institute
2. ASTM – American Society for Testing and Materials
3. AWWA – American Water Works Association
4. AASHTO – American Association of State Highway Transportation Officials

Specific ASTM references detailing CIPP operations are the following:

1. ASTM F1216 – Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
2. ASTM F1743 – Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe
3. ASTM D5813 – Cured-in-Place Thermosetting Resin Sewer Pipe
4. ASTM D790 – Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials
5. D2990 – Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics

MATERIAL

Tube

The sewn tube shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216 or ASTM F1743, Section 5.1. The tube shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe, negotiate bends, and stretch to fit irregular pipe sections.

The tube shall have a uniform thickness so that it will meet or exceed the design thickness when compressed at installation pressures.

The tube shall be sewn to a size that will tightly fit the internal circumference and length of the original pipe. Allowance should be made for circumferential stretching during inversion. Overlapped layers of felt in longitudinal seams that cause lumps in the final product shall not be allowed. Seams in the tube shall be stronger than the non-seamed felt.

The outside layer of the tube (before wetting) shall be coated with an impermeable, flexible membrane that will contain the resin and facilitate monitoring of resin saturation during the resin impregnation (wetting) procedure.

The tube shall be homogeneous across the entire wall thickness and shall contain 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 CIPP after installation shall be a light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made.

The outside of the tube shall be marked for distance at regular intervals along its entire length, not to exceed 25 ft. Such markings shall include the manufacturer's name or identifying symbol. The tubes must be manufactured in the USA.

Resin

The resin shall be a general purpose, unsaturated, styrene based, thermoset resin and catalyst system, an epoxy resin and hardener, or a thermoset polyurethane that is compatible with the inversion process being used.

The resin shall meet the requirements of ASTM F1216 and must be able to cure in the presence of water with the initiation temperature for cure being less than 180° F (82.2° C).

The resin shall produce CIPP which will comply with the structural and chemical resistance requirements of this specification.

CIPP Structure Requirements

The thickness of each Liner installed shall be determined using calculation methods that are consistent with applicable ASTMs. The Contractor shall submit stamped and signed designs prior to the installation of any Liner. The designs shall include a step-by-step calculation that shows all equations, defines all variables, lists all assumptions, and clearly indicates all values used for the design.

The design engineer shall set the long term (50 year extrapolated) Creep Retention Factor at 50% of the initial design flexural modulus as determined by ASTM D790 test method.

The cured in place pipe material (CIPP) shall conform to the structural properties as listed below.

Table CIPP-1: Cast-In-Place Pipe

Property	Test Method	Minimum Value
Flexural Strength	ASTM D790	4,500 psi
Flexural Modulus of Elasticity	ASTM D790	250,000 psi
Tensile Strength (Gravity Pipe)	ASTM D638	2,500 psi
Tensile Strength (Pressure Pipe)	ASTM D638	3,000 psi

Bypassing Sewer

The Contractor shall provide, operate, maintain, and remove all equipment, labor, materials, and supplies required for temporary bypass pumping and flow control precautions.

The bypass shall be made by plugging the line at an existing upstream manhole or adjacent system and then pumping the wastewater via the bypass line to a manhole or other suitable outlet that is

located downstream from the rehabilitation section. Pumped wastewater shall not be allowed to spill onto lawns, roadways, open excavations, or into undersized piping.

The pump and bypass lines shall be of adequate capacity and size to handle the flow. Bypassing must include all mainline and service line flows affected by construction.

Provide bypass pumping at the following locations:

Sanitary Sewer

1. S. Dewey Street from SNM-1904-051 (north side of the Comstock & Dewey intersection) to SNM-1803-001 (in the center of the M-21 & Dewey intersection) an approximate distance of 315 feet.
2. Frederick Street from SNM-2302-007 (in the center of the Frederick & Nelson intersection) to SNM-2302-005 (in the center of Frederick & Kenwood intersection) an approximate distance of 675 feet.
3. E. Comstock Street from SNM-2401-045 (in the center of Park & Comstock intersection) to SNM-2401-044 (in the center of M-71 & Comstock intersection) an approximate distance of 353 feet.
4. S. Saginaw Street from SNM-2402-047 (in the center of Saginaw & Harper intersection) to SNM-2402-046 (in front of #938 Saginaw) an approximate distance of 293 feet.

Required Bypass Pumping flows for sanitary sewer

Location	Flows (gpm)*		Bypass Proposed Location
	Average	Peak	
S Dewey St: SGM-1904-028	60	570	East to E Main St
Frederick: SGM-2302-007	20	200	West to Frederick/Chipman
Frederick: SGM-2302-006	40	370	West to Frederick/Chipman
Comstock: SGM-2401-056	10	40	East to Comstock/Water
Saginaw: SGM-2402-015	10	20	North to E Ridge/Saginaw

**Estimated based on 2018 flow metering, peak flow evaluation in 2018, and number of manholes upstream of 2018 meter locations*

*Storm Sewer**

1. Hickory/Dingwall/Summit from STM-2202 (catch basin in front of #1035 Summit) to STM-1364 (manhole in front of #1202 Hickory) an approximate distance of 567 feet.
2. Grover Street from STM-1169 (in the center of Oakwood & Grover intersection) to STM-1157 in the center of Dewey & Grover intersection) an approximate distance of 660 feet.

