ADDENDUM NO. 1  
DATED AUGUST 28, 2018  
CROSS COUNTRY SEWER INTERCEPTOR REHABILITATION  
SALEM, NEW HAMPSHIRE

The following changes and information are hereby incorporated into the Contract Documents

SPECIFICATIONS

Changes to Technical Specifications

1) The following “Additional Information” is provided to supplement information contained in the specifications.

ADDITIONAL INFORMATION

1) Attached are the notes from the Pre-Bid meeting and sign-in sheet held on August 22, 2018.

2) Manhole inspection logs from 2017 are attached for manholes 1503, 1504, 1505, 1506, 1507, and 1509 which indicate manhole invert and rim elevations, material, size, etc.

3) The Town has hired Busby Construction to pave the rail trail in the area of the work for this contract. This work is scheduled for September/October 2018. The successful bidder shall be aware of this work and shall coordinate work and trail access with the Town and Busby Construction. All bidders should be aware that the small gravel lot on Willow St. will be eliminated with curb as part of the Rail Trail project and will not be available for parking/storage for this project.

4) Estimated maximum day sewer flow in the project area is 1.7 MGD based on best available information. Bidders should be aware that peak hour flow may be higher.

5) The Town does not want project schedule to discourage bidders from submitting a bid and will allow work to be completed after October, 2018. However, bidders should be aware that the Rail Trail has no snow removal or other maintenance during the winter. The successful bidder shall be responsible for all work and costs associated with winter access.

UNDERWOOD ENGINEERS, INC.

Cole S. Melendy, P.E.  
Project Manager

Dated August 28, 2018
# Sign In Sheet

## NON-MANDATORY PRE-BID MEETING

**Town of Salem, NH**  
**Sewer Interceptor Rehabilitation**  
**August 22, 2018 2:00 P.M.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Address</th>
<th>Phone 1</th>
<th>Phone 2</th>
<th>Fax 1</th>
<th>Fax 2</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Goodwin</td>
<td>Ted Berry Company</td>
<td>521 Federal Rd Livermore</td>
<td>207-897-2348</td>
<td>207-877-3627</td>
<td></td>
<td></td>
<td><a href="mailto:peter.goodwin@tedberryco.com">peter.goodwin@tedberryco.com</a></td>
</tr>
<tr>
<td>Andrew Flanagan</td>
<td>National Water Main Cleaning Co</td>
<td>25 Marshall St Concord, MA 02301</td>
<td>781-328-0063</td>
<td></td>
<td></td>
<td></td>
<td><a href="mailto:jflate@nwmc-505.com">jflate@nwmc-505.com</a></td>
</tr>
<tr>
<td>Doug Tarnawa</td>
<td>Godwin Pumps/</td>
<td>99 Stock House Rd</td>
<td>603-383-9844</td>
<td></td>
<td></td>
<td></td>
<td><a href="mailto:douglin.tarnawa@xyleminc.com">douglin.tarnawa@xyleminc.com</a></td>
</tr>
<tr>
<td></td>
<td>Xylem Dewatering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary Meloney</td>
<td>Underground Engineers</td>
<td>25 Vaughan Rd Manchester, NH 03101</td>
<td>603-436-0192</td>
<td></td>
<td></td>
<td><a href="mailto:mary.meloney@undergroundeng.com">mary.meloney@undergroundeng.com</a></td>
<td></td>
</tr>
<tr>
<td>Dan Hudson</td>
<td>Town of Salem</td>
<td>33 Community Rd Salem, NH</td>
<td>603-890-2033</td>
<td></td>
<td></td>
<td></td>
<td><a href="mailto:dhudson@salemnh.gov">dhudson@salemnh.gov</a></td>
</tr>
</tbody>
</table>

---

G:\PROJECTS\SALEM, NH\REALNUM\2308 - Cross Country Sewer Repair Design\20_Bidding\2308 Pre-Bid Sign In.doc
TOWN OF SALEM
SALEM, NEW HAMPSHIRE

CROSS COUNTRY SEWER INTERCEPTOR REHABILITATION

Pre-Bid Meeting
-MINUTES-

Town Hall, Knightly Room
33 Geremonty Drive
Salem, NH
August 22, 2018 2:00 P.M.

