



**BOLTON STREET BRICK LINE CURED IN PLACE PIPE  
EVENT NO. 5257**

**SECTION II  
SCOPE OF WORK**

**2.0 DESCRIPTION OF THE PROJECT**

The Bolton Street brick storm line is approximately 102 inches in diameter and was constructed by hand over 150 years ago. The outer wall of this historic culvert is composed of three (3) layers of brick. The portion considered for rehabilitation includes a 1,600 linear foot section of this line that is located between a stormwater manhole in the intersection of East Broad and Bolton Streets and extends east to a stormwater manhole in Bolton Street, just west of Paulsen Street. Due to the length of pipe, condition of the brick in the line, and location, the most economical approach for rehabilitation was determined to be trenchless pipe rehabilitation method. This method refers to the installation of a resin impregnated, cured-in-place-pipe (CIPP) within the existing brick line. A previous repair to a manhole/vault structure on the brick line at East Broad Street provided an enlarged access opening, covered by a twelve foot (12') by twelve foot (12') concrete slab weighing approximately 20,000 pounds for the insertion of felt tubing.

The City of Savannah is requesting proposals for the design and installation of approximately 1,600 linear feet of 102 inch diameter CIPP. There are no other access points along the 1,600 foot section. No additional access points will be considered. All proposals shall meet specifications herein. Inspection of the brick line is mandatory prior to submitting a proposal. Missing bricks in pipe wall and other imperfections of pipe wall must be repaired to ensure uniform lining wall and must be included in proposal price. The cut-in of all existing storm lateral lines shall be included in the proposal price. It shall be noted that the vault is covered by a twelve foot (12') by twelve foot (12') concrete slab with cast in lifting eyes weighing approximately 20,000 pounds. All proposals shall include labor and equipment costs for removing the asphalt and road base material over the slab, lifting the slab from the vault structure, safe storage of the slab, and placement and sealing of the slab on the vault structure once lining is complete. Proposals shall also include restoration of the road base and the asphalt paving. If the slab is damaged during the project it shall be replaced at the expense of the contractor. If the liner installation process includes 'over the hole wet out,' the required equipment footprint shall be included in the proposal. If the required footprint exceeds the City of Savannah right-of-way, it shall be the responsibility of the contractor to temporarily acquire additional area. There are two (2) privately owned vacant lots near the entry vault, north side of the intersection of East Broad and Bolton Street. Contractors may consider pursuing a property rental agreement, if needed. Any rental agreement shall be between the contractor and the private land owner.

A mandatory pre-proposal conference and site visit and walkthrough has been scheduled. The pre-proposal conference will be held at the Purchasing Department, City Hall, third floor, 2 E Bay Street, Savannah, Georgia 31401. The mandatory walkthrough will be held immediately following the pre-proposal conference. Any vendors interested in submitting a proposal must attend both the pre-proposal conference and walkthrough to be considered further. Additionally, interested vendors must bring with them all required personal protection equipment for confined space entry. The City of Savannah will provide traffic control.

No electronic responses will be accepted for this RFP.

## **2.1 CURED-IN-PLACE PIPE SPECIFICATIONS AND SPECIAL CONDITIONS**

The purpose of these specifications is to procure trenchless stormwater line rehabilitation using the cured-in-place-pipe (CIPP) process for the Stormwater Management Department.

The pipeline sections to be reconstructed are generally composed of brick, concrete, and/or terra-cotta. The contractor shall submit a schedule of work to include all work dates, times, and anticipated areas of impact regarding pedestrian and vehicle access restrictions to the owner for approval. Work shall not commence until such time as the contractor's written work schedule has been approved by the owner. All pipe dimensions, footages, and site conditions represented are approximate and are required to be field verified by the contractor prior to beginning any work or ordering the necessary CIPP liners. The City of Savannah shall assume no liability for the incorrect sizing of any CIPP liner. The successful contractor must obtain a right-of-way permit from the City of Savannah Traffic Engineering Department and provide all necessary traffic control devices per the issued permit requirements to access manholes in City streets and rights of way. The Traffic Engineering Department may be contacted by phone at (912) 651-6600. The contractor shall also be responsible for securing necessary right-of-way permits from the Georgia Department of Transportation (GDOT) when working in rights of way that fall under GDOT's jurisdiction.

## **2.2 SECTION A: CLEANING AND INSPECTION**

2.2.1 Light to Moderate Cleaning requiring the removal of sand and/or debris from each section of pipe invert shall be required. All pipeline cleaning required for the installation of the CIPP liners will be included in the contract price. No separate payment shall be made for additional cleaning. Contractors shall be required to field verify cleaning requirements prior to submitting a proposal. Traffic permit requirements for manhole access are the same as those specified in herein.

2.2.2 All debris removed as a result of the cleaning of stormwater lines shall be disposed of in accordance with applicable local, state, and federal law. No separate payment shall be made for costs associated with debris disposal.

2.2.3 The contractor shall conduct a color digitally recorded television inspection of each length of pipe after it is cleaned for the purpose of determining if existing conditions are suitable for the use of the proposed lining process and to document the location of all service lateral connections. The contractor shall submit electronic files or CDs and accompanying type-written hard copy reports noting locations of all known laterals to the project manager for review and approval.

prior to proceeding with liner installation.

- 2.2.4 Following installation of the liner and the reopening of the City specified service connections, the contractor shall conduct a second color digitally recorded television inspection of the completed work. One (1) copy of these electronic files or CDs and accompanying type-written hard copy logs shall be submitted to the project manager for review and approval. Payment shall not be made until the owner has reviewed and approved these electronic files or CDs. The contractor shall submit the electronic files or CDs a minimum of ten (10) days in advance of any payment request to provide the owner sufficient time to review the electronic files or CDs. A type-written report of each line segment showing lateral locations, size, lateral material composition and condition shall be provided with the electronic files or CDs.