*Bypass pumping for storm sewer lining shall be the responsibility of the Contractor

Provide temporary piping and valve(s) as needed to assist the bypass pumping operation and to allow the Work to proceed. Provide 'Pump & Haul' service for any time when the Work prevents bypass pumping.

Provide backup equipment to ensure continuous sanitary service.

Maximum sound level produced from the pumping system and engine generators not to exceed 75 dB at a distance of 50 feet.

Provide high level alarm in the bypass pumping manhole. Alarm shall be transmitted to Contractor and Owner.

Contractor shall have designated personnel for on-call maintenance and operation of the bypass pumping facility 24 hours a day, 7 days a week during bypass operations.

Bypass Pumping Preparation & Installation

Engineer shall schedule a meeting with Owner and Contractor to discuss bypass arrangement plans and approval prior to commencing Work.

Locate bypass suction and discharge piping to minimize interference with pedestrian and vehicular traffic.

Maintain access to all residents and properties in the affected area.

Provide ramps or steel plates for bypass piping laid across roads, sidewalks and driveways to maintain traffic and pedestrian traffic as required.

Demonstrate to Owner and Engineer that bypass pumping system is operating and sized to handle the required flows by performing a test run for a period of 48 hours prior to taking existing system out of service.

Bypass Pumping Precautions

Maintain bypass pumping operations 24 hours per day to prevent any flooding or backups in the sanitary sewer system.

Contractor shall take precautions to protect the public health and to protect the sewer lines from damage resulting from surcharging.

Contractor shall take precautions to ensure that flow control operations do not cause flooding or damage to public or private property being served by the sewer involved and be responsible for any damage resulting from his flow control operations.

Should any sewage matter from the system be spilled, discharged, leaked or otherwise be deposited to the open environment as a result of Contractor's flow control operation, he shall immediately notify City sewer system operating personnel and appropriate regulatory agencies, perform required cleanup, disinfect the affected area and assume all costs associated with same.

CONSTRUCTION

Inspection of Sewer Lines

The inspection of pipelines shall determine active service connections and which addresses they serve. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation of the CIPP. These conditions shall be recorded and submitted to the Owner prior to the commencement of construction so that these conditions can be corrected. A video tape and suitable log shall be kept for later reference by the Owner.

Line Obstructions

It shall be the responsibility of the Contractor to clear the line of obstructions such as solids and roots that will prevent the insertion of the CIPP. If pre-installation inspection reveals an obstruction such as a protruding service connection, dropped joint, collapsed pipe or obstruction that will adversely affect the inversion process and cannot be removed by conventional sewer cleaning

equipment, then the Contractor shall make a point repair open-cut excavation to remove or repair the obstruction. If a pay item for point repair work is not included in the proposal form, then the Owner will negotiate with the Contractor for costs associated with this work.

Public Notification

The Contractor shall make every effort to maintain service usage throughout the duration of the project. In the event that a sewer will be out of service, the maximum amount of time of no service shall be 10 hours for any property served by the sewer or main. A public notification program shall be implemented before the start of work. As a minimum, the Contractor shall be responsible for contacting each home or business connected to the affected sewer or main and informing them of the work to be conducted, as well as when the sewer will be off-line.

The Contractor shall also provide the following:

1. Written notice to be delivered to each home or business on the day prior to the beginning of work being conducted on the section, and a local telephone number of the Contractor that the property owner can call to discuss the project or any problems which could arise.
2. Personal contact with any home or business that cannot be reconnected within the time stated in the written notice.

Installation

Installation of CIPP shall be in accordance with the current versions of ASTM F1216 section 7 or ASTM F1743 Section 6 with the following modifications:

Resin Impregnation

The tube should be vacuum-impregnated with resin (wet-out) under controlled conditions.

The volume of resin used shall be sufficient to fill all voids in the tube material at nominal thickness and diameter.

The volume shall be adjusted by adding 5-10% excess resin to allow for the change in resin volume due to polymerization and to allow for any migration of resin into the cracks and joints in the original pipe.

The quantities of the liquid thermosetting materials shall be per manufacturer's standards to provide the wall thickness specified. To insure thorough resin saturation throughout the length of the felt tube, the point of vacuum shall be no further than 25 feet from the point of initial resin introduction.

After vacuum in the tube is established, a vacuum point shall be no further than 75 feet from the leading edge of the resin. The leading edge of the resin slug shall be as near to perpendicular as possible. A roller system shall be used to uniformly distribute the resin throughout the tube. If the Contractor uses an alternate method of resin impregnation, the method must produce the same results. Any alternate resin impregnation method must be proven.

