City of Weslaco

"The City on the Grow"

David Suarez, Mayor
John F. Cuellar, Mayor Pro-Tem, District 2
David R. Fox, Commissioner, District 1
Olga M. Noriega, Commissioner, District 3
Gerardo "Jerry" Tafolla, Commissioner, District 4
Lupe V. Rivera, Commissioner, District 5
Fidel L. Peña, Commissioner, District 6

Leonardo Olivares, City Manager

CITY OF WESLACO

Invitation for Bids

The City of Weslaco hereby requests sealed Bids for the following:

Sanitary Sewer Manhole Rehab on 18th Street = RFB No. 2014-15-02

Sealed Bids addressed to Homer Rhodes, will be accepted at the Weslaco City Hall Purchasing Office, 255 S. Kansas Avenue, Weslaco, Texas 78596, until **3:00 p.m.** on **November 7, 2014**, at which time they will be opened and read aloud. Please mark envelope, Sealed Bid **" Sanitary Sewer Manhole Rehab on 18th Street, RFB No.: 2014-15-02."**

An informative, non-mandatory Pre-Submittal Conference meeting followed by a Walk –Through will be held at 3:00 pm on October 30, 2014 at Weslaco City Hall – Purchasing Conference Room C, located at 255 S. Kansas Avenue, Weslaco, Texas.

Potential Respondents are advised that the bid documents can be downloaded from the City of Weslaco web page address: **www.weslacotx.gov**, and may also be secured at the Weslaco City Hall Purchasing Office, 255 S. Kansas Avenue, Weslaco, Texas 78596, or by calling 956.447.2240. Be advised that if your company is contemplating on bidding this project you must contact the Purchasing Office, so that any changes/additions via addendum form can be forwarded to your company. (Please include your company name, address, e-mail, telephone and fax, and contact person). **No electronic bids will be accepted.**

The City of Weslaco reserves the right to accept or reject any or all bids, to waive any informalities, and to accept the bid to be the best and most advantageous to the City and to hold bids for a period of forty-five (45) days without taking action, for the purpose of reviewing the bids and investigation of Respondents' qualifications prior to bid award. Bids submitted past the aforementioned date and time will not be accepted.

City of Weslaco

Homer Rhodes,
Purchasing Office

VENDOR'S NOTICE OF INTENT TO SUBMIT A BID

If you intend to submit a bid for **Sanitary Sewer Manhole Rehab on 18th Street** with the City of Weslaco as outlined in the specifications, please indicate your intention by signing, dating, and returning this form to the address below prior to **November 7, 2014** so that you may receive any addendums to the specifications should the need arise.

Homer Rhodes
City of Weslaco
Purchasing Office
255 S. Kansas Avenue
Weslaco, Texas 78596
Phone: 956.447.2240
Fax: 956.969.8452
hrhodes@weslacotx.gov

Name: _____ Signature: _____
(print / contact person)

Title: _____ Company/Agency: _____

Mailing
Address: _____ City/State/Zip: _____

Phone: _____ Fax: _____

Email Address: _____

Bid No.: 2014-15-02

Solicitation Overview

The City of Weslaco is soliciting qualifications for:

TITLE: Sanitary Sewer Manhole Rehab on 18th Street
RFB Number: 2014-15-02
Due Date: 3:00 p.m., November 7, 2014
Location: City of Weslaco, Purchasing Division
255 S. Kansas
Weslaco, Texas 78599

Pre-Submittal Conference:
Date: October 30, 2014
Time: 3:00 p.m.
Location: City Hall, Purchasing Office Conference Room A
255 S. Kansas
Weslaco, Texas 78599

This conference is recommended, but not mandatory

Public Opening of Submittals:

There will be a public opening of submittals in the Purchasing Division conference room immediately following the submission due time/date. Only the names of submitters will be read aloud. Interested parties are invited to attend.

Written Questions:

Submit written questions to:
Homer Rhodes, Purchasing Agent at hrhodes@weslacotx.gov
David Salinas, Utilities Director at dsalinas@weslacotx.gov
Trinidad Cantu, Assistant Utilities Director at trinidad.cantu@weslacotx.gov
Questions may be submitted through 3:00 p.m., October 30, 2014.
No verbal questions will be accepted.
Questions of a substantial nature will be addressed in an addendum, posted on the City's Purchasing Web page for all interested parties.