### **2.3 SECTION B: STORMWATER REHABILITATION**

- 2.3.1 Trenchless Pipe Rehabilitation refers to the installation of a resin impregnated, cured-in-place pipe within the existing stormwater pipe.
- 2.3.2 It is the intent of this portion of this specification to provide for the rehabilitation of stormwater pipelines by the installation of a resin impregnated flexible felt tube, inverted into the existing stormwater lines utilizing hydrostatic pressure. Curing shall be accomplished by circulating hot water in the liner or by other method approved by the City. The curing method shall be suitable for the resin used in order that the resin is converted into a hard impermeable pipe wall. When cured, the Invert-And-Cure Pipe (ICP) should extend over the length of the inversion in a jointless, continuous, and tight-fitting watertight pipe-within-a-pipe unit. All annular spaces remaining after lining non-circular pipe shall be completely filled using grout approved by the liner manufacturer for the intended application. All labor, materials and equipment required to complete annular space grouting shall be included in the liner price. No separate payment shall be made for annular space grouting. Every effort shall be made to reduce wrinkles in all interior liner surfaces. A smooth interior surface is both expected and desired.
- 2.3.3 Structural requirements: The structural performance of the finished pipe must be adequate to accommodate all internal and external loads over its design life. The oils and greases in stormwater systems penetrate and permeate the microporosity of the pipe interior and inhibit long term bonding of the liner to the host pipe. On this basis, cleaning of the host pipe interior to a condition conducive to proper resin bonding is required. Given that the host pipe's final strength is related to the uniformity and density of impregnation of the liner resin into the host pipe interior surface, liner installation in the absence of proper cleaning and surface preparation will not be allowed. Cleaning and surface preparation of the host pipe shall be accomplished per the liner manufacturer's requirements in order to achieve maximum bonding with the host pipe interior. Resin impregnation at atmospheric pressures allows trapped air and voids to occur which weaken the pipe wall. If reinforcing materials (fiberglass, etc.) are used, the reinforcing material must be totally and completely encapsulated within the resin to assure that the reinforcing material is not exposed either to the inside of the pipe or at the interface of the ICP and the deteriorated pipe.
- 2.3.4 Structural design methods: Design methods are to be derived from generally accepted pipe formulas for various loading conditions and modes of failure. Parameters considered in design shall include, but not be limited to, pipe wall material strength, long-term strength for minimum 50 year design life, earth loads, groundwater loads, condition of existing pipe, geometry of the existing

pipe, and localized loadings or structural defects in the existing pipe. The design will be chosen relative to buckling, stress and deflection failure from external loads and ring tension and deflection failure from internal loads. When the existing pipe is determined to be fully deteriorated and will not offer any support to the ICP, the equation for buckling design will be based upon the equation as described in AWWA-C-950. All equations will be modified to include ovality as a design parameter.

- 2.3.5 Installation standard: The process installation must meet the requirements as described in ASTM F-1216 or ASTM F-1743 with the exception of the gravity pipe leakage testing and the pressure pipe testing which may be performed at the owner's expense. Contractors selecting the ASTM F-1743 or steam curing method of installation shall have extensive verifiable experience in using this method to line large diameter pipe.
- 2.3.6 Flow requirements: All finished rehabilitated pipe, excepting rectangular pipe receiving round liners, shall have at least 100% of the flow capacity of the original pipe before rehabilitation. In lieu of actual measurements, calculated capacities may be derived using a commonly accepted value of Manning "n" coefficients for the original pipe material and a Manning "n" coefficient of 0.009 for a jointless smooth-wall cured-in-place pipe.
- 2.3.7 Continuous structure: The invert-and-cure pipe (ICP) must bridge over breaks and missing sections of the existing pipe, eliminating infiltration, exfiltration, or loss of effluent in the case of pressure pipe. The new pipe-within-a pipe must fit tightly against the old pipe wall and consolidate all disconnect sections into a single continuous conduit. All liners will be extended continuously through connected manholes to insure complete lining of all host pipe and the manhole invert. The crown of the cured liner in the manholes shall then be removed to neat lines by sawing and matching the diameter of the existing manhole riser.
- 2.3.8 Useful life: The cured-in-place pipe must have a minimum design life of 50 years. The minimum design life may be documented by submitting life estimates by national or internationally recognized authorities, otherwise, long-term testing and long-term in service results, minimum ten (10) years, may be used and results extrapolated to 50 years.
- 2.3.9 Materials: All materials which make up the final product will be suitable for service in the environment intended. The final product will not deteriorate, corrode, or lose structural strength in any manner that will preclude meeting the expected design life.
- 2.3.10 Strength enhancement factor: Buckling pressures from external forces will not exceed those forces which cause failure of the cure-in-place pipe in an unrestrained condition. No increase in strength or enhancement will be allowed unless the manufacturer or manufacturer's agent provides documented evidence of testing (from accepted third-party testing organizations) to determine the enhancement by being restrained in an existing pipe. No purely mathematical calculation will be allowed. There must be a minimum of 25 separate tests used to determine this enhancement.
- 2.3.11 Physical strength: The design for the ICP wall thickness will be based on the following strengths as shown in ASTM F-1216 unless otherwise submitted and approved by the City. The wall thickness calculations shall be based on surveyed depth and with design parameters of fully deteriorated pipe including all external, internal and buckling design.

ASTM F-1216

<u>Cure ICP</u>	<u>Standard</u>	<u>Results</u>
Flexural Stress	#101 (Modified ASTM D-790)	4,500 psi
Flexural Modulus of Elasticity	#101 (Modified ASTM D-790)	250,000-500,000 psi

2.3.12 Inspection: The materials and processes must be reasonably available for pre-installation, during installation, and post-installation inspections. The contractor shall assist the owner's representatives in accessing the work to be inspected. Areas which require inspection include, but are not limited to, the following:

1. Materials used in the product should exhibit sufficient transparency to allow visual inspection in order to assure the quality of resin impregnation.
2. To assure the proper re-instatement of service laterals in non-man entry pipe, the pipe wall color of the ICP shall not be of a dark or non-reflective surface which inhibits proper viewing when inspected with closed circuit television.
3. Temperature sensing devices, such as thermocouples, shall be furnished and located by the Contractor between the existing pipe and the ICP to insure complete cure of the entire wall thickness. No separate payment shall be made for the installation or monitoring of these devices. Results of such tests shall be furnished to the Owner prior to final payment.