ATTENDEES

See attached Sign-in Sheet for list of attendees.

Addresses and Phone Numbers

<table>
<thead>
<tr>
<th>Underwood Engineers</th>
<th>Town of Salem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cole Melendy, P.E.  Project Manager</td>
<td>Dan Hudson, P.E.  Engineering Division</td>
</tr>
<tr>
<td>Ransom Horner-Richardson, Project Engineer</td>
<td>Director</td>
</tr>
<tr>
<td>Phone:  (603)-436-6192</td>
<td>Phone:  (603)-890-2033</td>
</tr>
<tr>
<td>Fax:  (603)-431-4733</td>
<td>33 Geremonty Drive</td>
</tr>
<tr>
<td>25 Vaughan Mall</td>
<td>Salem, New Hampshire 03079</td>
</tr>
<tr>
<td>Portsmouth, New Hampshire 03801</td>
<td></td>
</tr>
</tbody>
</table>

Specifications and figures (included in appendix) can be downloaded from Town’s purchasing website at http://www.townofsalemnh.org/purchasing/pages/current-bids-proposals-and-awards

Direct all technical questions to Underwood Engineers.

Project Overview

The scope of work includes the following:

Base Bid:
- Obtain NHDOT Access Permit to access work area via the Rail Trail.
- Provide UV-cure CIPP liner for approximately 530 LF of 15-inch sewer interceptor including TV inspection and sewer cleaning.
- Provide bypass pumping for sewer during rehabilitation.

Additive Alternate No. 1:
- Provide UV-cure CIPP liner for approximately 1030 LF of additional 15-inch sewer interceptor including bypass pumping, TV inspection, and sewer cleaning.
Bids

Bids are due **11:00 A.M. Thursday, August 30, 2018** at the office of the Purchasing Agent, Town Hall, 33 Geremonty Drive, Salem, NH, and will then be opened and read publicly. Bids shall be in a sealed envelope marked “PROPOSAL FOR SEWER INTERCEPTOR REHABILITATION (Bid No. 2018-026)”. If bids are mailed, the sealed bid should be packaged in a second envelope, marked “PROPOSAL FOR SEWER INTERCEPTOR REHABILITATION (Bid No. 2018-026)” and mailed to: Office of the Purchasing Agent, 33 Geremonty Drive, Salem, NH 03079.

Addendum

An addendum, including pre-bid meeting minutes, will be posted to the purchasing website 2 days prior to the bid due date. Addenda issuance is Tuesday, August 28, 2018.

Funding

This project is being funded locally. No MBE/WBE requirements and no Davis-Bacon wage rates.

General Contract Requirements

Requirements include:
- 100% Performance bond.
- 100% Payment bond.
- $50,000 2-year Warranty Bond (from substantial completion)
- Retainage will be 5% held until final completion.
- Insurance requirements and additional insured as noted in General and Special Conditions.
- Payment request frequency to be agreed between the successful Contractor and Owner at Contract signing.

Easements and Agreements

- Access manholes are located in easements through private property as indicated in the Contract Documents.
- Access to site will be from the NHDOT Rail Trail. The successful bidder will be responsible to obtain a NHDOT Access Permit. Details included in Appendix C.

Permits

- NHDOT Access Permit.
- If dewatering is required, NPDES General Permit for Construction Dewatering will be required.

Dewatering

If dewatering is anticipated during construction, the Contractor shall submit a Dewatering Plan, stamped by a Geotechnical Engineer registered as a P.E. in New Hampshire.

Manhole Access

Access manholes are located off the rail trail in a wetlands area. Contractor is responsible to
assess the site and provide all equipment and material necessary to access manholes and perform repairs.

**Schedule and Time**

The Town’s goals for completion times for the project is October 31, 2018 for Substantial Completion and a Final Completion date of November 30, 2018 with a construction start date of September 10, 2018. Each contractor shall state their dates on their bid form.

It is anticipated that the Work will be completed during daylight hours unless specifically noted otherwise. Allowable work days and hours shall be as noted in the GENERAL CONDITIONS.