Tube Inversion

The wet out tube shall be positioned in the pipeline using either inversion or a mechanical pull-in method. Inversion may be accomplished by using hydrostatic head or by air pressure. If pulled into place, a power winch should be utilized and care should be exercised not to damage the tube as a result of pull-in friction.

The tube should be inverted or pulled-in through an existing manhole or approved access point and fully extend to the next designated manhole or termination point.

The hydrostatic head or air pressure should be adjusted to cause the impregnated tube to invert from the point of inversion to the point of termination. The hydrostatic head or air pressure should turn the tube inside out and hold the tube tight to the wall while producing dimples at lateral connections. Care shall be taken to avoid overstressing the fabric. The tube manufacturer shall provide information on the maximum allowable tensile stress for the tube. This information shall also indicate what the minimum required pressure is to hold the tube tight against the existing sewer or main as well as what the maximum allowable pressure is so as not to damage the tube. Once the inversion has started the pressure shall be maintained between the minimum and maximum pressures until the inversion has been completed. If the pressure range is not maintained, the tube shall be removed from the sewer.

Curing By Heated Water or Steam

Prior to the start of the inversion process, the Contractor shall furnish information to the Owner which outlines the resin manufacturer's recommended cure temperatures.

After inversion has been completed, the inversion water shall be uniformly raised above the temperature required to affect a cure of the resin as recommended by the manufacturer. The inversion water shall be recirculated by means of a pump throughout the tube and temperature monitors shall be placed on the ingoing and outgoing lines to determine that the correct temperature is maintained. Additionally, a temperature gauge shall be installed between the tube and the pipe invert at the termination point to determine temperatures during cure.

The recommended temperature shall be held for the length of time recommended by the resin manufacturer. Initial cure occurs during heat up and is indicated when the exposed portions of the tube appear to be hard and sound and the remote temperature sensor(s) indicate that the temperature is of a magnitude to realize an exotherm or cure in the resin. The temperature should then be raised to post cure temperatures and held for the duration recommended by the resin manufacturer.

Pressure shall be maintained as per the manufacturer's recommendations to hold the flexible tube tight against the existing sewer or main. This pressure shall be maintained until the cure has been completed. The contractor shall provide a continuous log of the designated temperatures and pressures during the time of the cure and cool down.

Cool Down

The new liner pipe shall be cooled down to a temperature below 100° F for the heated water curing method (113° F for the steam curing method) before relieving the internal pressure. Cool down may be accomplished by introducing cool water into the section as the water and/or steam is drained off through a small hole in the downstream end. Care must be taken to avoid causing a vacuum that could damage the newly installed pipe.

Additional Installation Activities

Lubricant

A lubricant may be used to reduce friction during inversion. The lubricant shall be a nontoxic, oil-based product that has no detrimental effect on the tube and does not support bacteria growth or affect the general characteristics of the fluid to be transported.

Workmanship and Finish

The finished CIPP shall be continuous over the entire length between manholes and be free from visual defects such as foreign inclusions, dry spots, lifts, pinholes, or delamination. The new pipe

shall be free of leaks and any defects that will affect the integrity or strength of the CIPP. If any defects are found, then they shall be repaired at the Contractor's expense in a manner that is acceptable to the Owner.

Sealing CIPP at Manholes

If the CIPP fails to make a tight seal at the manhole walls, the Contractor shall apply a resin mixture seal at that point. The resin seal shall be compatible with the resin mixture of the CIPP.

Service Connections

After the new pipe has been cured in place, the Contractor shall reconnect all existing active service connections. This shall be done without excavation by means of a television camera and cutting device or by man entry and a cutting device. The services shall be restored to not less than 95% of their original capacity and shall be free of any sharp edges or protrusions, which could cause paper, rags or debris to accumulate. No service connection shall remain out of service for more than 10 hours without the Contractor providing some suitable temporary facilities.

Final acceptance

The Contractor shall perform a CCTV inspection in accordance with ASTM F1216, section 8.7 after installation of the CIPP Liner and reconnection of the active side sewer laterals. The quality of the post-installation CCTV inspection shall be held to the same standards as the preinstallation CCTV inspection.

The Contractor shall submit to the Engineer, for acceptance and approval, a copy of unedited post-installation flash drives and associated curing reports for each sanitary sewer main segment within 10 working days of the Liner installation.

Sampling and Laboratory Testing

The physical properties of the installed CIPP Liner shall meet the minimum physical properties per Section 2.05, verified through field sampling and laboratory testing.

All materials testing shall be performed at the Contractor's expense by an independent third party laboratory. All tests shall be in accordance with applicable ASTM test methods to confirm compliance with the requirements specified in these contract documents. If properties tested do not meet the physical and thickness design requirements as required by the contract, the CIPP liner shall be repaired or replaced by the Contractor. The City reserves the right to provide independent testing at their own expense to confirm results.

