

INVITATION FOR BID (IFB)

Instructions For Bidders

The Town of Westhampton, the Awarding Authority, invites sealed bids from responsible and eligible bidders for culvert relining at 295 Northwest Rd, Westhampton, MA 01027. Bid documents are available July 13 at the Town Hall located at 1 South Road, Westhampton, MA 01027, at the Town website www.westhampton-ma.com, or by request at 413-203-3086 or westhamptontownhall@comcast.net. Bids shall be enclosed in a sealed envelope clearly marked Northwest Road Culvert Relining Project Bid. Bids must be received no later than 1:00 p.m. on Wednesday, July 27, 2016 at the Town Hall, 1 South Road, Westhampton, MA 01027.

Mandatory Pre-bid Meeting Tuesday, July 19 @ 10 a.m. at the project site, 295 Northwest Rd. Westhampton, MA 01027.

If any changes are made to this IFB, an addendum will be issued. Addenda will be mailed or faxed to all bidders on record as having picked up the IFB.

Questions concerning this invitation for bids must be submitted in writing to: Selectboard c/o Administrative Assistant, 1 South Road, Westhampton, MA 01027 before 1:00 p.m. on Tuesday, July 26, 2016. Questions may be delivered, mailed, or emailed. Written responses will be mailed or emailed to all bidders on record as having picked up the IFB.

A bidder may correct, modify, or withdraw a bid by written notice received by the Town prior to the time and date set for the bid opening. Bid modifications must be submitted in a sealed envelope clearly labeled "Modification No. _". Each modification must be numbered in sequence, and must reference the original IFB.

Any item specified by brand name or model have been selected because of their performance and availability. It is the responsibility of the bidder to prove to the Town that an item bid as "or approved equal" is truly of equal quality, design, and function as the specified item. The Town maintains the right to make the final decision as to the acceptability of an item bid "as approved equal" to the item specified.

After the bid opening, a bidder may not change any provision of the bid in a manner prejudicial to the interests of the Town or fair competition. Minor informalities will be waived or the bidder will be allowed to correct them. If a mistake and the intended bid are clearly evident on the face of the bid document, the mistake will be corrected to reflect the intended correct bid, and the bidder will be notified in writing; the bidder may not withdraw the bid. A bidder may withdraw a bid if a mistake is clearly evident on the face of the bid document, but the intended correct bid is not similarly evident.

The Town may cancel this IFB, or reject in whole or in part any and all bids, if the Town determines that the cancellation or rejection serves in the best interest of the Town.

All bid prices submitted in response to this IFB must remain firm for sixty (60) days following the bid opening.

The bid opening will be done in public on July 27, 2016 at 1:00 p.m. at the Westhampton Town Hall, 1 South Road, Westhampton, MA 01027. If at that time the Town Hall is closed or the Selectboard Chair/Chief Procurement Officer, or his Designee is unavailable due to uncontrolled events such as any

major emergencies or natural disasters, the bid opening will be postponed until the next business day at the same time of the original opening. Bids will be accepted until that date and time.

All bids shall include a non-collusion form, tax compliance certificate, bid pricing form, bid deposit of at least 5% of the total bid in the form of cash, money order, or company check payable to the Town of Westhampton.

A Payment Bond of fifty (50) percent must be presented within 10 days of award of contract and shall be in a form satisfactory to the Awarding Authority and with a surety company qualified to do business in the Commonwealth of Massachusetts. Prevailing Wage Law applies to all work performed under this contract. OSHA Training Certifications are required by all employees to be employed at the worksite.

**BID PRICING FORM
FOR**

SHOP BROOK CULVERT LINING UNDER NORTHWEST ROAD

For Shop Brook culvert lining under Northwest Road per the attached specifications, the amount of
\$ _____ is bid.

Date _____

Name of Bidder

By _____
Name of Person Signing

Business Address

City, State, Zip

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

(Name of person signing bid)

(Name of organization or business)

(Date of signature)

CERTIFICATE OF TAX COMPLIANCE

(Pursuant to Mass. G.L. c. 62C, § 49A(b))

Pursuant to Chapter 62C of the Massachusetts General Laws, Section 49A(b), I,

_____, authorized signatory for

_____, do hereby certify under the pains and penalties of perjury that said contractor has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Date

Authorized Signature

Print Name

Title

SCOPE OF SERVICES:

The following is a description of the work to be completed:

RULE FOR AWARD:

The contract will be awarded to the responsive and responsible bidder offering the lowest total price for all items.