**Other/Special Requirements**

- Prior to the start of construction, the Contractor shall submit a By-Pass Pumping Plan to the Engineer and Town of Salem for review and approval (refer to Specification Section 01518).
- The Town has hired Busby Construction to pave the rail trail in the area of the work for this contract. This rail trail paving work is scheduled for September/October 2018. The successful bidder shall be aware of this work and shall coordinate work and trail access with the Town and Busby Construction. All bidders should be aware that the small gravel lot on Willow St. will be eliminated as part of the rail trail work and will not be available for parking/storage.

**Questions and Answers**

**Q1:** In the Bid Scope it states that the project will be completed during the 2018 construction season. Is it OK (since we are curing with UV and not thermal) to complete the project in Feb/March? (Precision Trenchless, 8/17/18)

**A1:** There is no maintenance/snow removal for the rail trail during the winter. The Town is open to the possibility of the work being completed during the winter but the successful bidder would have to provide the required snow removal to provide the lining work.

**Q2:** Are CCTV video files available for the reaches in the Base Bid and Add. Alt 1?

**A2:** Yes. Video inspection files can be downloaded at this link (Provided in Section 02011): [http://gofile.me/2RflJ/6q0RgRmqO](http://gofile.me/2RflJ/6q0RgRmqO). Please note that CCTV is from 2017 and conditions may have changed since the CCTV inspections. The inspection crew had difficulty dewatering the reaches entirely and other leaks or defects may be present below the visible water line.

**Q3:** What are the depths of the access manholes?
A3: See Addendum 1 for manhole inspection logs.

Q4: Are the provided flows for bypass Max day or peak hour flows?

A4: The 1.7 MGD provided is the maximum day sewer flow in the area of the work based on our best understanding. Peak hour flows may be higher.

Q5: Are point repairs part of the contract?

A5: No, the UV-cured liner is intended to fix the two big leaks and other defects in the reaches included in the base bid and additive alternate. Any additional material or work including pre-grouting, etc. required to repair sewer defects in each reach and furnish and install the liner is subsidiary to bid.
SMH INSPECTION REPORT

Location: County / Rail Trail

Dia. 4' Ft. Material: Pre-Cast By: DTE CSM

Clear Opening: 30' In. Corbel: N/A In. Frame 6' In.

ID No. 1503

Date: 5/12/17

Inflow Area Potential: N/A S.F.

Notes:

Rim to Inv. Depth Clock Size/ Flow

1. 1'26' Ft. 6 15' 1/3 Pipe

2. 1'28' Ft. 12 15'

3. ___ Ft. ___ ___

4. ___ Ft. ___ ___

5. ___ Ft. ___ ___

Top pipe e Joint

Connects to: #1504

Infiltration: None observed Est. GPM<0.01 Location: Walls/Joints H2S pH

<table>
<thead>
<tr>
<th>Observations</th>
<th>Material</th>
<th>Condition Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame/Cover:</td>
<td>Bolted</td>
<td>2</td>
<td>8&quot; Offset</td>
</tr>
<tr>
<td>Corbel:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cone/Slab Top</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>3</td>
<td>Joint @ conc, Dripping &lt;0.01 gpm</td>
<td></td>
</tr>
<tr>
<td>Invert/Shelf</td>
<td>2</td>
<td></td>
<td>Concrete debris on shelf</td>
</tr>
</tbody>
</table>

Condition Rating Codes:
1. Good condition – no further action needed
2. Minor defects – no immediate action needed no I/I observed.
3. Minor defects or I/I potential – needs attention or rehabilitation.
4. Significant defects and/or I/I – corrective action should be scheduled in near future.
5. Manhole or connecting pipes in extremely poor condition failure eminent – needs immediate action.
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire
**SMH INSPECTION REPORT**

Location:  X-country Rail Trail  ID No. 1504

Dia. 4' Ft.  Material: Precast  By: LSM JTR  Date: 5/12/17

Clear Opening: 30” In.  Corbel:  N/A  In.  Frame 6” In.  Inflow Area:  N/A  S.F.