Per Section 8 of ASTM F1216 and ASTM F1743, the Contractor shall obtain samples from all actual installed CIPP Liners. All samples shall be labeled with the following:

Date of installation
Main segment number
Warranty

The Contractor shall provide the City a non pro-rated, full labor and materials warranty to be in force and effect for a period of one (1) year from the date of physical completion of the project. The warranty shall cause the Contractor to repair or replace the Liner should failures or damage result from faulty material or installation.

Clean Up and Restoration

Upon completion of the CIPP work, the Contractor shall clean up and restore the site to match the original site conditions. This work shall include restoration of items such as grass, shrubs, fences,

and paved surfaces as well as manholes or other appurtenances that were affected by the CIPP work.

MEASUREMENT AND PAYMENT

The completed work as measured will be paid for at the contract unit price for the following pay item(s).

<u>Pay Item</u>	<u>Pay Unit</u>
CIPP Lining, Sanitary Sewer, _ inch	Foot
CIPP Lining, Storm Sewer, _ inch	Foot
CIPP Lining, _ inch, Top Hat Liner	Each
CIPP Lining, _ inch, Spot Liner	Each

The contract unit price for **CIPP Lining, _ Sewer, _ inch** shall be payment in full for all labor, materials, and equipment necessary to rehabilitate the structurally and/or functionally deteriorated sewer pipelines using the trenchless method of cured-in-place pipe (CIPP) liner and will be measured from center of manhole to center of manhole.

Payment for **CIPP Lining, _ Sewer, _ inch** shall also include any site clearing, relocating of rocks and/or boulders, removing and re-setting of signs and mailboxes, and restoration as necessary to perform the work.

The bid price for **CIPP Lining, _ Sewer, _ inch** shall include preparatory cleaning for all sewers completely. Preparatory or light cleaning is defined as all cleaning up to and including 3 high-pressure water-jetting passes.

All items required for liner protection, liner insertion, liner inflation, and liner inspection shall be included in **CIPP Lining, _ Sewer, _ inch**. The contract unit price shall also include payment in full for all labor, materials, and equipment necessary for the curing process of the liner regardless of the measured pipe diameter as noted on the plans.

CIPP Lining, _ Sewer, _ inch shall also include all bypass pumping necessary to line the pipeline, as well as internal reinstatement of side sewer laterals and infiltration seals at pipe connections to manholes.

Pre-lining sewer video recording to verify cleaning was appropriately completed prior to lining shall be paid for as **CIPP Lining, _ Sewer, _ inch**. Final CCTV inspection to ensure the liner was installed properly with no defects or damage and that side sewer laterals were reconnected shall also be included in **CIPP Lining, _ Sewer, _ inch**.

CIPP Lining, _ inch, Top Hat Liner and **CIPP Lining, _ inch, Spot Liner** shall be payment in full for all labor, materials, and equipment necessary to rehabilitate the structurally and/or functionally deteriorated sanitary sewer pipelines using the trenchless method of cured-in-place pipe (CIPP) liner and will be measured by the each.

CIPP Lining, _ inch, Top Hat Liner and **CIPP Lining, _ inch, Spot Liner** shall include all site clearing, preparatory cleaning, liner protection, curing, bypass pumping, video recording, and restoration in accordance with **CIPP Lining, _ Sewer, _ inch**.

CITY OF OWOSSO
SPECIAL PROVISION
FOR
SEWER LINE CLEANING FOR PREPARATION OF SEWER REHABILITATION

OHM

1 of 3

01/30/24

DESCRIPTION

Clean all sewer pipe for proposed CIPP lining rehabilitation.

The goal is to remove all debris, roots intruding services, deposits, and other blockages to a 95 percent minimum open area so the CIPP can be successfully installed without any significant installation issues or post lining defects. On all sewers, perform sewer cleaning work to an acceptable level as necessary to perform a thorough television inspection of the sewer and to install a CIPP liner. If the pipe condition is such that cleaning may cause a potential collapse, the pipe shall be televised without attempting to clean it to the 95 percent condition, pending Construction Manager's approval.

Cleaning may involve preparatory or light sewer cleaning (small amounts of debris and/or light root growth existing within the sewer line) or heavy sewer cleaning (large amounts of debris, grease, large size stones and bricks, and/or heavy root growth existing within the sewer line).

MATERIAL

High Velocity Hydro-Cleaning Equipment shall have the following:

- A minimum 750-foot high pressure hose
- Two or more high velocity nozzles able to produce a scouring action from 15 to 45 degrees in all size lines to be cleaned
- A high velocity gun for washing and scouring manhole walls and floor
- Ability to produce flows from a fine spray to a long distance solid stream
- A water tank, auxiliary engines and pumps and a hydraulically driven hose reel
- Equipment operating controls located above ground

Mechanical cleaning equipment shall be either power buckets or power rodders manufactured by the Flexible Tool Division of Rockwell Manufacturing Co. or equal

CONSTRUCTION

Cleaning Precautions: During sewer cleaning operations, satisfactory precautions shall be taken when using cleaning equipment.