**SPECIFICATION – SLIPLINING OF SHOP BROOK
CULVERT UNDER NORTHWEST ROAD,
WESTHAMPTON, MA
Snap-Tite® Culvert Liners**

- 1. Description** — This Item shall govern for furnishing, installing, grouting and providing all labor, material and equipment necessary to rehabilitate existing culvert pipe by sliplining an existing culvert pipe with high density polyethylene (HDPE) pipe. The pipes shall be sizes, types, designs and dimensions shown on the plans and shall include all connections, joints and other appurtenances as required to complete the work.

The sliplining process will require the contractor to completely grout the annular void between the host and insert pipe. The grouting process shall be considered subsidiary to this item.

- 2. Materials** — Unless otherwise specified herein, culvert pipe renewal shall conform to the following:

Snap-Tite® Culvert Liner as provided by ISCO Industries or approved equal.

Available round diameters: 10.75”, 12.75”, 14”, 16”, 18”, 20”, 22”, 24”, 26”, 28”, 30”, 32”, 36”, 42”, 48”, 54”, 63”

A. Liner Material – High Density Polyethylene (HDPE) Pipe

1. High density polyethylene pipe and fittings shall meet the requirements in the AASHTO M326-08 Specification.
 - a. 3rd Party Test Data
2. Raw Materials. The pipes and the fittings shall be manufactured from PE resin compounds, which have a minimum cell class 345464C as defined and described in ASTM D3350.
3. HDPE Resin Specifications.

Property	Specifications	Unit	Nominal Value
Material Designation	PPI/ASTM		PE3408/PE3608/PE4710
Cell Classification	ASTM D3350		345464C
1. Density (3)	ASTM D1505	Gm/cm³	0.955
2. Melt Index (4)	ASTM D1238	gm/10 min.	0.11
3. Flexural Modulus (5)	ASTM D790	psi	135,000
4. Tensile Strength (4)	ASTM D638	psi	3,200
5. Slow Crack Growth			
a. ESCR	ASTM D1693	hours in 100% igeval	>5,000
b. PENT (6)	ASTM F1473	hours	>100
6. HDB @ 73 deg. F (4)	ASTM D2837	psi	1,600
7. UV Stabilizer (C)	ASTM D1603	%C	2.5%

B. Designation of Type

1. The HDPE pipes used for liners in gravity flow culverts shall be solid-wall construction with mechanical end connectors, male and female, consisting of 2 machined-groove landing points, to prevent the pipe from pulling apart during installation.
2. Individual liner section lengths shall be a minimum of 6 ft. but shall not exceed 50 ft. unless pre-approved.

C. Pipe joints shall comply with ASTM D3212 Standard Specification for joint tightness.

1. Extrusion welded joints shall not be allowed to join the liner pipe together to keep grout from leaking out during the grouting stage.
2. Neoprene Cement shall not be allowed to create a seal at the joint to prevent grout from leaking out during the grouting stage.

D. Hydraulic flow characteristics for the liner pipe shall provide a Manning's coefficient of $n = 0.00914$. Pipe Manufacturer shall submit 3rd party test data verifying the Manning's coefficient has been achieved.

E. HDPE Pipe Liners – ISO Registered with male and female mechanical end connectors must be supplied by one manufacturer that has a certified quality management system registered to ISO 9001:2008

F. Other pipe liners that do not meet this specification must be submitted for approval prior to bid date.

G. Liner Pipe must be manufactured in the United States under the 'Buy American Products' program

H. Grouting Material – Contractor shall utilize material specifications for solidification of the annular void between host and the inserted liner with low-density flowable fill or cellular grout. The cellular grout with a density between 40 and 80 lbs. per cubic foot may be used. Reduced-density flowable fill grout with a density between 100 and 120 lbs. per cubic foot may be used.