2.3.13 Testing: For each inversion length designated by the owner in the contract documents or purchase order, one CIPP sample shall be cut from a section of cured CIPP at an intermediate manhole or at the termination point that has been inverted through a like diameter pipe which has been held in place by a suitable heat sink, such as sandbags. Note: In areas with limited space and larger diameter pipes, other sampling techniques may be required. No less than one (1) sample per installed liner section or 500 linear feet, whichever is less, shall be tested. Tests shall be completed by a certified, third party testing facility approved by the owner. No separate payment shall be made for testing. Test results shall be furnished to the owner prior to final payment.

1. The sample shall be large enough to provide a minimum of three specimens and a recommended five specimens for flexural testing and for tensile testing, if applicable. The full CIPP sample wall thickness shall be tested, whenever possible. If the sample is irregular, distorted, or of such thickness that proper testing is inhibited, the wall thickness shall be machined away from the inside pipe face of the sample only. Thus, the test specimen shall be cut from the outside pipe face of the CIPP sample. For specimens greater than ½ inch (12.70 mm) thickness, the width-to-thickness ratio of the specimen shall be increased to a minimum of 1:1 and shall not exceed 4:1. Test specimens shall be oriented on the testing machine with the interior surface of CIPP in tension. The following test procedures should be followed after the sample is cured and removed:
2. Flexural (Bending) properties - The initial tangent flexural modulus of elasticity and flexural stress shall be measured for gravity and pressure pipe applications in accordance with Test Method D 790, Test Method I Procedure A, and shall meet the requirements of these specifications.

3. Tensile properties - The tensile strength shall be measured for pressure pipe applications in accordance with Test Method D 638 and shall meet the requirements of these specifications.
4. Due to the deteriorated condition of the existing pipe, CIPP material shall be applied to a minimum thickness of 21 mm over the entire length of the pipe.

## **2.4 GENERAL REQUIREMENTS**

- 2.4.1 City standards: All work on the project shall conform to all requirements of the City of Savannah's Technical Specifications and General Conditions wherever applicable, except as modified by the requirements of these contract documents or approved in writing by the owner. Examples of items covered by the above include, but are not limited to clearing, earth work, erosion and sedimentation control, storm drainage, and concrete. It is the responsibility of the contractor to obtain copies of these specifications as necessary to ensure the proposal conforms to the specifications herein.
- 2.4.2 Weather: The contractor is responsible for monitoring weather conditions and forecasts and for protecting stored materials, equipment, and all work from being damaged by rain, runoff, or any other weather conditions. Any work or materials that are damaged by weather shall be replaced at the contractor's expense at no additional cost to the City. The contractor shall be solely responsible for and shall indemnify and save harmless the City of Savannah from any and all claims arising from flooding caused by the contractor's actions in the execution of the specified work.
- 2.4.3 Water supply: Arrangements for water to be supplied for the project shall be made by the contractor prior to the project start date. A \$1,000.00 deposit is required to obtain a hydrant meter. Three inch (3") hydrant meter connection fee is \$145.16 and includes 114 units of water. Water usage after 114 units will be charged to the Contractor at a rate of \$1.21/unit. (1 unit = 100 cubic feet or 748 gallons)
- 2.4.4 Site disruption: True trenchless rehabilitation means rehabilitation without any excavation. However, sometimes a difficult access to the deteriorated pipe may require an excavation to provide access. If during television inspection, cleaning, or pipe rehabilitation, the contractor or its agent or subcontractor lodges any piece of equipment including, but not limited to jet hoses and nozzles, root cutting heads, televising equipment, or internal tap removal equipment, the contractor shall excavate and then restore the site to its original condition, at its expense, to remove said piece of equipment. Contractors must obtain a right-of-way permit from the City of Savannah Traffic Engineering Department and provide all necessary traffic control devices per the issued permit requirements to access manholes in City streets and rights of way. The Traffic Engineering Department may be contacted by phone at (912) 651-6600. The contractor shall also be responsible for securing necessary right-of-way permits from the Georgia Department of Transportation (GDOT) when working in rights of way that fall under GDOT'd jurisdiction.

- 2.4.5 Control of water/flow: Structures to be repaired may contain or be submerged in static or flowing water at various times depending on weather and other factors. Diversion of water as necessary to perform the work shall be the sole responsibility of the Contractor. Water flow shall not be stopped or impeded in any stormwater line unless an alternate method approved by the owner for diverting the flow around the affected line segment is in place. The water may not be diverted through any other portion of the City's stormwater system, but should be pumped or diverted through temporary pipes or by other means. If the contractor uses a bypass system to reroute water around any portion of a pipe being lined, the method of diversion must allow for an equal or greater amount of flow as would be possible if the water were to flow freely through the line being blocked by the lining process. The contractor shall submit to the owner for approval the proposed method of diverting water on this project prior to beginning work.
- 2.4.6 Internal reconnections: All laterals, taps, or side connections will be reinstated from inside the rehabilitated pipe at the owner's discretion. Lateral connections found to be inactive per the owner's determination will not be reinstated. In large diameter pipe, side connections may be reinstated internally by hand. In smaller diameter pipe in which man-entry is not possible, side connections must be reinstated internally by suitable television monitored robotic cutting equipment. Excavation to reinstate side connections must be previously approved by the City. No more than one (1) excavation for side connection reinstatement shall be allowed on an entire project unless previously approved by the City. Cross sections of the openings of all laterals, taps and side connections shall be reinstated to at least 90% of the original opening. Mark laterals with lag bolts, metal tags or other appropriate permanent means for potential location and connection prior to or after installation of the liner. The owner shall be provided with a positive means by which to identify non-reinstated laterals in the event they must be reinstated at a later time. All cutting of the newly installed liner shall be accomplished to clean lines and shall insure a tight seal between the lined pipe and the line being "cut-in" or reconnected.
- 2.4.7 Time of construction: Construction schedules shall be submitted to and approved by the City prior to beginning construction. At no time will any service connection remain inoperative for more than a twelve (12) hour period. Any service that will be inoperative for more than twelve hours shall be temporarily connected to a bypass system. The contractor shall notify affected residents and the owner of all inoperative service connections and shall be responsible for any damages incurred as a result of said inoperative connection. The contractor shall notify individual property owners and the owner at least 72 hours in advance of anticipated loss of service. The contractor shall furnish individual property owners and the owner with an estimate of service loss duration at the time of loss, allowing adequate time in this estimate for the work being conducted to be completed.