When hydraulically propelled cleaning tools (which depend on water pressure to provide their cleaning force) or tools which retard the flow in the sewer line are used, precautions shall be taken to ensure the water pressure created does not damage or cause flooding of public or private property being served by the sewer.

When possible, sewage flow in the sewer shall be used to provide the necessary pressure for hydraulic cleaning devices.

When it is necessary to use water from fire hydrants in order to avoid delays in normal work procedures, the water shall be conserved and not used unnecessarily. No fire hydrant shall be obstructed. Access to the fire hydrant shall be available at all times.

Sewer Cleaning

If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set up on the other manhole and cleaning again attempted. If successful cleaning still cannot be performed or the equipment fails to traverse the entire manhole section, it will be assumed a major blockage exists, and the cleaning effort shall be repeated with other equipment types.

Cleaning equipment selection shall be based on the conditions of the manholes and sewer lines at the time the work commences based on the pre-construction CCTV inspection to be conducted.

For Light cleaning (small amounts of debris existing within the sewer line), use high-pressure water jetting equipment (3 passes), brushes, and swabs.

If the sewer is still not clean after 3 high-pressure water-jetting passes, inform the Construction Manager about the condition and the reason(s) for the failure to fully clear the line. The Construction Manager may direct heavy cleaning of the problem sewer section. Alternatively, the Construction Manager may direct the Contractor to perform a point repair in the problem section.

For **Heavy Cleaning** (large deposits of debris or heavy root growth existing within the sewer line), Use bucket machines, scrapers, hydraulic pressure jetting with special aggressive root cutting nozzles, or tools and augers. Cleaning requiring more than 3 passes with hydraulic cleaning equipment to achieve acceptable results shall be considered heavy cleaning.

Provide appropriate screening to stop materials from passing into downstream sewers. All solid or semisolid materials dislodged during cleaning operations shall be removed from the sewer at the downstream manhole in the sewer section being cleaned. These materials shall be removed from the site at the end of each workday and shall be properly disposed. Passing dislodged materials downstream from the sewer segment being cleaned shall not be permitted. In such an event, as observed or detected by the Construction Manager, Contractor shall be responsible for cleaning the affected downstream sewers in their entirety, at no additional cost to the city.

Take precautions to avoid damage or flooding to public or private property being served by the line being cleaned.

No sewer cleaning shall take place in a particular sewer segment until all upstream pipe segments have been cleaned. If cleaning is performed in a downstream pipe segment to facilitate overall cleaning operations, the segment shall be re-cleaned at no additional cost, after all pipes upstream of that segment have been cleaned.

MEASUREMENT AND PAYMENT

The completed work as measured will be paid for at the contract unit price for the following pay item(s).

<u>Pay Item</u>	<u>Pay Unit</u>
Heavy Cleaning	Hour

The bid price for pipeline rehabilitation shall include preparatory cleaning for all sewers completely. Preparatory or light cleaning is defined as all cleaning up to and including 3 high-pressure water-jetting passes.

Heavy Cleaning shall be payment in full for all labor, equipment, and materials needed to accomplish this work.

OWOSSO 2024 SEWER REHABILITATION

Pipe Rehabilitation Table

#	Pipe Segment ID	Upstream MH	Downstream MH	Map Number	Road Name	Location	Pipe Dia (Inch)	Material	Full Pipe Segment Length (Ft)	Rehab Method
SANITARY										
1	SGM-1904-028	1803-001	1904-051	SAN 1	Dewey Street	Between M-21 and E Comstock St - 106-110 Ft downstream of upstream manhole SNM-2401-051.	10	Clay	315	Spot liner
2	SGM-2302-007	2302-007	2302-006	SAN 2	Frederick Street	Between Nelson St & George St	10	Clay	312	Full CIPP Liner
3	SGM-2302-006	2302-006	2302-005	SAN 2	Frederick Street	Between George St & Kenwood Dr	18	Clay	363	Full CIPP Liner
4	SGM-2401-056	2401-045	2401-044	SAN 3	E Comstock Street	West side of N Park and E Comstock intersection - 23-25 Ft downstream of upstream manhole SNM-2401-045 on Comstock.	8	Clay	353	Top hat liner
5	SGM-2402-015	2402-047	2402-046	SAN 4	S Saginaw Street	Between Harper St and ±315' north of Harper St	8	Clay	293	Full CIPP Liner
STORM										
1	STG-0710	1373	1364	STM 1	Dingwall/Hickory	Between Dingwall Dr and Hickory St	15		287	Full CIPP Liner
2	STG-1025	2202	1373	STM 1	Summit/Dingwall	Between Summit St and Dingwall Dr	15		280	Full CIPP Liner
3	STG-2947	1842	1157	STM 2	Grover Street	Between S Dewey St and 220' east of S Dewey	15		254	Full CIPP Liner
4	STG-0996	1169	1842	STM 2	Grover Street	Between Oakwood Ave and 220' east of S Dewey	15		406	Full CIPP Liner

City of Owosso

Sanitary Sewer Mains for Lining

S. Dewey St.

From E. Comstock St. to E. Main St

SGM-1904-028
AVG Flow = 52 GPM
Peak Flow = 570 GPM

SPOT LINER 106-110 FT
UPSTREAM OF THE
DOWNSTREAM MANHOLE
SNM-1904-051.