CEMENTITIOUS LINING FOR SEWER STRUCTURES

PART - GENERAL

1.1 INTENT

A. It is the intent of this Specification to provide for the rehabilitation of complete sewer structures suffering from minor structural deterioration and/or infiltration/exfiltration via the installation of a cementitious liner.

1.2 SCOPE OF WORK

1.3 MINIMUM QUALIFICATIONS

A. Application of lining materials shall be performed by operators familiar with the handling of the products and materials involved and equipment employed. CONTRACTOR's foreman and applicator(s) shall have a minimum of 3 years experience in the spray application of concrete/cementitious products and provide resume.

B. requested by OWNER, CONTRACTOR shall provide to the satisfaction of OWNER certification from the lining material manufacturer that CONTRACTOR's personnel have been adequately trained in the application of manufacturer's product(s). Such certification shall describe manufacturer's training program and, if applicable, licensing policies and procedures for installers

PART 2 - PRODUCTS

2.1 SEWER STRUCTURE LINING

A. CONTRACTOR shall furnish and install manhole patching and surface coating materials in all structures designated to receive rehabilitation by lining interior. CONTRACTOR shall not perform patching and sealing activities in any structure designated for same when the structural integrity of the structure has been severely compromised. If, in the opinion of CONTRACTOR, any structure designated to be lined has lost its structural integrity, in whole or in part, CONTRACTOR shall immediately notify OWNER. OWNER will assess the condition of the structure and provide written instruction to CONTRACTOR on how to proceed.

PART 3 – EXECUTION

3.1 INSTALLATION

A. CONTRACTOR shall remove all foreign materials and matter from the interior of the structure. Cleaning, surface preparation, and material removal activities shall be accomplished in strict accordance with the written instructions of the manufacturer of the patching and lining products; however, CONTRACTOR shall be required to make additional effort such as high pressure water blast, sandblast, acid wash or combination thereof at no additional cost to owner if manufacturer's written instructions prove insufficient to provide a thoroughly clean surface prior to application of patching and lining materials. CONTRACTOR shall take any and all necessary precautions to prevent debris from falling into the manhole. Precautions may include the use of debris catchers which shall be inserted in the bottom of the structure prior to making reconstructive repairs. This precaution may also be required for lining work provided it does not interfere with the application and installation of lining materials. Regardless of the method used, CONTRACTOR shall provide a positive means of preventing debris from collecting in the bottom of the structure and entering the sewer lines. All debris removed from the interior surface of the structure shall be removed and disposed of by the CONTRACTOR at his expense.

B. After surface preparation and prior to the application of patching and lining materials, CONTRACTOR shall stop all visible points of infiltration by applying a rapid setting hydraulic cement based product with the following minimum characteristics:

1. Designed to stop leakage of water under pressure and slow seepage of water through openings in concrete and masonry surfaces.
2. Maximum initial set time of 2 minutes (70°F).
3. Minimum compressive strength of 4000 psi at 28 days (ASTM C109).
4. Zero percent length change at 7 days (ASTM C157).

This product shall be applied in strict accordance with the manufacturer's specifications.

C. CONTRACTOR shall patch structure walls in areas where large voids exist (i.e., missing bricks, around steps, frames and pipes). CONTRACTOR shall remove all cracked or disintegrated material from the area to be patched exposing a sound subbase. CONTRACTOR shall apply a high early strength cementitious patching mortar with the following minimum characteristics:

1. Designed for patching openings in horizontal, vertical and overhead concrete and masonry surfaces.
2. Maximum initial set time of 60 minutes (70°F).
3. Minimum compressive strength of 6000 psi at 28 days (ASTM C495) gaining 85% of its compressive strength within 7 days.
4. Shear bond to concrete of 150 psi at 28 days.

This product shall be applied in accordance with the manufacturer's recommendations for surface preparation and cure/set times prior to performing lining activities.

