



REQUEST FOR PROPOSALS (RFP)

RFP ID: Manhole Lining

Issue Date:
January 15, 2026

Proposal Due Date:
February 4, 2026

Issued By: City of St. Johns

RFP ID: Manhole Lining

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Proposal Due Date: February 4, 2026, 2:00 PM

Delivery of Submissions:

By Mail:

City of St. Johns
100 E. State St.
Suite 1100
P.O. Box 477
St. Johns, MI 48879
Attn: Mindy Seavy
Re: Manhole Lining

Hand-Delivery:

100 E. State St.
Suite 1100
St. Johns, MI 48879
Attn: Mindy Seavy
Re: Manhole Lining

Project Description:

This project consists of the inspection, preparation, and rehabilitation of existing sanitary sewer manholes through the installation of a spray-applied manhole lining system. The intent of the project is to restore structural integrity, eliminate infiltration and exfiltration, and extend the service life of the manhole structures.

All work shall be performed in accordance with the **Project Specifications contained in the attached document**, which governs materials, installation methods, quality control, and acceptance requirements.

The project is anticipated to include **approximately 315 vertical feet of manhole lining across an estimated 30 manholes**. These quantities are approximate and may increase or decrease slightly based on final bid results.

Pre-Construction Inspections

Pre-lining manhole inspection videos and written condition reports will be provided to the awarded contractor after the project is awarded.

Post-Construction Inspections

All lined manholes shall be inspected following completion of lining using 360-degree video inspection equipment to verify workmanship, lining coverage, and overall quality.

The contractor shall provide a separate line-item, per-manhole cost for performing the post-lining 360-degree video inspection and for furnishing all associated video files and inspection reports to the Owner. All post-lining inspection documentation shall be submitted as part of the project close-out package.

CORROSION AND INFILTRATION PROTECTION COATING

Issued for Bid
St. Johns, MI
Manhole Lining
01/2026

PART 1 – GENERAL

1.01 SCOPE

- A. This section covers work, materials and equipment required to install a monolithic multi-layer/component concrete manhole lining system to provide infiltration and corrosion protection.
- B. This section includes procedures for surface preparation, cleaning, application and testing.
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1.02 SUBMITTALS

- A. Submit technical data sheets on each product used, including ASTM test results indicating the product conforms to and is suitable for its intended use per these specifications.
- B. Material Safety Data Sheets (MSDS) for each product used.
- C. Submit technical data sheets and project specific data for repair materials to be top coated with the coating products including application, cure time and surface preparation.
- D. Provide samples of the cured system including stepped samples showing stages of multi-layer/component applications.
- E. Applicator Qualifications:
1. Manufacturer and Contractor specializing in the performance of work specified in this section with a minimum of three (3) years documented experience and 3,000 vertical feet of application.
 2. Three (3) references of municipal sanitary sewer projects successfully performed within the past three years for projects similar in size and scope.
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1.03 QUALITY ASSURANCE

- A. Coating material shall be produced in an ISO 9001 certified facility.
 - B. Furnish materials of quality required by ASTM standards or other approved standards and specification.
 - C. Coating products shall be capable of being installed and curing properly within the specified environments. Coating products shall be resistant to all forms of chemical or bacteriological attack found in municipal sanitary sewer systems and capable of adhering to the substrates and repair products.
 - D. Coating products must have been tested by and passed ASTM G210-13 Severe Wastewater Analysis Testing (SWAT).
 - E. Repair product(s) shall be fully compatible with coating product(s) including ability to bond effectively to the host substrate and coating product(s) forming a composite system.
 - F. Contractor shall utilize equipment for the spray application of the coating product(s) which has been approved by the coating product manufacturer; and, Contractor shall have received training on the operation and maintenance of said equipment from the coating product manufacturer.
 - G. Contractor shall be trained by, or have their training approved and certified by, the coating product manufacturer for the handling, mixing, application and inspection of the coating product(s) to be used as specified herein.
 - H. Contractor shall be trained in the use of testing or inspection instrumentation and knowledgeable of the proper use, preparation and installation of the coating products to be used as specified herein.
 - I. Provide guarantee against defective materials and workmanship in accordance with the requirements of these specifications.
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1.04 DELIVERY, STORAGE AND HANDLING

- A. Delivery and Handling: Prevent moisture damage and contamination of materials during delivery and handling.
 - B. Storage: Store materials in undamaged condition with seals and labels intact as packaged by the manufacturer.
 - 1. Liquid products shall be protected from freezing while being stored.
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1.05 DEFINITIONS

A. Cleaning: Removal of sand, dirt, roots, grease and all other solid or semi-solid material from the structures as required for proper application of patching and coating products.

B. Faults: Leaking joints, cracks, breaks or other imperfections in the structure.

1.06 JOB CONDITIONS

A. Environmental Requirements:

1. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the Manufacturer. Do not apply the products of this Section to frozen surfaces.
2. Do not apply coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the Manufacturer.

B. Protection:

1. Public Safety: If public safety is endangered during the progress of the rehabilitation work, provide adequate protective measures to protect public pedestrian and vehicular traffic on streets and walkways.

a. Signs, signals and barricades used shall conform to requirements of Federal, State and Local laws, rules, regulations, precautions, orders, and decrees.