Notes: Recommended removal of trees, Top Root & 3’ 0”

<table>
<thead>
<tr>
<th>Rim to Inv. Depth</th>
<th>Clock Position</th>
<th>Size/ Material</th>
<th>Flow Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 36’ Ft.</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 34’ Ft.</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ____ Ft.</td>
<td>____</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. ____ Ft.</td>
<td>____</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ____ Ft.</td>
<td>____</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Connects to: #1

Infiltration: □ None observed  Est. GPM < 0.01  Location: Walls  H₂S  pH

<table>
<thead>
<tr>
<th>Observations</th>
<th>Material</th>
<th>Condition Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame/Cover:</td>
<td></td>
<td></td>
<td>New Bolted Cover</td>
</tr>
<tr>
<td>Corbel:</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Cone/Slab Top</td>
<td></td>
<td>2</td>
<td>Med+Fine Roots, baking Joint</td>
</tr>
<tr>
<td>Walls</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Invert/Shelf</td>
<td>Brick</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Condition Rating Codes:**

1. Good condition – no further action needed
2. Minor defects – no immediate action needed no I/I observed.
3. Minor defects or I/I potential – needs attention or rehabilitation.
4. Significant defects and/or I/I – corrective action should be scheduled in near future.
5. Manhole or connecting pipes in extremely poor condition failure eminent – needs immediate action.
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire
SMH INSPECTION REPORT

Location: X-country Rail trail

Dia. 4' Ft. Material: Pre-Cast By: DSM ID No. 1505
Clear Opening: 30" In. Corbel: 0 In. Frame: 60" In.

Date: 5/12/77
Inflow Area Potential: N/A S.F.

Notes:

Rim to Inv. Depth Clock Position Size/Material Flow Depth
1. 130' Ft. 6 15 15
2. 128 Ft. 9 8
3. 128 Ft. 12
4. ___ Ft.
5. ___ Ft.

Connects to: #1

Infiltration: □ None observed Est. GPM < 0.01 Location: Walls H2S pH

<table>
<thead>
<tr>
<th>Observations</th>
<th>Material</th>
<th>Condition Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame/Cover</td>
<td></td>
<td>1</td>
<td>Bedded</td>
</tr>
<tr>
<td>Corbel</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cone/Slab Top</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invert/Shelf</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Condition Rating Codes:
1. Good condition – no further action needed
2. Minor defects – no immediate action needed no I/I observed.
3. Minor defects or I/I potential – needs attention or rehabilitation.
4. Significant defects and/or I/I – corrective action should be scheduled in near future.
5. Manhole or connecting pipes in extremely poor condition failure eminent – needs immediate action.
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire
SMH INSPECTION REPORT

Location: X-country Rail trail
Dia. 4' Ft. Material: Precast By: DTR CSM
Clear Opening: 30" In. Corbel: 0" In. Frame 6" In.
ID No. 1506
Date: 3/12/17
Inflow Area Potential: N/A S.F.

Notes:
- Manhole surcharged to crown
- Inlet possibly lower than outlet based on H2O level

<table>
<thead>
<tr>
<th>Rim to Inv. Depth</th>
<th>Clock Position</th>
<th>Size/Material</th>
<th>Flow Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 120' Ft.</td>
<td>6</td>
<td>Not Visible Surcharge to crown</td>
<td></td>
</tr>
<tr>
<td>2. ___ Ft.</td>
<td>Not Visible</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>3. ___ Ft.</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>4. ___ Ft.</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>5. ___ Ft.</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

Infiltration: 
- None observed
- Est. GPM
- Location:

\[ H_2S \] pH

<table>
<thead>
<tr>
<th>Observations</th>
<th>Material</th>
<th>Condition Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame/Cover:</td>
<td>1</td>
<td>Rodded new</td>
<td></td>
</tr>
<tr>
<td>Corbel:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cone/Slab Top</td>
<td>2</td>
<td>Previous perging, grout on bot of crown</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>N/A</td>
<td>Not Visible</td>
<td></td>
</tr>
<tr>
<td>Invert/Shelf</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Condition Rating Codes:
1. Good condition – no further action needed
2. Minor defects – no immediate action needed no I/I observed.
3. Minor defects or I/I potential – needs attention or rehabilitation.
4. Significant defects and/or I/I – corrective action should be scheduled in near future.
5. Manhole or connecting pipes in extremely poor condition failure eminent – needs immediate action.
SMH INSPECTION REPORT

Location: X-Country Rail trail
ID No. 1507
Dia. 4 Ft. Material: Pre-Cast By: Date CSM
Clear Opening: 30" In. Corbel: 0 In. Frame 6" In.