D. CONTRACTOR shall apply a high density cement based coating with the following minimum characteristics to the interior surfaces in the structures:

1. Designed for application on horizontal, vertical and overhead concrete and masonry surfaces.
2. Traffic bearing within 24 hours of application.
3. Water resistant/waterproof.
4. Minimum compressive strength of 6000 psi at 28 days (ASTM C495).
5. Minimum flexural strength of 650 psi at 28 days (ASTM C78).
6. Zero percent length change (ASTM C157) and shrinkage (at 90% relative humidity (ASTM C596).

Materials shall be applied to form a smooth continuous surface to the original configuration of the manhole wall. All products shall be furnished, mixed, applied and allowed to cure in strict accordance with manufacturer's recommendations. All surface coating materials shall be applied to a finished thickness of the completed work of a minimum of one inch (1") with an allowable variance of + or - 10 percent.

3.2 TESTING AND ACCEPTANCE

A. Any structure which fails testing shall be repaired by methods approved by the OWNER at CONTRACTOR'S expense, and retested as required by OWNER.

B. After all work is completed, CONTRACTOR shall provide OWNER with color photographs showing both the pre- and post-installation conditions.

3.2 MEASUREMENT AND PAYMENT

A. Payment for structure rehabilitation via interior surface lining shall be made *per vertical foot per diameter* in accordance with the unit prices set out in the CONTRACTOR'S Proposal for each structure receiving lining treatment and shall include the cost of all labor, equipment, materials, safety, surface preparation, patching, installation, testing and all incidentals necessary to provide a complete work in accordance with this Specification.

4.0 INSURANCE REQUIREMENTS

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

AMOUNT OF INSURANCE

A) Comprehensive General Liability:
Bodily injury or Property Damage -- $1,000,000
each occurrence and general aggregate

B) Automobile and Truck Liability:
Bodily Injury or Property Damage -- $1,000,000
each occurrence and general aggregate

Comprehensive General Liability coverage and Automobile and Truck Liability coverage may be met with a combination of coverage including excess and umbrella liability coverage.

TYPES OF INSURANCE FOR CONTRACTOR

Purchase and maintain the following types of insurance:

A) Full Workers Comprehensive Insurance coverage for all people employed by the contractor to perform work on this project. This insurance shall be the amount of $500,000 for each accident illness or disease or such other amount that may be required by the most current laws of the State of Texas, whichever is greater.

B) Comprehensive General Liability Insurance covering bodily injuries and property damage shall also include coverage for:

1) Injury to or destruction of wires, pipes, conduits, and similar property located below the surface of the ground, whether public or private;
2) Collapse of or structural injury to any building or structure except those on which work under this Contract is being performed;
3) Contractual liabilities related to bodily injury and property damage.

C) Automobile and Truck Liability covering bodily injury and property damage covering the operation of all motor vehicles and equipment, whether or not owned by the Contractor, being operated in connection with the prosecution of the work under this Contract.

D) Product and Completed Operations coverage to be included in the amounts specified above for Comprehensive General Liability.

EVIDENCE OF INSURANCE

As evidence of insurance coverage, the Owner may, in lieu of actual policies, accept official written statements from the insurance company certifying that all the insurance policies specified below are in force for the specified period. The Contractor shall submit evidence of insurance to the Owner at the time of execution of the Service Contract. Written notice shall be given to the City of Weslaco, TX at least thirty (30) days prior to cancellation or non-renewal of such insurance coverage.

MANHOLE REHAB SPECIFICATION

Product Application Procedure

Micro Silica Cementitious Spray Applied Structural Repair Liner for Manhole Rehab