#### 2.4.8 Submittals

Each bidder shall submit the following:

1. Shop drawings, catalog data, and manufacturer's technical data showing

complete information on material composition, physical properties, and dimensions of new pipe, fittings and annular space grout. Include manufacturer's recommendation for handling, storage, and repair of pipe and fittings damaged.

2. Method of construction and restoration of existing service connections. This shall include:
  - A. Detailed drawings and a written description of the entire construction procedure to install the CIPP liner, bypass drainage flow and reconnect all stormwater service connections.
3. Certification of training for all workers installing the CIPP liner.

2.4.9 Delivery, storage, and handling shall be executed as follows:

1. Transporting handling and storage of the CIPP liner shall be as recommended by the manufacturer.
2. If the new CIPP liner becomes damaged before or during installation, the damaged area shall be repaired as recommended by the manufacturer or replaced as required by the Owner at the Contractor's expense prior to proceeding further with the remainder of the work.
3. Delivery, storage and handling of all other necessary materials shall be as required to prevent damage.

2.4.10 Service connections: All service lateral connections shall be identified and located prior to the pipe insertion to expedite reconnection. Upon commencement, pipe insertion shall be continuous and without interruption from one manhole to another, except as approved by the owner. Upon completion of the liner insertion into the host pipe, the contractor shall expedite the reconnection of services so as to minimize any inconvenience to the City's customers.

2.4.11 Service continuity: The contractor shall be responsible for continuity of stormwater service to each facility and structure connected to the stormwater system specified for rehabilitation in the contract during the execution of the prescribed work. If a stormwater backup occurs resulting in property damage, the contractor shall be solely responsible for clean-up, repair, property damage costs and claims, and shall indemnify and save harmless the Mayor and Aldermen of the City of Savannah from all claims arising from said backup.

2.4.12 Warranty: All work performed under this contract shall be warranted to be free from defects in material and workmanship for a period of five (5) years from the date of acceptance by the owner. If the City determines that the process has failed during the warranty period, the contractor shall perform any and all repairs necessary at no additional cost to the owner.

2.4.13 Safety: The contractor and its agents and subcontractors shall perform their operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving entering and working in confined spaces. The contractor shall indemnify and save harmless the Mayor and Aldermen of the City of Savannah from all claims associated with the injury of the



contractor's employees, agents, or subcontractors involved in the execution of the work.

2.4.14 Payment: Payment shall be based on a unit price per linear foot, per diameter, as measured from manhole center to manhole center in accordance with the proposal pages of this document. All services performed necessary to complete the liner installation shall be included in this price.

2.4.15 Maintenance of the traffic and sequence of operation: The work shall be arranged and conducted in such a manner that it will be performed with the least possible interference to all vehicular and pedestrian traffic. All detours, signage, and traffic control device placement and street closing shall be performed by the contractor in accordance with the current revision of the City of Savannah Manual on Traffic Controls and Temporary Street Construction and Maintenance and the MUTCD. All detours around construction must be reviewed and approved by the City of Savannah Traffic Engineer prior to installation by the contractor. The contractor shall be solely responsible for providing all necessary traffic signs, traffic control devices, maintenance of signs and traffic control devices, police officer assistance, advertising, etc. No separate payment shall be made for traffic control. The contractor shall submit a detour and traffic control plan to the City Traffic Engineer for review and approval prior to commencing any work. The contractor must obtain a right-of-way permit from the City of Savannah Traffic Engineering Department and provide all necessary traffic control devices per the issued permit requirements to access manholes in City streets and rights of way. The contractor shall also be responsible for securing necessary right-of-way permits from the Georgia Department of Transportation (GDOT) when working in rights of way that fall under GDOT's jurisdiction. City of Savannah owned barricades and other traffic control devices shall not be used by the contractor to protect worksites under any circumstances.

## **2.5 INSURANCE REQUIREMENTS**

- (a) Liability. The contractor shall maintain such insurance as will protect him from claims under workers compensation acts and from any other claims for damages to property, and for personal injury, including death, which may arise from operations under this contract, whether such operations are by himself or by any subcontractor or anyone directly or indirectly employed by either of them. Certificates of such insurance shall be filed with the owner, and shall be subject to his approval for adequacy of protection. The contractor shall be responsible for providing adequate limits of insurance when working within property owned by railroads, as established by such railroad company.
- (b) Certificate of Insurance and Endorsements. For each insurance policy required under this contract, the Contractor shall provide a Certificate of Insurance naming the Mayor and Aldermen of the City of Savannah as CERTIFICATE HOLDER and the following endorsements for each policy:
  - i. A waiver of subrogation in favor of the Mayor and Alderman of the City of

Savannah, its agents and/or employees shall also be provided and attached to the Certificate.

- ii. A thirty (30) day cancellation in favor of the Mayor and Alderman of the City of Savannah, its agents and/or employees must be endorsed to the policy and attached to the Certificate.

- (c) Indemnity. The Contractor shall indemnify and hold harmless, the Owner from and against all losses and all claims, demands, payment, suits, actions, recoveries, and judgments of every nature and description brought or recovered against the Contractor by reason of any act or omission of the said Contractor, his agents or employees, in execution of the work or in the guarding of it.