SAN 1



-  Sanitary Sewer Mains for Lining
-  Sanitary Sewer Manholes
-  Other Sanitary Sewer Mains
-  Other Sanitary Manholes
-  City Parcels



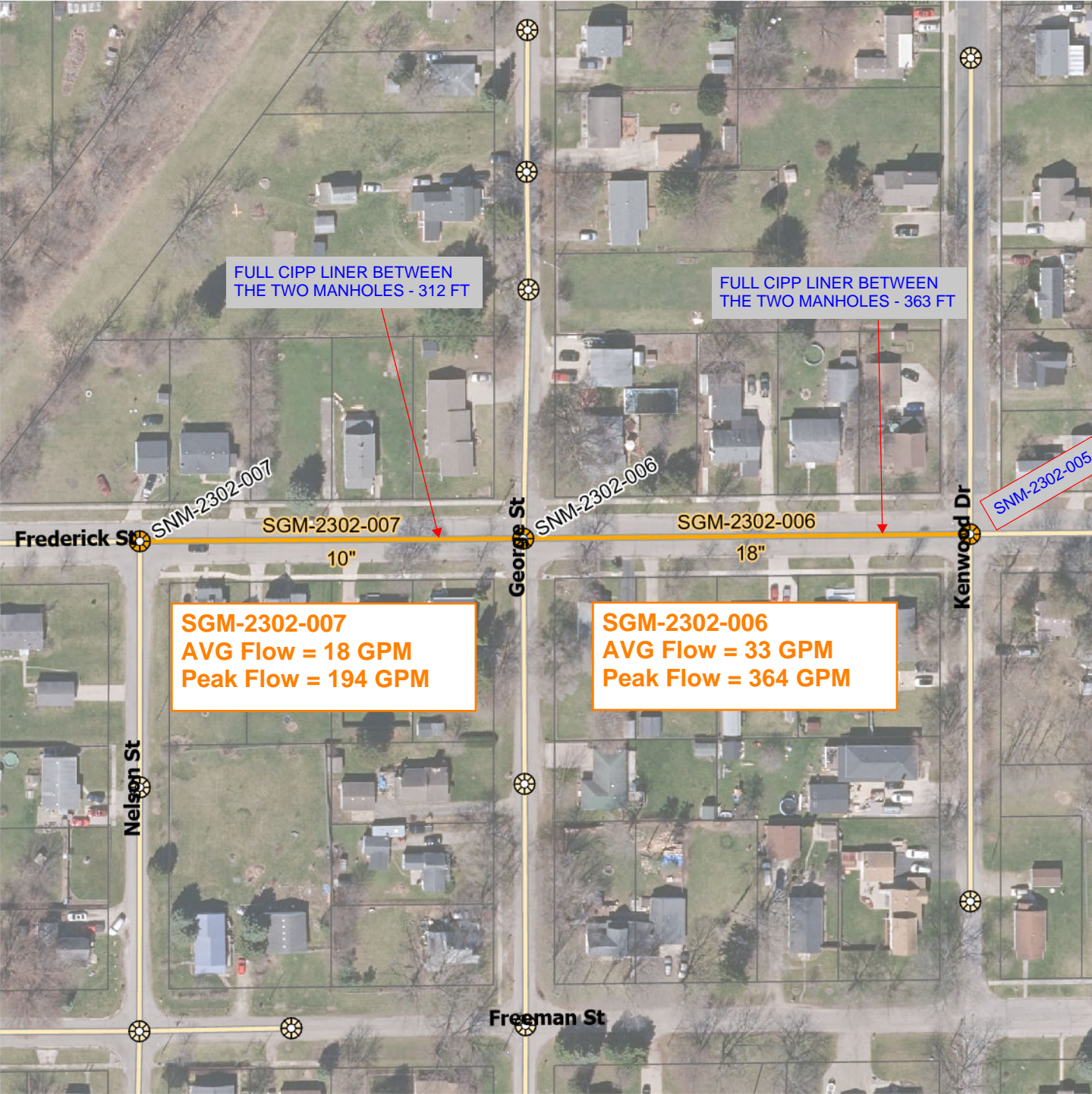
27 July, 2023

City of Owosso

Sanitary Sewer Mains for Lining

Frederick St.