- I. End Treatment** – The upstream/inlet end of the new liner pipe shall be fitted with a flow enhancement device to reduce inlet control effects. The device shall be HDPE material, or fiberglass, and have a connector included for connection to the liner pipe. The opening at the end of the device shall be larger than the ID of the host pipe. 3rd Party Test data shall be provided to show improvement of flow by at least 30% at 2 feet of headwater depth or an entrance loss coefficient (K) of approximately 0.2 for outlet control conditions. The device shall be the Hydro-Bell or approved equal. The HydroBell shall be secured at the joint with the pipe with a concrete collar and finished so that the inlet is cohesive and secured.
- 3. Cleaning** — The existing culvert pipe shall be cleaned by whatever means necessary to remove all obstructions which may be encountered that would prevent insertion of the pipe liner into the host pipe as approved by the engineer. This work will not be paid for directly, but shall be considered subsidiary to this item.
- 4. Construction**
- A. Liner Pipe** – Liner pipe shall be inserted and installed in accordance with manufacturer’s recommendations.
- B. Grouting**
- a. Upon completion or partial completion of the sliplining process, grouting will be required to be placed in the annular void between the insertion pipe and the host pipe. Cellular grout with a density between 40 and 80 lbs. per cubic foot may be used. Reduced- density flowable fill grout with a density between 80 and 120 lbs. per cubic foot may be used. Project engineer shall state density of grout to be used on drawings or in specifications.
 - b. A detailed plan on holding the liner pipe on the invert of the host pipe shall be submitted to the engineer for approval.
 - c. The annular void shall be completely grout filled without deflecting the insertion pipe greater than 1.5 percent.
 - d. The contractor shall provide end seals at the open points of each run of pipe to be grouted.
 - e. Penetration of the host pipe shall be permitted for host pipe constructed with Corrugated Metal Pipe (CMP) to facilitate grouting of the annular void. Multiple fill pipes will be required.
 - f. The annular void shall be grouted solid by injecting grout from one end of the pipe run and allowing it to flow toward the other end. Venting of the annular void shall be performed to assure uniform filling of the void space during the grouting process.
 - g. An open-ended, high-point tap or equivalent vent must be provided and monitored at the bulkhead opposite to the point of grouting.
 - h. Pressure on the annular void shall not exceed 2 PSI to avoid damage to the liner pipe. Regardless of the pressure, the contractor shall be solely responsible for any damage or distortion to the insertion pipe due to the grouting process.
 - i. The grout shall be made using the preformed foam process using foam-generating equipment calibrated daily by the foam manufacturer to produce a precise and predictable volume of foam. The foam concentrate shall be certified by the customer to have specific liquid/foam expansion ratio at a constant dilution ratio with water.
 - j. The specific job mix shall be submitted to the customer by either the foam concentrate supplier or the certified /licensed contractor for approval prior to use on this project. The mix shall have a minimum 28 day compressive strength of 300 psi.

- k. Grout mixed off-site shall be delivered to the jobsite in a truck mixer filled to half its capacity. The foam concentrate shall then be added to the cement mix in the truck and mixed to a uniform consistency and pumped into the annular space.
 - l. Contractor must have a written erosion control plan with a method for waste grout recovery submitted to town with attached bid proposal.
 - m. Town of Westhampton will verify that post-construction conditions are acceptable after installation and ensure that proper seeding and general cleanup has been completed.
- **Submittals and Required Calculations.**
The Contractor shall submit the following:
 - The proposed grouting mix
 - The proposed densities
 - Initial set time of the grout
 - The proposed grouting method
 - The maximum injection pressures
 - The 24-hour and 28 day compressive strengths
 - Proposed grout stage volumes
 - Bulkhead designs
 - Buoyant force calculations
 - Vent location plans
 - Certification that grouting plan conforms with all provisions, cautions, and restrictions of the liner manufacturer, specifications and contract plans

Requirement as noted by the Massachusetts DOT for Shop Brook Culvert under Northwest Road:

- 1.) Prior to ordering any materials for the installation, the contractor shall submit calculations performed by a Professional Engineer registered in the Commonwealth of Massachusetts in accordance with Chapter 8 of the 2006 MassHighway Project Development and Design Guidebook indicating that the proposed pipe/liner has sufficient hydraulic capacity to convey the peak flow for a **25 year storm**.
- 2.) The contractor shall also submit calculations performed by a Professional Engineer registered in the Commonwealth of Massachusetts indicating that the proposed pipe/liner has sufficient strength to withstand the loads imposed on the pipe by the soil and traffic as applicable, in accordance with Section 12 of the AASHTO LRFD Bridge Design Specifications.

Contractor shall submit proof of the following listed experience to ensure that the delivered product will be of quality and sound work:

- 1.) 5 years experience as a company doing culvert slip line
- 2.) 1000' sliplining in last 12 months using segmental liner pipe (such as SnapTite)
- 3.) Sliplining experience with 1,000 feet of 40" or greater using segmental liner pipe (such as SnapTite)
- 4.) Culvert relines using segmental liner pipe in the last 24 months
- 5.) 500 cu/yds of grout pumped in last 12 months