The limits of insurance are as follows:

- 2.5.1 Comprehensive Commercial General Liability - policy covering bodily injury and property damage including premises, operations, products, and completed operations

Limits (or Higher):

General Aggregate:	\$2,000,000
Products Completed Operations Aggregate:	\$2,000,000
Each Occurrence Limit:	\$1,000,000
Personal Injury Limit:	\$1,000,000
Damage to Premises Rented to You:	\$50,000
Medical Expenses:	\$5,000 Any One Person

- 2.5.2 Commercial Automobile Liability - policy covering injury and property damage

Limits:

\$1,000,000 per occurrence and aggregate (minimum)

- 2.5.3 Workers Compensation and Employers Liability (includes coverage all employees, volunteers and others under your direction and supervision)

Limits:

Part A: Workers Compensation:	Statutory
Part B: Bodily Injury By Accident:	\$500,000 Each Accident
Bodily Injury By Disease:	\$500,000 Policy Limit
Bodily Injury By Disease:	\$500,000 Each Employee

- 2.5.4 Commercial Umbrella Policy

Limits (or Higher):

\$5,000,000 Per Occurrence & Aggregate (Minimum)

## **2.6 PROPOSAL FORMAT**

Proposals shall be submitted in the following format and include the following information:

2.6.1 Cover letter stating the intent of the Proposer for this event. Cover letter must include acknowledgement of all addenda issued for this proposal. If addenda are not acknowledged in the cover letter, proposals will not be considered further.

### **2.6.2 STATEMENT OF QUALIFICATIONS**

1. The contractor performing the proposed lining work shall be fully qualified, experienced, and equipped to complete this work expeditiously and in a satisfactory manner and shall be certified and/or licensed as an installer by the lining manufacturer. The contractor shall have successfully installed a minimum of 50,000 linear feet of 24 inch or larger diameter pipe liner and shall have successfully installed a minimum of 10,000 linear feet of 42 inch or larger diameter pipe liner. The contractor shall demonstrate considerable experience in lining large dimension non-circular pipe as documented by verifiable references. The contractor shall also have demonstrated considerable experience in annular space grouting. All required experience listed above shall be verifiable. There shall be no exceptions to these requirements. The City of Savannah reserves the right to reject proposals submitted by those firms not qualified based on the above criteria. The contractor shall submit the following information to the owner in its proposal for review and approval before the proposal will be considered:
  - A. The number of years of experience installing the proposed project liners under Attachment 1.
  - B. The name of the lining manufacturer and supplier for this work and previous work listed under Attachment 1.
  - C. A list of all municipal clients for which the contractor has performed this type of work including contact names, phone numbers, pipe size(s), and linear footage for each listed municipality under Attachment 1A.
  - D. The contractor shall submit a certified statement from the manufacturer that it is a certified and/or licensed installer of the liner under Attachment 1B.
2. The contractor shall be capable of providing the necessary manpower and crews to complete this work without undue delay, and shall be ready and able to begin work within 21 calendar days from the issuance of an

authorized Notice to Proceed.

3. The owner reserves the right to approve or disapprove the contractor, and/or manufacturer based on the submitted qualifications and a follow up interview.

Proposers shall use Response to Contractor Statement of Qualifications (Attachment 1) to respond to requirements above.

4. The contractor must provide evidence of insurability for a project of this type. Include current certificate of insurance including worker's compensation coverage.
5. The contractor must provide evidence of a bonding capacity of \$3,000,000.00 or more.

#### 2.6.3 Municipal Clients and Related Project Experience (Attachment 1B)

#### 2.6.4 PROJECT APPROACH

Detailed narrative description of Contractor's proposed project approach addressing critical project requirements including, but not limited to, the following:

- Coordination with owner and milestones for progress meetings/workshops
- Cost estimating at various project design stages
- Installation methods
- Required installation footprint
- Traffic control plan
- Maintaining project schedule
- Quality assurance

#### 2.6.5 DETAILED PROJECT SCHEDULE

Project schedule and/or Gantt chart for completion of the project, including start and end dates for task or sub-task completion, submittal dates, major project milestones, review periods, and critical path.

Schedule shall include all tasks and milestones necessary to indicate project approach. The proposed schedule will be strictly followed throughout the project duration, and shall only be modified as agreed between the owner and contractor.

#### 2.6.6 HOURLY RATE SCHEDULE

Provide hourly rates for each type and class, (e.g. – project manager, engineer, CAD operator, administrative assistant, etc.) of individual assigned to the project team.

Submit rate schedule on the form provided as Exhibit 2 of Attachment 2. As Exhibit 2 may not capture all necessary staff type and/or class, the contractor shall include the firm's published rate schedule.

Hourly rates shall be fully burdened, including overhead and profit.

## **2.7 FEE PROPOSAL**

Proposer shall submit fees in a separate, sealed envelope per instructions in Section III and signed by responsible party.

## **2.8 MINORITY / WOMAN BUSINESS ENTERPRISE GOALS**

The City of Savannah desires that this project have the strongest possible participation of minority and women-owned business enterprises (M/WBEs), which employ local residents and otherwise support the local economy. M/WBE firms must have a current certification as such by the City of Savannah or an approved certifying agency. Proposers should embrace this goal and demonstrate meaningful local M/WBE participation in the project as follows:

- A. Prime Contractor Level M/WBE Participation – Meaningful MWBE participation may take the form of a teaming agreement, partnership, mentor-protégé relationship, joint venture, or similar relationship wherein the M/WBE partner shares in a significant portion of management responsibility and profit-making potential. The proposer shall:
  - a. Provide names of M/WBE firms that are part of prime contractor bid team.
  - b. Provide a copy of teaming, joint venture or other equivalent agreement(s) between parties on prime contractor bid team setting forth roles and responsibilities and profit-sharing arrangements.
  - c. Describe roles and responsibilities of each company and its employees.
  - d. Provide anticipated percentage of M/WBE/participation for each participant on the team.
  - e. Provide letter of commitment from lead firm, addressed to the City of Savannah, regarding association with each participant on the prime contractor level team.
  - f. Provide letters of commitment from each local M/WBE firm, addressed to the City of Savannah regarding association with lead firm.
  
- B. Sub-Contractor Level M/WBE Participation – The proposer shall provide a written plan for how it will ensure that M/WBE firms have the maximum possible opportunity to participate in prime and second tier sub-contracts that will be available in the completion of this project.
  - a. The plan should include the proposer’s best estimate of the percentage of M/WBE participation (based on subcontract values) it expects to be able to achieve in this project from subcontractors.