Potential: N/A S.F. Notes: Surcharged to top of invert shelf

<table>
<thead>
<tr>
<th>Rim to Inv. Depth</th>
<th>Clock Position</th>
<th>Size/ Material</th>
<th>Flow Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5' Ft.</td>
<td>6</td>
<td>15&quot;</td>
<td>Full Pipe</td>
</tr>
<tr>
<td>2' Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2' Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5' Ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Infiltration: □ None observed Est. GPM<0.01 Location: Walls H2S pH

<table>
<thead>
<tr>
<th>Observations</th>
<th>Material</th>
<th>Condition Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame/Cover:</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Botted New</td>
</tr>
<tr>
<td>Corbel:</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Cone/Slab Top</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td></td>
<td>3</td>
<td>all Joints previously pared</td>
</tr>
<tr>
<td>Invert/Shelf</td>
<td></td>
<td>N/A</td>
<td>Not visible</td>
</tr>
</tbody>
</table>

Condition Rating Codes:
1. Good condition – no further action needed
2. Minor defects – no immediate action needed no I/I observed.
3. Minor defects or I/I potential – needs attention or rehabilitation.
4. Significant defects and/or I/I – corrective action should be scheduled in near future.
5. Manhole or connecting pipes in extremely poor condition failure eminent – needs immediate action.
SMH INSPECTION REPORT

Location: **X-country Trail**

ID No. 508 1509

Dia. 4 Ft. Material: **lined Precast** By: DTR CSM

Clear Opening: 30 In. Corbel: 25" In. Frame 6" In.

Date: 5/12/17

Potential: N/A S.F.

Notes:

<table>
<thead>
<tr>
<th>Rim to Inv. Depth</th>
<th>Clock Position</th>
<th>Size/ Material</th>
<th>Flow Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 137 Ft.</td>
<td>6</td>
<td>15&quot;</td>
<td>1/2 Pipe</td>
</tr>
<tr>
<td>2. 135 Ft.</td>
<td>3</td>
<td>15&quot;</td>
<td></td>
</tr>
<tr>
<td>3. 129&quot; Ft.</td>
<td>9</td>
<td>8&quot;</td>
<td>1/2&quot; R-</td>
</tr>
<tr>
<td>4. ____ Ft.</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>5. ____ Ft.</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

Infiltration: ✔ None observed  Est. GPM Location: __________  H₂S  pH __________

<table>
<thead>
<tr>
<th>Observations</th>
<th>Material</th>
<th>Condition Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame/Cover:</td>
<td></td>
<td>2</td>
<td>Frame is corroded.</td>
</tr>
<tr>
<td>Corbel:</td>
<td></td>
<td>2</td>
<td>lined, peeling away</td>
</tr>
<tr>
<td>Cone/Slab Top:</td>
<td></td>
<td>2</td>
<td>roots through liner or corbel joint</td>
</tr>
<tr>
<td>Walls</td>
<td></td>
<td>2</td>
<td>Previously lined</td>
</tr>
<tr>
<td>Invert/Shelf:</td>
<td></td>
<td>2</td>
<td>Previously lined</td>
</tr>
</tbody>
</table>

Condition Rating Codes:
1. Good condition – no further action needed
2. Minor defects – no immediate action needed no I/I observed.
3. Minor defects or I/I potential – needs attention or rehabilitation.
4. Significant defects and/or I/I – corrective action should be scheduled in near future.
5. Manhole or connecting pipes in extremely poor condition failure eminent – needs immediate action.
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire

05.12.2017 11:54

05.12.2017 11:56
Sewer Manhole Inspection Photos
2017 Infiltration and Inflow Evaluations
Salem, New Hampshire