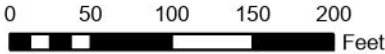
From Nelson St. to Kenwood Dr.



SAN 2



- Sanitary Sewer Mains for Lining
- Sanitary Sewer Manholes
- Other Sanitary Sewer Mains
- Other Sanitary Manholes
- City Parcels



27 July, 2023

City of Owosso

Sanitary Sewer Mains for Lining

E. Comstock St.

From S. Washington St to Park St.



SAN 3



- Sanitary Sewer Mains for Lining
- Sanitary Sewer Manholes
- Other Sanitary Sewer Mains
- Other Sanitary Manholes
- City Parcels

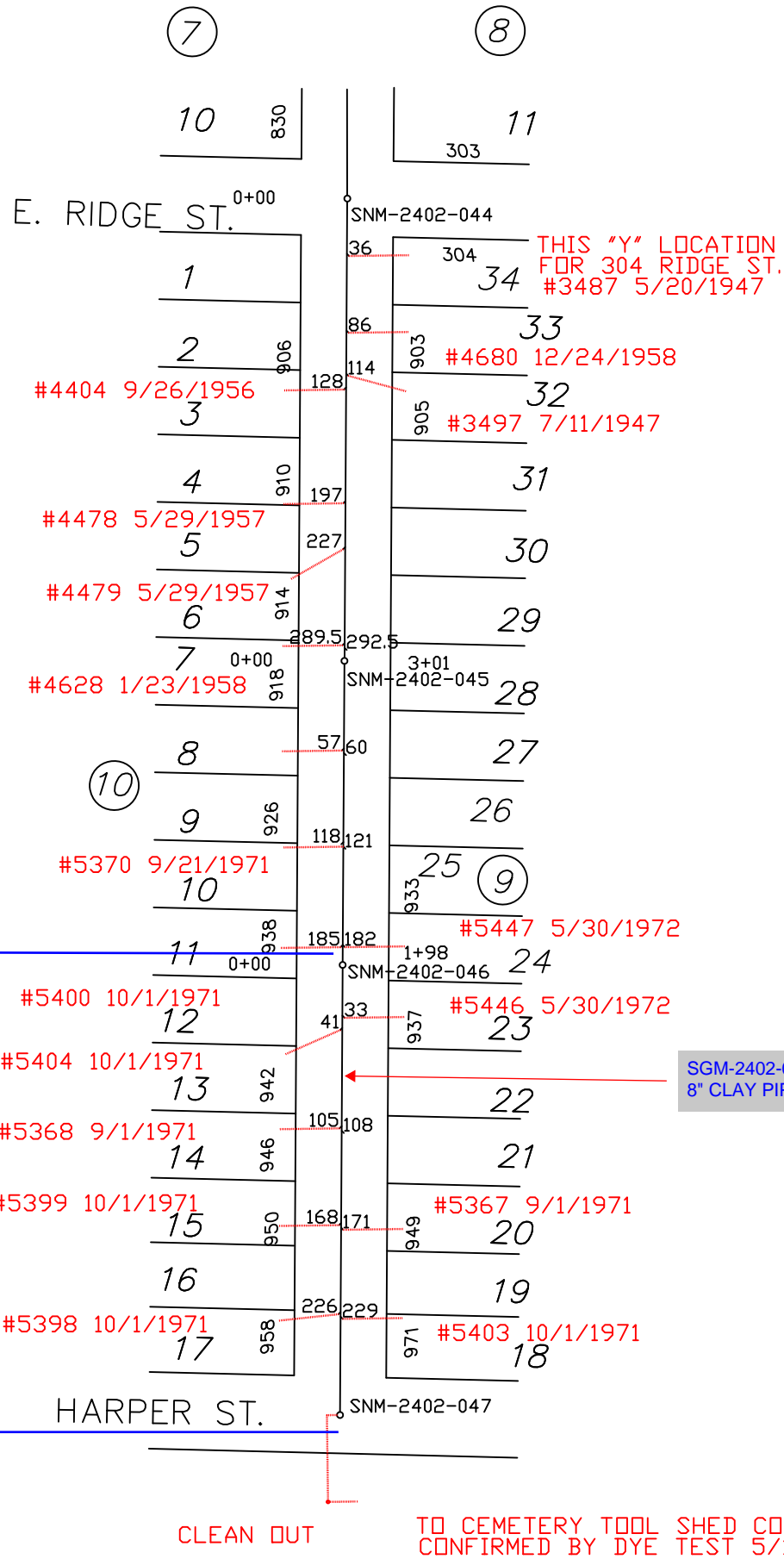


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SAGINAW ST.