- b. The plan shall include estimated dollar amounts of subcontract values that are used to estimate an overall proposal from the proposer.

Points will be allocated based on each respondent's proposed M/WBE goal, with the maximum points of four (4) being awarded to the respondent who submits the highest proposed M/WBE goal at the prime contractor level, and six (6) being awarded to the respondent who submits the highest proposed M/WBE goal at the sub-contractor level. Points will be allocated to each respondent by using the following mathematical calculation:

- i. In the case of the award based on the prime contractor level:

$$\frac{\text{Respondent's Proposed M/WBE Goal}}{\text{Highest Proposed M/WBE Goal}} \times 4 = \text{Weighted Score}$$

- ii. In the case of the award based on the sub-contractor level:

$$\frac{\text{Respondent's Proposed M/WBE Goal}}{\text{Highest Proposed M/WBE Goal}} \times 6 = \text{Weighted Score}$$

No proposals will be deemed non-responsive due to this factor.

## 2.9 LOCAL VENDOR DEFINITION

A bidder or business shall be considered a local vendor if it meets all of the following requirements:

- A. The bidder or business must operate and maintain a regular place of business with a physical address within the corporate limits of the city, and
- B. The bidder or business must at the time of bid or quotation submission, have a current city business tax certificate issued by the city, and
- C. The business owner must serve a commercially useful function, meaning performance of real and actual service in the discharge of any contractual endeavor. The contractor/vendor must perform a distinct element of work for which the business owner has the skills, qualifications and expertise, as well as the responsibility for the actual performance, management and supervision of the work for which he/she has been contracted to perform.

## 2.10 BASIS OF AWARD

Proposals will be evaluated according to the following criteria and weight:

- A. Project team and experience with the design of similar projects (25 points)
- B. Project approach (15 points)

- |  |             |
|--|-------------|
| C. Proposed schedule   | (5 points)  |
| D. Fee proposal  | (40 points) |
| E. M/WBE Participation   | (10 points) |
| F. Local Vendor Participation<br>(Within the City Limits of Savannah and<br>has a City of Savannah Business Tax Certificate) | (5 Points)  |

Proposals shall be evaluated by a selection committee. The selection committee may, at its option, develop a shortlist and/or conduct interviews with those proposers deemed to be most qualified. The City reserves the right to conduct interviews of any or all proposers at the City's discretion. The City also reserves the right to request a best and final offer (BFO) and to re-score evaluations based on the best and final offer. Proposers may be required to provide clarification of their proposal as part of the BFO response.

**2.11 COPIES**

One (1) unbound, printed and signed original and six (6) identical, printed copies, and one (1) electronic copy on a flash drive of the proposal and supporting documents must be submitted in response to the RFP. All responses shall follow the format outlined in this RFP. The electronic and hard copies shall not include the fee proposal.

**2.12 CONTACTS**

Proposers must submit proposals in accordance with the instructions contained in this RFP. All requested information must be submitted with the proposal. Instructions for preparation and submission of proposals are contained in this package. All questions regarding this request for proposal shall be submitted in writing and emailed to the contact listed on the event.

**2.13 FEES**

Each proposer shall submit fees in a separate, sealed envelope based on the detailed listing in Section III of the RFP.

**2.14 ACKNOWLEDGMENT OF ADDENDA**

Vendor is responsible for determining and acknowledging any addenda issued in connection with this RFP. Addenda must be acknowledged in order for proposals to be considered.

**2.15** Those intending to respond to this event, their employees, agents and attorneys, shall not make contact with City Council members, or with City staff outside of the Purchasing Department during the bidding process and evaluation phase.

**SECTION III  
FEE PROPOSAL**

**ALL PROPOSERS MUST BE REGISTERED SUPPLIERS ON THE CITY'S WEBSITE TO BE AWARDED AN EVENT. PLEASE REGISTER AT WWW.SAVANNAHGA.GOV. ELECTRONIC SUBMISSIONS WILL NOT BE ACCEPTED. PROPOSALS MUST BE SUBMITTED ON THIS FORM.**

Fee proposals shall be submitted on this form in a separate sealed envelope clearly marked Fee Proposal for Bolton Street Brick Line Cured in Place Pipe, RFP Event # 5257 and include the name of the proposer. Fee proposals will only be opened if after the initial evaluation, proposer is deemed to be qualified. Fee proposals will then be considered in relation to the qualification points awarded to determine the overall best proposal in terms of fees and qualifications.

Cleaning and Inspection \$ \_\_\_\_\_

Trenchless Pipe Rehabilitation – CIPP per linear foot \$ \_\_\_\_\_

Total Trenchless Pipe Rehabilitation – CIPP 1,600 linear feet \$ \_\_\_\_\_

**TOTAL FEE PROPOSAL** \$ \_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_

PROPOSER: \_\_\_\_\_

SIGNED: \_\_\_\_\_

NAME (PRINT): \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY/STATE: \_\_\_\_\_ ZIP \_\_\_\_\_

TELEPHONE: ( \_\_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_ FAX: ( \_\_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_  
Area Code Area Code

**CONFIRM RECEIPT OF ANY ADDENDA ISSUED FOR THIS PROPOSAL:**

**ADDENDUM #(S)** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**INDICATE MINORITY OWNERSHIP STATUS OF BIDDER (FOR STATISTICAL PURPOSES ONLY): CHECK ONE:**

\_\_\_\_\_ **NON-MINORITY OWNED**  
\_\_\_\_\_ **AFRICAN AMERICAN**  
\_\_\_\_\_ **HISPANIC**  
\_\_\_\_\_ **WOMAN (non-minority)**

\_\_\_\_\_ **ASIAN AMERICAN**  
\_\_\_\_\_ **AMERICAN INDIAN**  
\_\_\_\_\_ **OTHER MINORITY Describe** \_\_\_\_\_



## NON-DISCRIMINATION STATEMENT

The bidder certifies that:

- (1) No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin, or gender in connection with any bid submitted to the City of Savannah or the performance of any contract resulting therefrom;
- (2) That it is and shall be the policy of this company to provide equal opportunity to all business persons seeking to contract or otherwise interested in contracting with this company, including those companies owned and controlled by racial minorities, cultural minorities, and women;
- (3) In connection herewith, we acknowledge and warrant that this company has been made aware of, understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this company;
- (4) That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made as part of and incorporated by reference into any contract or portion thereof which this company may hereafter obtain and;
- (6) That the failure of this company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the City of Savannah to declare the contract in default and to exercise any and all applicable rights and remedies including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and/or forfeiture of compensation due and owing on a contract.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Title**

**PROPOSED SCHEDULE OF M/WBE PARTICIPATION**

All M/WBEs listed **must be certified as a minority-owned or women-owned business** by the City of Savannah or a federally-recognized or state-level certifying agency (such as USDOT, State DOT, SBA 8(a) or GMSDC) that utilizes certification standards comparable to the City of Savannah **prior** to the due date of this bid. **Other business certifications that do not specify majority woman or minority ownership may not be substituted.** **Proof of M/WBE certification from the certifying agency is required to accompany the bid.** A firm that has submitted an application for M/WBE certification but has not been certified is not qualified as a certified M/WBE and will not be recognized as such during the City's evaluation process. To expedite verification, please provide accurate phone numbers for all M/WBEs listed and ensure firms understand contact will be made following bid submittal.

Name of Proposer: \_\_\_\_\_ Event No. \_\_\_\_\_

Project Title: \_\_\_\_\_

**NOTE: Unless certified through the City of Savannah M/WBE Program, proof of M/WBE certification must be attached for all firms listed.**

Name of M/WBE Participant	Name of Majority Owner	Telephone	Address (City, State)	Type of Work Sub-Contracted	Estimated Sub-contract Value	MBE or WBE	Certified ? (Y or N)	Certifying Agency? (City of Sav. or Other)
					%			
					%			
					%			
					%			
					%			
					%			

MBE Participation Value: \_\_\_\_\_ % WBE Participation Value: \_\_\_\_\_ % M/WBE Participation Value: \_\_\_\_\_ %

The undersigned will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah. The Prime's subcontractor that subcontracts work must enter into a formal agreement with the tier subcontractor identified herein for work listed in this schedule. The Prime may count toward the goal any tier of M/WBE subcontractors and/or suppliers that will be utilized in the contract work. However, when an M/WBE subcontracts part of the work, the value of the subcontracted work may **only** be counted toward the goal **if the tier subcontractor is an M/WBE**. Any work an M/WBE firm subcontracts to a non-M/WBE firm **will not count toward the M/WBE goal**. It is the responsibility of the Prime contractor to advise all M/WBEs of this requirement and to ensure compliance by subcontractors.

**Joint Venture Disclosure**

If the prime bidder is a joint venture, please describe the nature of the joint venture, the level of work and the financial participation to be provided by the Minority/Female joint venture firm in the space provided below.

Joint Venture Firms	Level of Work	Financial Participation

Printed name (company officer or representative): \_\_\_\_\_

Signature: \_\_\_\_\_ Date \_\_\_\_\_

Title: \_\_\_\_\_ Email: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

*The Minority/Women Owned Business Office is available to assist with identifying certified M/WBEs. Please contact the M/WBE Office at (912) 652-3582. The City of Savannah's certified M/WBE registry is posted on its website @ [www.savannahga.gov](http://www.savannahga.gov).*

## Developing a Strong M/WBE Participation Plan

### *Key facts every bidder/proposer needs to know prior to developing their M/WBE Participation Plan:*

1. All bidders/proposers must submit a "Proposed Schedule of M/WBE Participation" which identifies the minority and/or woman-owned companies that have agreed to participate in the project if awarded. All companies listed on the form must be certified as either minority-owned and controlled or woman-owned and controlled. The City does not accept a company's "self-identification" as minority or woman-owned.
2. **Proof** of M/WBE certification from the certifying agency is required to accompany the bid; and certification must have been completed by the City of Savannah, a federally-recognized or a state-level certifying agency (USDOT, State DOT, SBA 8(a) or GMSDC) utilizing certification standards comparable to the City of Savannah.
3. The certification must have been approved prior to the due date of this bid. A firm that has submitted an application for certification but has not been certified will not be counted toward the M/WBE goal.
4. The M/WBE Office will be contacting all M/WBE firms included in the bidder's M/WBE Plan to confirm each: a) was contacted by the bidder/proposer; b) performs the type of work listed; and c) agreed to participate.
5. To expedite the verification process, bidders/proposers need to: provide accurate phone numbers for all M/WBEs listed; ensure M/WBEs know to expect to be contacted by phone and email; request M/WBEs be accessible during the critical period before bid-opening; and advise M/WBEs that City staff must receive the M/WBE's confirmation that the firm agreed to participate in the bid/proposal in order for the prime contractor to receive credit toward their proposed M/WBE participation goals.
6. If a proposed M/WBE cannot be confirmed as certified, performing the type of work described or agreeing to participate, the bidder/proposer will be notified and given a pre-determined period to submit a correction. If an M/WBE still cannot be confirmed or replaced, the proposed percentage of participation associated with the unverified M/WBE firm will not be counted and will be deducted from the overall proposed M/WBE goal.
7. Any tier of M/WBE subcontractors or suppliers that will be utilized in the contract work may count toward the MBE and WBE goal as long as the tier subcontractors/suppliers are certified M/WBEs. Work that an M/WBE subcontracts to a non-M/WBE firm does not count toward the M/WBE goal.
8. M/WBEs must perform a "**commercially useful function**" which is the provision of real and actual work or products, or performing a distinct element of work for which the business has the skills, qualifications and expertise, and the responsibility for the actual management and supervision of the work contracted.
9. Per the *Proposed Schedule of M/WBE Participation* "the undersigned (bidder/proposer) will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah." **This signed commitment is taken seriously by the City**, so do not list M/WBEs you do not plan to utilize. Any proposed changes must be pre-approved by the M/WBE Office, be based on legitimate business-related reasons, and still meet the M/WBE participation goals per the City's contract.
10. A bidder who is a certified M/WBE may count toward the goal the portion of work or services on a City contract that is actually performed by the M/WBE, including: the cost of supplies/materials purchased or equipment leased for contract work, fees for bona fide services such as professional or technical services, or for providing bonds or insurance specifically required for the performance of a City contract.
11. If awarded the contract, the MWBE Office will be reviewing your company's subcontracts, invoices and payment records to substantiate the completion of work and payment of M/WBEs. If the prime contractor is an M/WBE that is being included in its M/WBE goal, the prime contractor must maintain records that will be inspected to prove the portion of work performed, cost of work, and payments to the prime company.
12. Most bids for goods and materials do not have specific MWBE goals established for the contract. If no goals are included in the scope of work or General Specifications, you are not required to submit MWBE participation but encouraged to do so when the opportunity is available. The City maintains this information for statistical purposes only and it is not reflected in the award decision.