2. Existing Facilities Protection: Protect existing structures from damage due to operations associated with work of this Section.
 3. Personnel Protection: It is the responsibility of the Contractor to provide appropriate protective measures to ensure that chemicals are under the control of the Contractor at all times and are not available to unauthorized personnel or animals.
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1.07 WARRANTY

A. Manufacturer and Applicator warrant the liner system against failure for a period of 10 years. "Failure" will be deemed to have occurred if the protective lining fails to prevent the internal deterioration or corrosion of the structure or prevent groundwater infiltration. If any such failure occurs within 10 years of initial completion of work on a structure, the damage will be repaired at no cost to the Owner. "Failure" does not include damage resulting from mechanical or chemical abuse or act of God. Mechanical or chemical abuse means exposing the lined

surfaces of the structure to any mechanical force or chemical substance not customarily present.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. Subject to compliance with requirements, manufacturers that may be used include:

1. OBIC, LLC.
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2.02 PROTECTIVE LINING SYSTEM MATERIALS

A. The protective lining system shall be a multi-layer/component protective lining system, including:

1. Polyurea Adhesion Coating
 2. Polymer Surfacer Layer
 3. Final Polyurea Armor Layer
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2.03 LINER SYSTEM ARMOR LAYER

A. 100% solids, no volatile organic compound (VOC), moisture tolerant, elastomeric polyurea coating to provide infiltration and corrosion protection. Material shall be capable of curing properly given the project site conditions and temperatures conforming to the following minimum physical requirements:

Property	Value
Hardness, D-2240	D 48
Tensile strength, D-412	3315 psi
100% Modulus, D-412	1668 psi
200% Modulus, D-412	1960 psi
300% Modulus, D-412	2650 psi

Property	Value
Tear resistance/Die-C, D-624	417 pli
Ultimate elongation, D-412	395 %
Taber Abrasion, mg loss CS17	15 mg loss
Flexibility, 1/8" mandrel	Pass
ASTM G210-13 SWAT	Pass

2.04 LINER SYSTEM SURFACER LAYER

A. 100% solids, no volatile organic compound (VOC), moisture tolerant, elastomeric polyurethane coating to provide infiltration and corrosion protection. Material shall be capable of curing properly given the project site conditions and temperatures conforming to the following minimum physical requirements:

Product Type	Value
Density (ASTM D-1622)	6-8 pcf
Compressive Strength 1"	130-180 psi
Closed Cell Content	> 94%
Water Absorption	< 0.03 lbs/sqft
Maximum Service Temp	180 deg
Viscosity (A side) @ 72 deg F	675 cps
Viscosity (B side) @ 72 deg F	200 cps
S.W.A.T (ASTM G210-13)	Pass

PART 3 – EXECUTION

3.01 SURFACE PREPARATION

- A. Conduct surface preparation program to include monitoring of atmosphere for hydrogen sulfide, methane, low oxygen or other gases, approved flow control equipment, and surface preparation equipment.
 - B. Surface preparation methods may include high pressure water cleaning, hydro blasting, abrasive blasting, grinding, detergent water cleaning and shall be suited to provide a surface compatible for installation of the liner system.
 - C. Surface preparation method shall produce a cleaned, abraded and sound surface with no evidence of laitance, loose concrete, brick or mortar, contaminants or debris, and shall display a surface profile suitable for application of liner system.
 - D. After the defects in the structure are identified, repair all leaks with a chemical or hydraulic sealant designed for use in field sealing of ground water. Severe cracks shall be “repaired with a urethane-based chemical” sealant. Product to be utilized shall be as approved by owner/engineer prior to installation. Repairs to exposed rebar, defective pipe penetrations or inverts, etc. shall be repaired utilizing nonshrink grout or approved alternative method.
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3.02 REPAIR MATERIALS

- A. Repair materials shall be used to fill voids, structurally reinforce and/or rebuild surfaces. Repair materials shall be compatible with the polyurea coating and shall be applied in accordance with the manufacturer’s recommendations.
 - B. Subject to compliance with the polyurea coating manufacturer’s requirements, the following products shall be acceptable as compatible repair base coat materials for polyurea top coating:
 - 1. A hydraulic cement and/or plug shall be used to stop active infiltration. The hydraulic cement and plug shall be suitable for the polyurea top coating, and shall be approved by the polyurea coating manufacturer.
 - 2. Hydrophobic and/or Hydrophilic polyurethane chemical grouts used to stop active infiltration. The chemical grouts shall be suitable for the polyurea top coating, and shall be approved by the polyurea coating manufacturer.
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3.03 MATERIAL INSTALLATION

A. Application procedures shall conform to recommendations of the manufacturer, including materials handling, mixing, environmental controls during application, safety and spray equipment.

B. Spray equipment shall be specifically designed to accurately ratio and apply the liner system.

C. Application of multi-layer/component liner system shall be in strict accordance with manufacturer's recommendation. Final installation shall be a minimum of ½" (500 mils).

1. Adhesion Layer (not intended to fill small voids)
2. Surfacer Layer (intended to fill voids, bug holes)
3. Armor Layer

3.04 INSPECTION

A. Final liner system shall be completely free of pinholes or voids. Liner thickness shall be the minimum value as described herein (500 mils).

B. Due to the fast gel and set time of the material, thickness of the application can be verified by awl point depth checks into the surface component and physical removal of a small area of the polyurea material. Repair of the test areas to be done immediately after the test.

C. High Voltage Holiday Detection may be used to inspect for pinholes or breaches in the liner system installation.

D. Visual inspection shall be made by the Owner/Engineer. Any deficiencies in the finished liner system shall be marked and repaired according to the procedures set forth by Manufacturer.

E. The manhole may be returned to full operational service after the final inspection has taken place.