Overview of Application of Manhole Mortar

Surface of preparation is the first step in a successful application of Manhole Mortar product. Surface shall be hydro blasted to clean, remove loose debris, and to etch the surface back to solid substrate up to *W'* anything beyond *W'* is not surface prep but hydro demolition a different scope of work. Once that is completed the next step is to moisten the surface of the substrate with water just enough to be damp or SSD Saturated Surface Dry. Then the structure is ready to have Manhole Mortar applied to it. Once all gases have reached a safe level naturally or by supplied fresh air the Nozzelmen shall conform to OSHA confined space regulations and lowered into place to be able to start spray applying the product to the substrate surface at its proscribed thickness not to exceed 4 inches in a single application. Once surface area has been completely sprayed by the Nozzelmen it will then be steel trowel out having a sealed smooth surface. If a top coating of Epoxy is to be applied to this surface it will receive a brushed tooled finish to allow the epoxy to anchor onto it (see epoxy manufactures recommendation, ASTM, or SSPC standards). Once all these steps have been executed properly the mortar will have already begun to cure and will increase in strength within 24 hours, and peak at 28 days. In order to be considered an approved equal product must meet or exceed physical properties. The information subsequent to this paragraph goes into further technical details of the
entire process which conform to ASTM guidelines for using a cementitious liner system to rehab manholes.

Surface Preparation:

5.4 *Surface Cleaning Procedures:*
5.4.1 *High Pressure Cleaning-Properly* cleaning the surface of the structure is critical to the success of this rehabilitation method. Use a high-pressure washer delivering a minimum of 3,500 psi (2413 MPa). A minimum of two and a half gallons per minute (9.46 litres per minute) should be delivered through the spray tip. The spray tip should be kept between 6 and 12 in. (15.24 and 30.48 em) from the surface and be held at an angle between 45° and 90° to the surface being cleaned. The spray tip should be directed across the surface at a speed of no more than one foot per second (0.3 metres per second). If the surface is especially dirty or greasy, cleaning agents may be added to the pressure washer water or the water may be heated. When hot water is required, should be heated to 210°F (99°C). Care should be taken to clean the frame sealing surface where the lid fits into the frame, removing any debris or other materials that negatively impact the lids ability to seal against the frame. Cleaning should begin with the frame surface and progress down to and include the bench. A rotating spray nozzle may be used for cleaning, if it meets pressure and flow requirements. Care should be taken to avoid further structural damage to the existing surface. Prepare surfaces to be repaired by water blasting, abrasive blast, hand or power tool to remove unsound concrete, contaminants, dirt, and/or debris.

Mixing of Prepackaged Cementitious Repair Materials

6.1 The applicator shall bear complete responsibility for mixing of the materials, applying, and finishing ofthe sewer manhole repair system.
6.1.1 The prepackaged cementitious liner material should be mixed with water in accordance with the manufacturer's recommendations. Tempering of the material above the manufacturers published limits should not be allowed.
6.1.2 Use clean and potable water for mixing.
6.1.3 No modifications or changes should be made to the product without prior written approval of the manufacturer.
6.1.4 During hot weather, the cementitious liner material should be mixed at temperatures below 90°F (32.2°C) in order to avoid rapid loss of workability, to decrease water evaporation, and to prevent premature set time. Retarding admixtures Type A, B, or D that meet Specification C 494/C 494M may be used to allow work in hotter weather. Apply admixtures in accordance with ACI 305R-99 recommendations for hot weather conditions.
6.1.5 If work is to be performed near 40°F (4.4°C), preheat the water and keep prepackaged material warm. The mix should be kept near 70°F (21.1°C). Apply in accordance with ACI 306R-88 recommendations for cold weather concreting. Some liner materials are

MANHOLE REHAB SPECIFICATION

Product Application Procedure

Micro Silica Cementitious Spray Applied Structural Repair Liner for Manhole Rehab

capable of setting in cold weather; consult Southern Trenchless Representative for suitability.