SCALE
1" = 100'

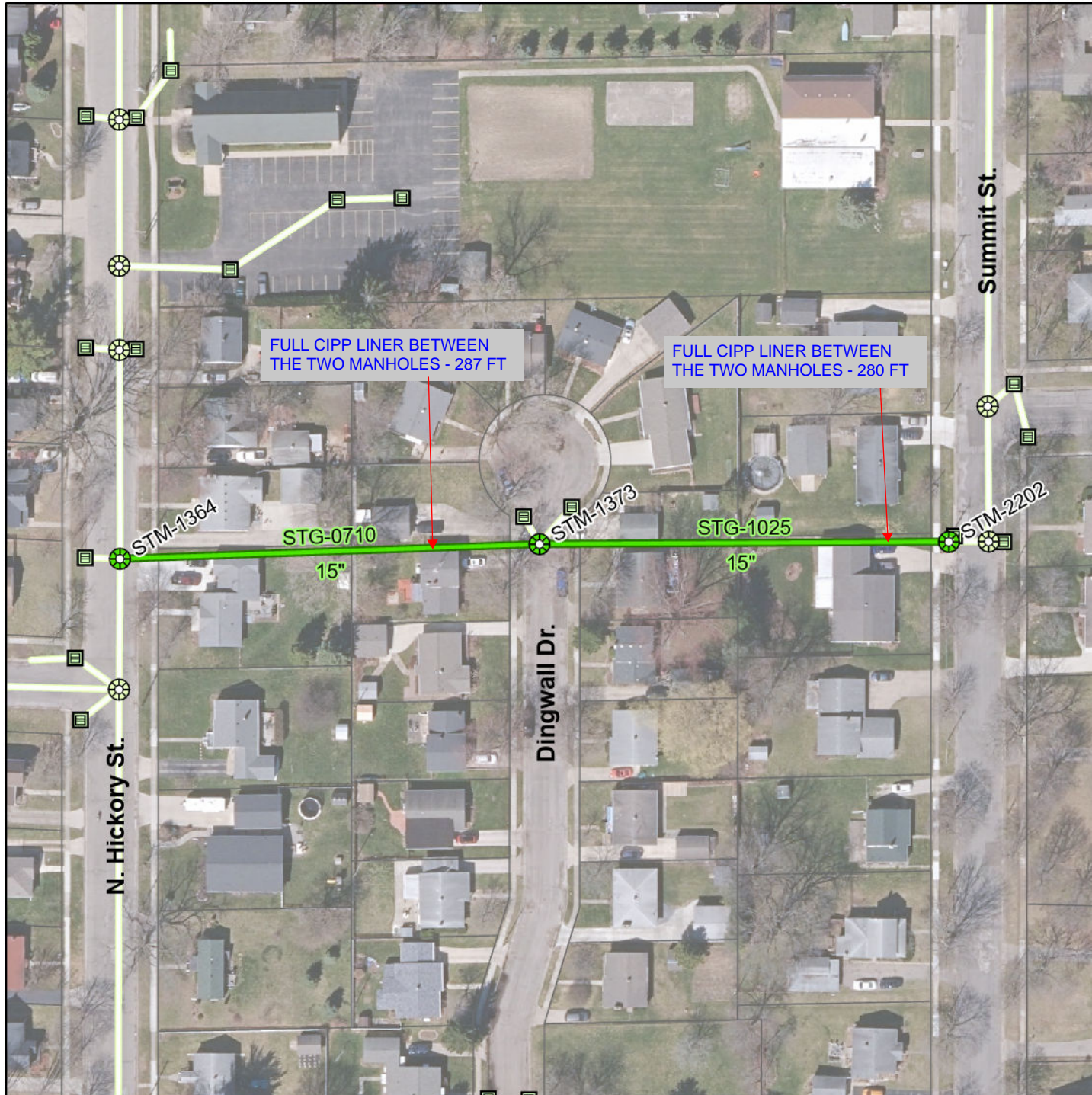


A. L. WILLIAM'S 2 ND ADD'N.

City of Owosso

Storm Sewer Mains for Lining

N. end of Dingwall Dr.
W-E from Hickory St to
Summit St



STM 1



- Storm Sewer Mains for Lining
- Stormwater Manholes
- Other Storm Sewer Mains
- Other Stormwater Manholes
- Catchbasins
- City Parcels



27 July, 2023

City of Owosso

Storm Sewer Mains for Lining

Grover St.
From S. Dewey St. to
Oakwood Ave.



STM-1169

FULL CIPP LINER BETWEEN THE TWO MANHOLES - 254 FT

FULL CIPP LINER BETWEEN THE TWO MANHOLES - 406 FT

S. Dewey St.

Oakwood Ave.

STM-1157

STG-2947
15"

STM-1842

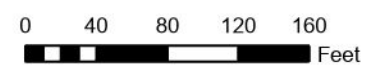
STG-0996
15"

Grover St.

STM 2



- Storm Sewer Mains for Lining
- Stormwater Manholes
- Other Storm Sewer Mains
- Other Stormwater Manholes
- Catchbasins
- City Parcels



27 July, 2023