**ATTACHMENT 1  
CONTRACTOR STATEMENT OF QUALIFICATIONS**

Contact Information

Provide information for a Principal Owner or Corporate Officer representing the prime contractor or joint venture that can be contacted for additional information:

Name of Firm/Company: \_\_\_\_\_

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

Name of Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Phone # \_\_\_\_\_ Fax # \_\_\_\_\_

E-mail Address \_\_\_\_\_

**A. General Information (Prime Contractor)**

Year Firm Established: \_\_\_\_\_ DUNS Number: \_\_\_\_\_

Type of Ownership: \_\_\_\_\_

Location of office where design work will be performed: \_\_\_\_\_

Number of personnel at office performing the work to provide services for the project:

Registered Engineers: \_\_\_\_\_

Design Engineers: \_\_\_\_\_

Draftsmen (CAD Tech): \_\_\_\_\_

Licensed/Cert. Staff: \_\_\_\_\_

Clerical Staff: \_\_\_\_\_

Total number in organization: \_\_\_\_\_

If your firm were selected for the proposed project, would your company's services be available within 21 days of issuance of Notice to Proceed? If not, indicate length of delay:

Yes: \_\_\_\_\_ No: \_\_\_\_\_

Could your firm provide continuous and uninterrupted services until the project is completed?

Yes: \_\_\_\_\_ No: \_\_\_\_\_

Please explain your approach to ensure this is possible:

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



Project Manager shall remain with the Project throughout the term of the A/E Agreement with the Owner. The Project Manager shall not be replaced or substituted without permission of the Owner. If the proposed Project Manager was not involved directly in at least three (3) of the projects listed in response to the "Related Project Experience" information request, please provide a discussion of why the project manager is very capable of managing this project and include as an attachment to the Project Manager's resume.

**LABEL AND INCLUDE ORGANIZATIONAL CHART AS ATTACHMENT 3.**

D. Resumes of Key Personnel

Provide the information requested in **Attachment 4** for each key person who shall participate in the contract. *If existing resumes for team members are provided, Attachment D will still be required*

Group entries by firm, with personnel of the prime consultant or joint-venture partner firms first. To successfully complete the form, please note that the following information must be provided:

Name, title, and role in project team

Total years of relevant experience and total years of relevant experience with current firm

Name, city and state of the firm where the person currently works, which must correspond with one of the firms listed in Attachment B (Project Team Data)

The highest relevant academic degree(s) received and the area(s) of specialization for each degree

Current relevant professional registration(s) in the United States

Other relevant professional qualifications relating to this project such as publications, organizational memberships, training, awards, etc.

The projects which the individual is currently obligated to spend at least four (4) hours per week and an estimate of the time the team member will be available during the active design phase of this project.

Up to four (4) relevant, projects in which the individual had a significant role that demonstrates the person's capability relevant to his or her role in the proposed project. If any of the professional services or construction projects are not complete, indicate so in the project description response.

E. Lining manufacturer and supplier for this project and previous work

Lining manufacturer: \_\_\_\_\_

Supplier: \_\_\_\_\_

F. Municipal Clients and Related Project Experience

List of all municipal clients for whom the Contractor has performed this type of work including contact names, phone numbers, pipe size(s) and linear footage for each listed municipality in **Attachment 1A**.

G. Certified statement from manufacturer

Attach a certified statement from the manufacturer that the contractor is a certified and/or licensed installer of the liner. Certified statement shall be provided under **Attachment 1B**.

**Attachment 1A**  
**Municipal Clients and Related Project Experience**

<u>Name of Municipality</u>	<u>Contact Name</u>	<u>Contact Number</u>	<u>Pipe Sizes &amp; Linear Footage</u>

**Attach related project experience descriptions to this sheet.**



**Attachment 1B – Certification from Liner Manufacturer**

**Attach certification from liner manufacturer to this sheet.**

**Attachment 2 – Proposed Project Team Data**

Please complete the following form for all members of the proposed project team (firms). Should additional pages be required, attach additional copies of this form.

Firm Name: \_\_\_\_\_ M/WBE Status \_\_\_\_\_ Relationship: Prime \_\_\_\_\_ Joint-Venture Partner  
\_\_\_\_\_ or Sub-Contractor \_\_\_\_\_ Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Role in this Contract: \_\_\_\_\_

\_\_\_\_\_

Firm Name: \_\_\_\_\_ M/WBE Status \_\_\_\_\_ Relationship: Prime \_\_\_\_\_ Joint-Venture Partner  
\_\_\_\_\_ or Sub-Contractor \_\_\_\_\_ Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Role in this Contract: \_\_\_\_\_

\_\_\_\_\_

Firm Name: \_\_\_\_\_ M/WBE Status \_\_\_\_\_ Relationship: Prime \_\_\_\_\_ Joint-Venture Partner  
\_\_\_\_\_ or Sub-Contractor \_\_\_\_\_ Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Role in this Contract: \_\_\_\_\_

\_\_\_\_\_

### **Attachment 3 – Organizational Chart of Project Team**

Attach the Organizational Chart for the proposed project team behind this page.

**Attachment 4 – Resumes of Key Personnel**

Attach resumes for the proposed project team behind this page.