Application of the Cement Liner

7.1 *Spray Application-Manual Surface Sealing:*
7.1.1 Dampen the manhole wall surface. Surface must be damp without noticeable free water droplets or running water (surface, saturated, dry). Spray or apply the cementitious liner
material to a uniform thickness as specified. Use a hand trowel to hand work and compact the manhole cementitious liner material into all the voids and crevices but do not over trowel. Allow the cementitious liner material to set as recommended by the manufacturer.
7.1.2 Spray the cementitious liner material to a nominal thickness of ½ in. (1.25 em) in one or more passes. The thickness of the cementitious lining material applied to the surface depends on a wide array of variables. These variables include overall condition of the manhole, depth, construction materials, location, dynamic traffic load, source and state of corrosion, diameter, hydrostatic pressure, soil type, and any other factors that might impact the design of the cementitiousliner. The design engineer should determine appropriate liner thickness and liner material properties and may be prepared to include the addition of protective coatings or other methods used to limit or eliminate corrosion factors. Use a wet gauge to measure applied cementitious liner material thickness at three sections of the manhole: the cone/corbel section, middle of barrel, and the barrel near the invert. The liner shall be even and uniform with a troweled, brushed, or natural finish.
7.1.3 Not all manufacturers recommend the use of a protective coating over the cementitious liner material. If the liner is to receive a top coating, then an anchor tooth finish is recommended and shall be free of curing or similar compounds. For dry gunite applications, firish in accordance with ACI 506R, using the recommended trowel.
7.1.4 Apply the prepackaged cementitious liner material from the top of the manhole down to the bench. Overlay the bench with a gradual slope from the wall to the edge of the channel. The wall and bench intersection should have a rounded and uniform radius. The thickness of the bench shall be no less than ½ in. (1.25 em) at the edge of the channel and shall increase in the direction of the wall so as to provide the required slope.
7.2 *Spray Application-Centrifugal Process:*
7.2.1 Position the high-speed, bi-directional, rotating applicator within the center of the manhole at the lowest point
desired for the new wall and commence pumping the mixed prepackaged cementitious liner material. Man-entry may be required to assure the lining has been effectively applied, as on the underside of any brickwork or around laterals. As the cementitious liner material begins to be centrifugally cast evenly around the interior, retrieve the applicator head at the prescribed speed for applying the thickness that has been selected. Controlled multiple passes in both clockwise and counterclockwise directions are made until the desired thickness is attained.
7.2.2 If the procedure is interrupted for any reason, simply arrest the retrieval of the applicator head until flows are recommenced. Verify the desired thickness with a wet gage. The liners shall be even and uniform with a brushed or natural finish. If the liner is to receive a top coating refer to 7.1.3.
Benches and channels are finished by hand as in 7.1.4.

Quality Assurance

Since the nozzleman is a key element to quality in the shotcrete process the applicator performing this work must hold an ACI Nozzleman Certfication and be an employee at the applicator firm. The name and certification ID must be submitted at the time of bid. Applicator shall also present OSHA confined space credentials at the time of the bid. Credentials, qualifications, and all applicable certifications must also be submitted at the time of the bid in order to qualify the applicator as capable to perform this scope of work. The stated quality assurance requirements described above are obtainable to anyone and help protect the owner from faulty craftsmanship from unqualified firms who do not meet these requirements.

Reference

ACI: American Concrete Institute
ASA: American Shotcrete Association
NASSCO: National Association of Sewer Service Companies
SSPC: The Society for Protective Coatings
NACE: National Association of Corrosion Engineers

COST FACTOR
SHEET

BID No.: 2014-15-02

THIS INFORMATION IN THE OPINION OF THE CITY OF WESLACO PUBLIC UTILITIES DEPARTMENT IS NEEDED TO DETERMINE "REASONABLENESS OF COST" AND IS PART OF THE RANKING CRITIERIA.

ITEM NO.	DESCRIPTION	QTY	UNIT PRICE	TOTAL PRICE
1	Cementitious lining per vertical ft	320	$	$
2	Surface preparation	1	$	$
3	Installation	1	$	$
4	Safety and traffic control	1	$	$
5	Mobilization/demobilization	1	$	$

Total Cost: $_____

RESPONDENTS SHALL ATTEST TO THE FACT THAT THEY HAVE READ AND ARE IN COMPLIANCE WITH ALL THE REQUIREMENTS AS STATED IN ALL OF THE AFOREMENTIONED, BY AFFIXING THEIR ORIGINAL SIGNATURE AND ENTERING OTHER INFORMATION ASKED FOR BELOW.

SIGNATURE _____

(Failure to sign will disqualify proposal)

TYPE/PRINT NAME: _____

TITLE: _____

COMPANY: _____

ADDRESS: _____

Telephone No.: _____

Fax No.: _____

Email: _____